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# Spillovers within Export Processing Zones

A field study on domestic export companies in Kenya

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# ABSTRACT

This field study is made to analyse possible spillover effects on domestic export companies within the Export Processing Zones in Kenya. More specifically this paper aims to investigate if, how much and through which ways potential spillover effect impinge upon the companies in question. The specific spillovers investigated are imitation, skill acquisition, competition and export. The analysis shows presence of several of these channels and they seem to have an impact on the domestic companies. Result is though rather vague, since experiences are spread in a wide range and the respondents are operating in a variety of sectors. In all, spillover is an issue recognised and kept in mind by several domestic EPZ companies in Kenya.

*Keywords: Foreign Direct Investment, Spillover, Imitation, Skill acquisition, Competition, Export, Export Processing Zones, Kenya, Transnational companies*

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Respondents participating in this study are not mentioned by name as a question of anonymity.

All eventual errors in this paper lay in the author's responsibility solely.

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# LIST OF ABBREVIATIONS

DECK	Domestic Export Company in Kenya
EAC	East African Community (Burundi, Kenya, Rwanda, Tanzania, Uganda)
EPZ	Export Processing Zone
EPZA	Export Processing Zones Authority
FDI	Foreign Direct Investment
FECK	Foreign Export Company in Kenya
GDP	Gross Domestic Product
IMF	International Monetary Fund
ISO	International Organization For Standardization
KNBS	Kenya National Bureau of Statistics
OECD	Organization for Economic Cooperation and Development
R&D	Research and Development
SEZ	Special Export Zone
SOE	State Owned Enterprise
TNC	Transnational Company
U.K	United Kingdom

# 1 INTRODUCTION

Since the beginning of 1970's Foreign Direct Investment (FDI)<sup>1</sup> in the world has increased considerably and much research has aimed to evaluate its economic consequences. The subject is under constant discussion and several analyses have been made with focus on the impact of FDI on economic growth. However, we still do not possess the knowledge of the exact fallout. Surveys reveal different tendencies and the answer to the question about a positive economic outcome of FDI is not considered as homogeneous.<sup>2</sup> From a policy perspective, FDI through Transnational Corporations (TNCs) is regarded as an important and dominant factor for the worldwide expanded economical integration.

Compared to other parts of the world, Sub-Saharan Africa has not experienced the same increase of FDIs. Even though the FDI inflows have increased since the 1970's, putting Africa in comparison with the rest of the world, the result is poor. As a response, several governments have put more value into the question and established concrete plans to attract international investors. However, FDI only represents one fifth of total flows in the region between 1970 and 2003. Causes discussed as reasons of this short supply of progress are poor macro economical policy changes, government failures and lack of policy credibility.<sup>3</sup>

From a theoretical perspective FDI is thought of generating positive economic effects by creating spillovers. The expected effects are increased domestic output as a result of the presence of foreign firms that brings advanced technology, skills and knowledge to the host country. The transfer of assets, i.e. spillovers such as competition, export, acquisition of human capital and imitation, from foreign investors to domestic firms reaches through a number of channels.<sup>4</sup> Due to spillover, FDI are to some economists believed to be crowding in domestic investment, hence creating a good climate on the domestic market with

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<sup>1</sup>According to the Organization for Economic Cooperation and Development (OECD, 2008) the definition of FDI is that:

“Foreign direct investment reflects the objective of establishing a lasting interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is resident in an economy other than that of the direct investor. The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise.”

<sup>2</sup> Greenaway & Görg (2003:6-7), UNCTAD (2009a)

<sup>3</sup> Ajayi (2006:1-2, 11-14)

<sup>4</sup> Leshner & Miroudot (2008:7), Greenaway & Görg, (2003:2-5)

origination and increased employment as the result. In spite of a widespread positive attitude towards FDI among the main body of governments in the world, various studies of spillovers and impacts on domestic market climate have come up with a range of results. The results are both positive and negative as well as evidence of no impact at all.<sup>5</sup>

One way to receive the possible spillover effects are through creation of Export Processing Zones (EPZ). These zones are established in several countries in Africa and were in 2007 in Sub-Saharan Africa counted to more than 90 zones with a total labour force of approximately 816.000 workers.<sup>6</sup> To achieve economic growth and industrial development export is believed to be a factor heading in the right direction. Export is one way for a country to contribute on the global market, hence widening its economic possibilities.<sup>7</sup>

In Kenya the Export Processing Zones Authority (EPZA) is in charge of the EPZs and their domestic and foreign members. To attract export focused firms to the zones EPZA have prescribed various alleviations and tax reductions. In order to obtain benefits for the development of Kenya, EPZA also declare that the zones are organized to create jobs, backward linkages, technological transfer and diversification. Not only do these zones attract foreign firms, domestic companies do as well utilize these opportunities and take part of the spillovers occurring.<sup>8</sup>

The purpose of this study is to analyse if, how much and through which ways the impact of spillovers impinge upon domestic companies allocated within the EPZs. More specifically this study aims to answer to which extent diverse spillovers affect the companies in question. By examine the issue of spillover from a domestic point of view it is possible to see if there are benefits of attracting FDI and also if the EPZA objectives are applicable in reality. Spillovers examined are imitation, skill acquisition, competition and export. The study is of particular interest since the Kenyan EPZ Authority does have spillover included in their main objectives. The impact is analysed through a theoretical discussion. Further, the companies' thoughts and experiences about being registered as EPZ enterprises are also looked upon.

The structure of this paper is divided into seven main sections. Firstly presented is the theoretical framework to give an understanding of this study's starting point. Secondly comes an empirical discussion while third section contains background information on the issue of this paper. The fourth section tackles the methodological framework. It contains a description of in which ways we received the information as well as the means used. Fifth section, the

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<sup>5</sup> Zarsky (2005:21-26), Grennaway & Görg (2003:6-15)

<sup>6</sup> ILO (2007)

<sup>7</sup> Elliott (2006:108), Gachino (2006:22), EPZA (2010-02-11)

<sup>8</sup> EPZA (2010-02-11)



analysis, consists of four parts discussing each one of the spillovers respectively. These parts are followed by two others considering the EPZ in particular. In the sixth section one can read our thoughts on further research and the seventh section is a conclusion of what we have been able to read from this study. The appendix section is a collection of some of the methodological means and figures used in this paper.

## 2 THEORETICAL FRAMEWORK

In this section the theoretical framework of FDI and its expected economical effects is introduced. To support a more comprehensive picture of the framework, spillovers are first explained as a segment within FDI and thereby followed by the certain ways through which the spillovers reaches out to the companies. These linkages are direct or indirect; backward or forward; horizontal or vertical. The principal approach i.e. the parts which will be primarily discussed throughout this paper, is though the issues of imitation, skill acquisition, competition and export spillovers.

### 2.1 FDI

According to theory found in literature, FDI are assumed to have diverse fallout. Todaro & Smith (2006) summarize and divide subjects of FDI into four. First issue is the theory about *economic growth*. One possibility is that FDI do results in economic growth. On the other hand does FDI create an out-crowding of domestic investments due to favourable agreements and reinvest failure. Secondly, the host countries *trade gap* is supposed to be filled in by TNC's export earnings according to some, but they seem not to be filled in the long run according to others. The third issue considers the *tax revenue from TNCs*. Higher income of tax means a larger budget for the government to spend on healthcare, education and social welfare. At the same time, TNCs often have exclusive tax- and tariff arrangements with the host country. Depending on the economic environment, for example level of corruption, tax income can also end up in the wrong pockets. The fourth issue is the *theory of spillovers* which, as will be discussed frequently through this study, means opportunity for domestic acquisition of knowledge, technology and entrepreneurship. Some researchers though believe that TNCs rather hold back domestic development by being too dominant on the market.<sup>9</sup>

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<sup>9</sup> Todaro & Smith (2006:710-712), Madani (1999)

The outcome of FDI surely depends on how FDI and related terms are defined. The investor of the FDI is generally represented by a single individual or a constellation of persons creating for example a private or public enterprise, a government or an organization. However, different countries tend to use different definitions of FDI and direct investment enterprises. To be able to compare data between diverse countries OECD recommend a definition of direct investment enterprises as when the foreign direct investor owns a minimum of 10 per cent of the enterprise.<sup>10</sup> As this paper discuss the impact of FDI on domestic export companies in Kenya only domestic companies with Kenyan ownership to 90 per cent or more are included. Domestic export companies in Kenya are hereafter referred to as DECKs and foreign export companies in Kenya are hereafter referred to as FECKs.

## 2.2 SPILLOVER

The theoretical framework of this study is based on the idea of FDI spillovers. A significant amount of researches discuss the existence of spillover when looking upon TNCs impact on local business environment. The effects of spillover are in fact the mostly discussed ones among theoretical effects of FDI. Nonetheless, spillover is not characterized as a pure theoretical model.

Spillover can be described as increased or decreased production in domestic firms due to TNCs in the host country. Companies situated in a different country than their home country do not only create an effect in the actual investment made, but likewise in the host country. The effect in the host country can initiate through e.g. transfer of knowledge or integration of local workers and result in increased competition, technology development etc. This impact on the host country is the titled spillover effect. Even when spillover is measured, its outcome greatly depends on the country's investing climate as well as the motives of the TNC in question.<sup>11</sup>

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<sup>10</sup> More defined, the 10 per cent is explained as the ordinary share or voting power of the corresponding enterprise.

<sup>11</sup> Leshner & Miroudot (2008:6-8)

### 2.2.1 Direct and Indirect Spillover

The impacts from spillovers do come in different shapes. Often referred to in researches and articles on this matter are Blomström & Kokko (1998) whom among other things discuss direct and indirect spillovers. These spillovers depend on the relationship the TNCs and the local companies establish. Direct spillover occurs in situations where, for example, the investing firm employs the local firm to work directly under them. The local firm can become a supplier of the TNC or a daughter company with responsibility of a certain part of the production process.<sup>12</sup>

Indirect spillover occurs as an alternative in a more vague coalition between the two involved parts. Here, the spillover effect can appear when local labour employed by the TNCs bring their increased human capital from the investor out into the society and further on influences the surrounding companies. Other situations of indirect spillover are when local firms copy the way the TNC act in the foreign market or when a filial of the TNC is lobbying for trade liberalization which could benefit the domestic firms. The divergence between indirect and direct spillover is not always obvious and the two are in reality sometimes hard to distinguish from each other.<sup>13</sup>

### 2.2.2 Vertical and Horizontal Linkages

Spillovers can also be divided into vertical and horizontal linkages. Vertical linkage, also titled inter-industry spillover, describes a situation where the TNCs with or without purpose influence domestic corporations in other industries in terms of improved technology or knowledge. Within the vertical linkages there are forward and backward spillovers which reflect the direction of the spillover outcome. These are situations where spillover is received from the intervention of the TNCs as a supplier of the domestic firm (forward) or as a customer of the firm (backward). Horizontal linkages on the other hand refer to spillovers from TNCs to domestic suppliers in the same industry, i.e. intra-industry spillover.<sup>14</sup>

Figure1 intends to graphically explain the different linkages. The vertical linkages (represented by the vertical grey arrows in the figure) work as channels for the spillovers

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<sup>12</sup> Blomström & Kokko (1998:7-8)

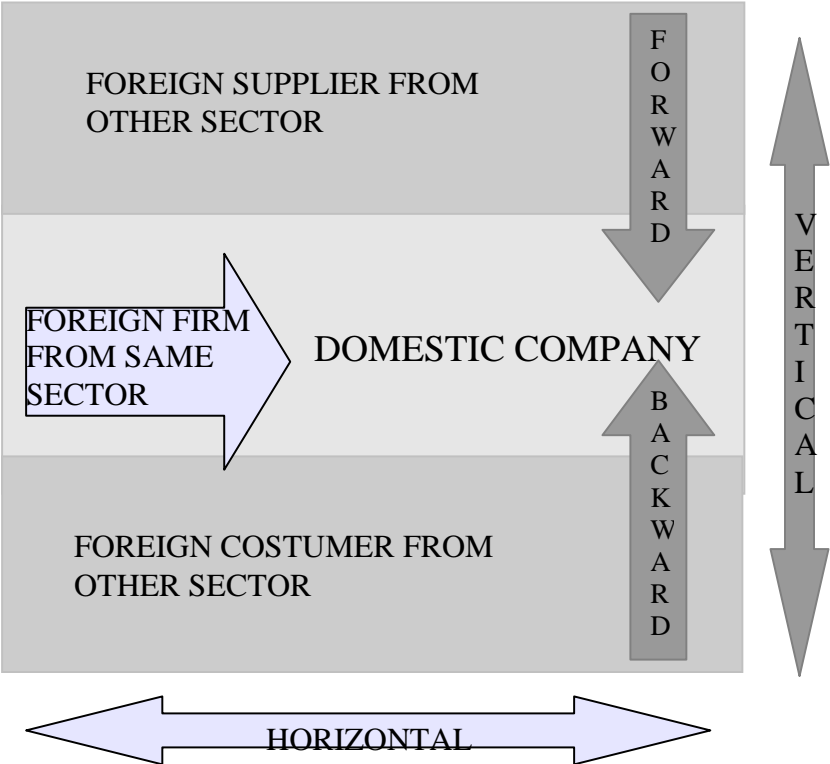
<sup>13</sup> Ibid.

<sup>14</sup> Greenway & Görg (2003:10-12), Leshner & Miroudot (2008:7-10)

between the domestic company in a specific sector and the foreign supplier and/or consumer in another sector. The horizontal linkages (represented by the horizontal light blue arrows in the figure) work as channels for the spillovers from the foreign firm to the domestic firm within the same sector.

There are normally greater motives for the TNC to intentionally create spillover effects through vertical linkages than horizontal as this to a larger extent could boost the productivity for the TNC. For example, if a domestic supplier becomes more efficient the sale to the costumer, i.e. the TNC, could increase. Regarding horizontal linkages, the motives are not always that strong as the domestic company and the TNC compete in the same sector. In these cases the TNC sometimes tries to keep the knowledge from leaking out to the domestic market. The impacts of these spillovers do declare themselves through diverse sub-linkages, which more clearly show potential effects on the indigenous firms.<sup>15</sup>

**Figure 1**



<sup>15</sup> Ibid.

## 2.3 FOUR FOCUSES

In accordance with Greenaway & Görg (2003) there are mainly four diverse ways to describe how the idea of spillover transfers from the TNCs to the indigenous firms. The four types of spillover are imitation, skill acquisition, competition and exports.<sup>16</sup> These spillovers seem to be able to both aggregate positive and negative outcomes according to various reports made.<sup>17</sup> Some studies divide the different types of spillovers into less than four. However, we find it preferable to distinguish rather than bunch together certain types of spillovers. By dividing the types of spillovers into four, the spillovers cover a good range of outcomes and a somewhat comprehensive picture of the effects of FDI can be made.

### 2.3.1 Imitation

Imitation spillover is a form of development of skills resulting in new products, processes and innovations. Through observations of TNCs the domestic firm becomes aware of new or more efficient ways regarding these factors. For example, the domestic company can observe how a TNC produce a product and then use the same technology to get their production more efficient. The spillover can come either voluntary through technology transfer or involuntary by knowledge leakage. It is important to notice that the spillover in question is not a work of replication of goods made by the TNC. It is though dependent on some technological progress happening in the domestic firm. The level of technology has to be correlated with the physical requirements of new creations i.e. there must be resources for using new techniques available.<sup>18</sup>

### 2.3.2 Skill Acquisition

Labour has a great impact on transfer of technology and knowledge and it has been argued that skill acquisition is the most important spillover. This spillover takes place as diverse forms of knowledge are transferred from the TNC to the local firm by either labour mobility

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<sup>16</sup> Greenaway & Görg (2003:3-4, 30)

<sup>17</sup> Zarsky (2005:21-26)

<sup>18</sup> Greenaway & Görg (2003:3-4, 30), Glass & Saggi (2002:495-498), Görg & Strobl (2004:2)

or domestic origination. TNCs tend to have a high level of technology and skill, which is hard to keep isolated within the company and therefore it naturally expand to the outside. By that they could increase the human capital in surrounding domestic firms.<sup>19</sup> Skill acquisition occurs, for example, when an employee at a domestic company uses knowledge in the current work that he or she received from an earlier employment at a TNC.

### 2.3.3 Competition

Distinct impacts on the market come from competition spillover which can cause two main outfalls, monopoly or efficiency. TNCs intervening a market can result in less competition due to elimination of indigenous corporations caused by differences in size and quality between the firms (crowding out). The competition can also be positive for the domestic market if firms are at a more equalized level. The TNC can with more advanced capability influence the market, thereby create a higher demand of quality whereas local firms are forced to advance as well (crowding in). Changes in quality can mean such a thing as incorporation of ISO standard specification when cooperating with TNCs. New technology or at least more efficient use of the already existing technology could also be an outcome.<sup>20</sup>

### 2.3.4 Export

A specific form of knowledge coming from FDI is the knowledge about export possibilities. Creating export contacts from scratch do take time as well as capital from the domestic firm. There are many stages before the contact is fully established and the export can start running smoothly. As TNCs trade both within and between different countries they naturally have the information needed to be able to export. Local firms do not always possess this kind of knowledge, but they receive the know-how through the influences of TNCs and imitation spillover.<sup>21</sup> Yet, export can be seen as an own spillover treating linkages outside the relationship between TNCs and domestic firms.

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<sup>19</sup> Greenway & Görg (2003:3-4, 30)

<sup>20</sup> Ibid., Leshner & Miroudot (2008:7)

<sup>21</sup> Ibid.

### 2.3.5 Summary

Table 1 tries to describe more concretely how the four different types of spillover occur and the results the spillovers in question are expected to reveal. Similarities and diversities between the four spillovers are easier observed. While the absolute final outcome is increased or decreased profit, the ways to get there as well as expected results between the spillovers do differ. However, changes in technology and knowledge transfer exist as expected result from imitation spillover as well as from skill acquisition spillover. The table do also show imitation spillover as a linkage to get to export spillover. Even though many of the ways and effects of the spillovers integrate with each other, each one of the four spillovers has particular components.

**Table 1**

<b>TYPE OF SPILLOVER</b>	<b>HOW IT PREVAILS</b>	<b>EXPECTED RESULT</b>
IMITATION	<ul style="list-style-type: none"> <li>• OBSERVATIONS</li> </ul>	<ul style="list-style-type: none"> <li>• INCREASED KNOWLEDGE</li> <li>• NEW / MORE EFFICIENT TECHNOLOGY &amp; MANAGEMENT</li> <li>• NEW PRODUCTS</li> </ul>
SKILL ACQUISITION	<ul style="list-style-type: none"> <li>• ORIGINATION</li> <li>• LABOUR MOVEMENT</li> </ul>	<ul style="list-style-type: none"> <li>• TECHNOLOGY &amp; KNOWLEDGE TRANSFER</li> </ul>
COMPETITION	<ul style="list-style-type: none"> <li>• CROWDING IN/OUT</li> </ul>	<ul style="list-style-type: none"> <li>• EFFICIENCY</li> <li>• MONOPOLY</li> </ul>
EXPORT	<ul style="list-style-type: none"> <li>• IMITATION</li> <li>• KNOW-HOW TRANSFER</li> </ul>	<ul style="list-style-type: none"> <li>• EXPORT CONTACTS</li> <li>• IMPROVED EXPORT PROCESS</li> </ul>



# 3 EMPIRICAL EVIDENCE

In this section we present some empirical evidence found on spillover. A major part of spillover studies are made with direct connection to the environment of developed countries. The library of studies made in the context of developing countries is of smaller size but still there are some investigations done.<sup>22</sup> Most of relevant investigations found do look into spillovers of different kinds, but there are few which specializes in the same four spillovers in an EPZ environment as this study does. Therefore, the studies discussed below are related to the analysis of this paper, but not of the exact same type. This section first treats FDI spillovers in general and thereafter FDI in an African context. It concludes with empirical evidences on EPZs.

## 3.1 FDI SPILLOVER

The empirical evidences for the role of FDI are not united as for or against, but widely spread and depending on variables not easily compared. While to some FDI is seen as a source of valuable spillovers for the host country, other researchers sees the risk of crowding out domestic firms.<sup>23</sup> According to Hansson (2001), optimistic voices about TNCs impact on domestic firms' productivity appears to be stronger in the earlier literature which present several positive correlations. However, recent researches do more often present an even or negative net-effect from spillovers. Hansson (2001) even points out that the literature pictures an unsure decision base for attracting FDI in believe of increasing domestic welfare. Government are therefore recommended to think twice before giving incentives to foreign investors.<sup>24</sup>

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<sup>22</sup> Gachino (2006), Görg & Strobl (2004:2)

<sup>23</sup> Gachino (2006:18)

<sup>24</sup> Hanson (2001:14, 23-4)

### 3.1.1 Spillover Sources

It seems like spillovers are just as much depending on the firm's incentives, host country policies and human capital resources as it is on FDI itself.<sup>25</sup> Some studies argue that the size of the domestic firm is crucial for spillover to absorb, but other variables may as well have great influence. Larger firms may have an advantage of tracking and absorbing spillovers due to more resources than smaller firms. Still, this interpretation also encounters less convinced voices and therefore there is no conclusion that fits all kind of contexts.<sup>26</sup>

Studies have also been made on the relationship between FDI and health with the conclusion that the two positively correlate. Human capital in general and public health in particular are important for a nation to fully take advantage of FDI inflow, while a healthy reliable workforce makes foreigners dare to invest.<sup>27</sup> Infrastructural and institutional support also appears to be important factors due to significant networks and linkages serving as spillover channels.<sup>28</sup>

TNCs have shown to be more concerned about training than domestic firms and thereby being possible providers of human capital spillover.<sup>29</sup> According to a model made by Glass and Saggi (2002) one can partly see that the domestic economy can benefit from the provided training either as of higher payments to workers or as a result of technological transfer. This is if positive effects are being distinguished from the provided training at all.

Some TNCs argue that transfer of training and technology is of negative impact for them. To limit the risk of technology transfer from the TNC to a domestic firm it is argued that the TNC has two choices, if movement from its current position do not appeal. Either the TNC do not give the labour knowledge through training which then will not spread on to the competitors, or the TNC do give training which might need to be followed by a wage premium to keep the labour from moving. Skill acquisition from TNCs to domestic firms is sometimes said to occur more frequently when the advantage of the TNC is not that large i.e. a situation that more likely occurs in developed countries.<sup>30</sup>

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<sup>25</sup> Görg & Strobl (2004:2-3)

<sup>26</sup> Gachino (2007:26-7)

<sup>27</sup> Todaro & Smith (2006)

<sup>28</sup> Gachino (2007:25)

<sup>29</sup> Gachino (2006:20)

<sup>30</sup> Greenway & Görg (2003:3-4, 30), Glass & Saggi (2002: 495-498)

### 3.1.2 Technology Gap

Different results in studies of spillovers may to great extent depend upon differences in methodologies used and views of spillover itself.<sup>31</sup> The same figures can have various outcomes depending on question at issue. For example, studies have shown a positive correlation between technology gaps and degree of spillovers. The wider gap between foreign and domestic country the higher is the degree of spillover. However, crucial for this result is how technology gap and spillovers are measured, which is coming through when opposite results are shown as well.<sup>32</sup>

In their paper, *Foreign Investment and Technology Transfer: A Simple Model*, Wang & Blomström (1992) discuss the costs of spillover through technology transfer. The TNC faces a cost in transferring technology to their subsidiary in the host country and the domestic firm faces a cost in learning the new technology. They refer to the action as a game theory where both sides calculate profit against losses and they argue that the domestic firm is in the dominant position. The more the domestic firm invests in learning the less is the technological gap, whereas the TNC transfer even more technology.<sup>33</sup> Other studies do also opt for small gaps as generators of a greater amount of spillovers, but there is as well diversities between high and low technological sectors.<sup>34</sup> In contrast, technology spillover is shown to lack in Poland when the technology gap between foreign and domestic firms is limited. Instead, a competition effect occurs since the firms are so close in productivity.<sup>35</sup>

Similar results come from a Chinese study. The paper finds an impact divergence between TNC coming from countries with a large Chinese population (such as Taiwan, Macao, Hong Kong) compared with TNCs from other countries. The technology gap is smaller between China and the three above mentioned countries and generally greater between China and the rest of the world. The study reveals significant result presenting negative effect on productivity growth when the technology gap is of minor size i.e. from Taiwan, Macao and Hong Kong, and greater technology transfer when the gap is wider i.e. from the rest of the world. Foreign invested companies from Taiwan, Macao and Hong Kong rather seem to generate harder competition for the domestic firms.<sup>36</sup>

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<sup>31</sup> Gachino (2007:10, 33)

<sup>32</sup> Sjöholm (1997:3-4, 19, 22-24)

<sup>33</sup> Wang & Blomström (1992:10-12)

<sup>34</sup> Tain (2009:1-5) Wooster & Diebel (2010:644)

<sup>35</sup> Nicolini & Resmini (2009)

<sup>36</sup> Tong & Youxin Hu (2003:11-14)

### 3.1.3 Related Evidences

The same Chinese study as above do as well present results saying that more recently established companies tend to have a more efficient productivity. These companies do, in comparison to older ones, easier adapt to new technology and equipment as well as new management skills.<sup>37</sup>

In the same study as above, Wang and Blomström (1992) claims there are positive external effects when a domestic company is able to absorb spillover, especially in developing countries. In fact, they suggest to governments that the best way to receive spillovers from TNCs is to help their domestic companies to learn from the TNCs rather than focusing exclusively on attracting the FDI.<sup>38</sup>

In another study of technology spillover in China it is found that absorptive capacity matters for spillover benefits. The absorptive capacity is measured as regional research and development, R&D, expenditure and education level. The higher technology absorptive capacity, the larger is the effect of technology spillover. A positive relationship does also show between FDI inflow and R&D output which could be argued as more or less investment incentives.<sup>39</sup>

Also, in the U.K context evidence is found that domestic firms themselves have impact on the spillover effect. When studying productivity spillover in relation with firm's efficiency gap, measured as difference in total factor productivity to the industry's maximum, a clear relationship is found. It seems that firms benefit more from spillovers if they are in the higher or lower end of productivity distribution than in the middle range. It suggests that in a certain state domestic firms lowers their productivity growth due to growth in FDI. However, this reaction is caused by increased expenditures with keeping up and will therefore fade when the domestic firm is closing in again.<sup>40</sup>

When comparing spillover effects in the short run with effects in the long run in Japanese manufacturing, Murakami (2007) finds differences in domestic firms' productivity. In the short run an increase in TNCs' market share has negative impact on domestic firms' total factor productivity. In the long run the domestic firms can absorb the positive technology

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<sup>37</sup> Ibid

<sup>38</sup> Wang & Blomström (1992:10-12)

<sup>39</sup> Ying-chun et.al. (2009)

<sup>40</sup> Girma & Görg (2007)

spillovers generated by TNCs'. Therefore, in the long run, FDI is positive for domestic productivity.<sup>41</sup>

Of interest for this study is a sum up of FDI spillover made by Leshner & Miroudot (2008). They point out that diverse researches have come to the conclusion that domestic export companies do benefit less than domestic non exporting firms from the presence of FDI. This results from the fact that export firms already obtain the knowledge of export and thereby the outcome is minor. However, the opposite is seen in the U.K manufacturing industry when it comes to horizontal spillovers, i.e. within the same sector. Exporting TNCs generate positive spillovers that benefit domestic exporting companies. Meanwhile, export-oriented FDI has negative impact on domestic suppliers through backward linkages.<sup>42</sup>

Considering backward linkages, other results have as well been publicized. From a Lithuanian paper studying productivity spillover through backward linkages the results are almost consequently positive. Smarzynska Javorcik (2004), who has made the study, finds positive backward relations between TNCs and domestic companies in both of two regressions made. Meanwhile, there is no evidence for existing horizontal linkages and considering forward linkages the results seem to be negative but the statistics are not fully significant.<sup>43</sup>

## 3.2 THE AFRICAN CONTEXT

One of the spillover channels being studied in an African context is the worker mobility. Görg & Strobl (2004) take a look at the worker movements from foreign to domestic firms in Ghana. They find a positive relationship between entrepreneur background in TNCs in the same sector and productivity in domestic firms. However, this relation is diminishing with education level of the entrepreneur. Meanwhile, there seem to be a negative relationship between experience in TNCs in other sectors and productivity in the new firm. They read that conclusion as TNCs being more sector specific than domestic firms and therefore spillovers do not reach as far.<sup>44</sup>

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<sup>41</sup> Murakami (2007)

<sup>42</sup> Girma et.al (2008)

<sup>43</sup> Smarzynska Javorcik (2004:619-621)

<sup>44</sup> Görg & Strobl (2004)

Study of EPZs outcome in Malawi was made in 2007. The author found the zones fail to generate spillover such as backward linkages, productivity diversification and transferring skills which society can make use of.<sup>45</sup> Still, even though Malawi is an African country the states within the continent differ from each other and others may be able to administrate FDI spillover, e.g. Kenya.

Although Kenya to some extent do lack public health, infrastructure and policies which are believed to be important factors for spillover absorption, the country do not face total absence of such effects. When looking at firm-level capabilities and human capital in the Kenyan manufacturing industry, Gachino (2006) finds TNCs creating development of human capital to a greater extent than Kenyan owned firms. However, the study also concludes that these domestic companies do absorb spillovers from TNCs.<sup>46</sup>

In a Kenyan study of training and leakage of know-how among management made by Gershenberg (1987), approximately 16% of the asked managers had a history in TNCs but now working in domestic firms. The same working paper also concludes that the Kenyan owned firms to less extent provided their labour with training, in relation to their transnational counterparts. The investigated TNCs did provide workers without inter-firm mobility with more managerial training than workers with background from other firms. Overseas training was preferably utilized in these cases.<sup>47</sup>

### 3.3 THE EPZ CONTEXT

A general discussion considering the impact of EPZ have been made by Madani (1999) and the conclusion do not show a one sided result, as in line with many other studies. If the establishment of an EPZ comes with positive or negative outcome depend mostly on the situation the country is in as a whole. If the initiative is good for the entire country it is expected to be of value for the EPZ as well.<sup>48</sup>

Over all, Madani (1999) considers a liberalization of a country to be of much greater and efficient value than creation of EPZs. Notwithstanding, if the zones meet specific condition e.g. suitable establishment and management, the EPZs have a possibility to create a more dynamic business environment. According to the study, it is of importance to see to the

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<sup>45</sup> Nkohoma (2007)

<sup>46</sup> Gachino (2006:43, 49-50)

<sup>47</sup> Gershenberg (1987)

<sup>48</sup> Madani (1999:78-81)

situation of the single country before a judgement about EPZ is made. The zones are sometimes not even of relevance for the development of a country and do create obstacles instead of opening up the way for economic growth. Madani (1999) argue that EPZs especially are of no superior position if the country in question already has gone through with a trade and macroeconomic reform.<sup>49</sup>

In *Export Processing Zones in Development and International Marketing: An Integrative Review and Research Agenda*, Papadopoulos & Malhotra (2007) summarize literature on EPZ in a development context. They look at benefits both for the host country and for the investing foreign firm and list them. Categories of benefits from EPZs for host countries are counted to thirteen in their list.<sup>50</sup>

EPZs attract FDI which, in turn, means increased currency input in the host economy as discussed in the theoretical section of this study. Also positive on a macroeconomic level is the increase in foreign exchange reserves as an effect of an increase in export. In the theoretical section, both issues were presented along with suspicious opinions as well. However, only the benefits are listed in the study made of Papadopoulos & Malhotra (2007) and negative effects are neglected.<sup>51</sup>

EPZA objectives like technology and knowledge transfer, labour skills and infrastructural improvements are also included in their list. Papadopoulos & Malhotra (2007) distinguish between technology and knowledge transfer from EPZ and transfer from FDI as this study focus on. A rise in levels of wages is another benefit for EPZ host countries listed. However, even though higher level of wages are positive for the individual employee it can initially strike hard on domestic firms and forcing them to close down, lower productivity or never enter the market.<sup>52</sup>

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<sup>49</sup> Ibid.

<sup>50</sup> Papadopoulos & Malhotra (2007)

<sup>51</sup> Ibid.

<sup>52</sup> Ibid.

## 4 BACKGROUND

In this section background information about FDI and EPZ in Kenya are described in order to give a better understanding of the context the responding companies are in. The section contains of two main parts, one about FDI in Africa and Kenya, and one about the EPZ Kenya.

### 4.1 FDI in AFRICA and KENYA

Most arguments about FDI suggest it would have a large impact on the global economy. Both IMF and the World Bank stress the importance of investments for developing economies to grow. In Sub-Saharan Africa, FDI has however not increased since many economies are unstable and have difficulties attracting foreign investments while having low national savings and therefore being capital poor.<sup>53</sup>

Similarly to Africa, Kenya has experienced a poor increase of FDI even though the performance from the government side has been significant. FDI inflows have even been scarce compared to the average FDI inflows in Africa. From 1997 to 2001 FDI in Kenya was represented by 0.6% of GDP, while the average for African countries were 1.9% of GDP. The relation between Kenya and its neighbouring countries are even worse, Kenya has lost considerable parts of FDI especially to Tanzania and Uganda. The establishment of EPZs has been one of the steps made to improve the FDI environment within Kenya.<sup>54</sup>

The importance of foreign investments in Kenya is partly due to lack of a dynamic and growing economy in the country, which in turn can need some support from outside. Gachino (2006) points out poor infrastructure, low technology level and inconsistent policies as part of

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<sup>53</sup> Gachino (2006:19)

<sup>54</sup> Mwege & Ngugi (2006:119-127)



the situation.<sup>55</sup> Despite, focus has changed from public investment to private and nowadays attracting investors is important work for the growth of the national economy. In 1993 economic reforms was made by government to emphasize the importance of the private sector. Among other changes, removal of restrictions on borrowing, reduction of import tariffs and legitimate opening of currency accounts were part of the reforms.<sup>56</sup>

Investments did show a major decline in 2008 due to post election violence in the beginning of the year. National business faced challenges in increased transport costs, damaged conditions in the agricultural sector and insecurity, which in turn made investors more careful in contributing. The financial crisis that struck the world with beginning in 2007 also contributed to decreasing FDI inflow in the country.<sup>57</sup>

In Figure 2, FDI inflow as percent of GDP shows low numbers for Kenya in comparison with Sub-Saharan Africa for the period 1979-2006. There are some years during this period where Kenya does have a greater inflow even though they are few. In the middle of the 1990's the difference between the two seems to be widening and then closing up again in the end of the period. One should bear in mind that these graphs are depending on two variables. If the FDI inflow is somewhat steady the graph can still fluctuate if GDP does so, which is likely to be true within these areas. Both wars and natural disasters have caused economic difficulties in more than one country in Sub-Saharan Africa during the actual period.

In Figure 3, Kenya also shows low numbers in comparison with the neighbouring countries Tanzania and Uganda for the period 1992-2007. However, they also seem to close in on each other as with Kenya and Sub-Saharan Africa in whole. As in Figure 2, Figure 3 also shows that Kenya lags in the 1990's which can be a reflection of politic tension in the country during this time. The reason for showing different time periods in the two figures is lack of data for solitary countries certain years. For a more comprehensive picture of the FDI development, Appendix 3 contains of a table presenting the data used in Figure 2 and Figure 3 as well as a table and figures of FDI net inflow.

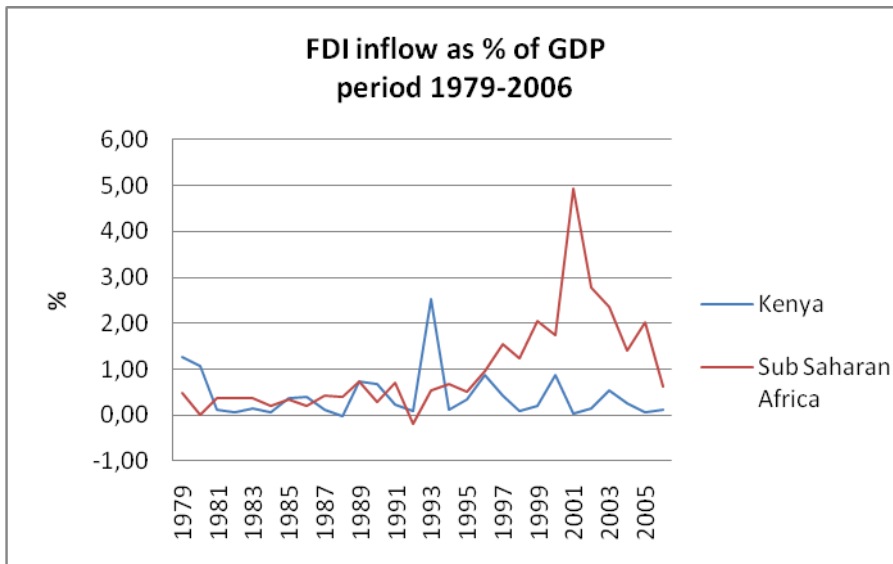
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<sup>55</sup> Gachino (2006:15)

<sup>56</sup> EPZA, Madani (1999)

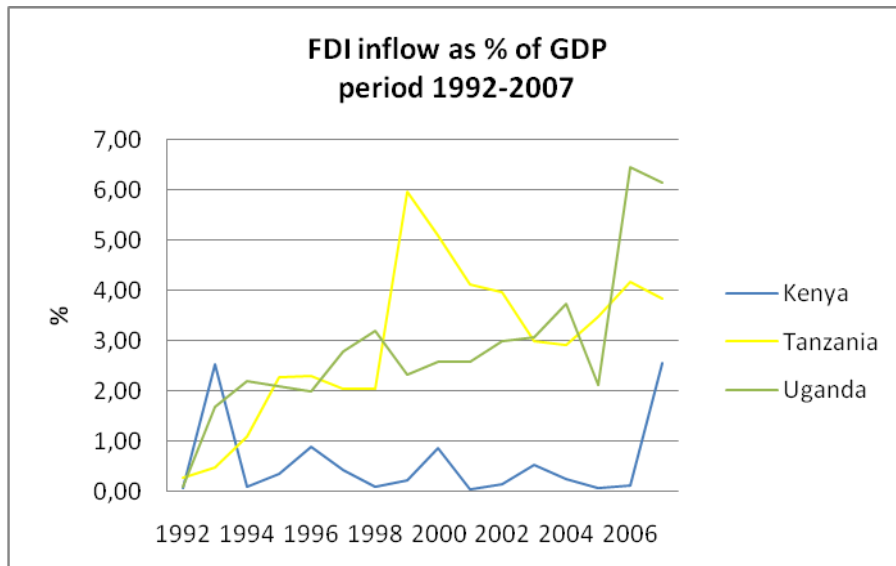
<sup>57</sup> EPZA (2,33-34)

Figure 2



Source: World Bank (see Table 3.1 in appendix 3)

Figure 3



Source: World Bank (see Table 3.1 in appendix 3)

## 4.2 EPZ KENYA

The number of countries hosting EPZs has grown steady over time. In 1975 the number was 25 countries, in 1997 it was 93 and in 2003 the number had grown to 105 countries.<sup>58</sup> To attract foreign investments several countries in Africa started EPZs in the 1990's and by 2007 there were more than 90 such zones running in Sub-Saharan Africa. Besides the actual direct investments in the zones activity, EPZs are also economically supported by government since export is believed to be a great factor of a countries economic growth and industrial development.<sup>59</sup> The EPZs were starting up in Kenya 1990 and by 1993 it was running. According to EPZA, it has up to this day shown a steady growth meanwhile other economical areas have faced various difficulties.<sup>60</sup>

### 4.2.1 Operation

Today Kenya has 41 EPZs which of two are public developed and managed while 39 are in private care. Together they are hosting 99 companies and close to 40,000 employees. There are five larger zones hosting a number of enterprises. The other 36 zones are individual EPZ companies.<sup>61</sup>

The companies within the Kenyan EPZs consist of a mixture of foreign owned, domestic owned and joint ventures since there is no such restriction of who can have a license. In 2009 there were 83 firms operating in the EPZ's with 19.3% domestically owned.<sup>62</sup> A major part of the EPZ export goes to the U.S market and the investors come from all directions in the world.<sup>63</sup>

The export-oriented firms can be divided into three types of activity. First, and most common ones are firms in the manufacturing or processing sector. Second comes commercial activities, for example repackaging and relabeling. A third category is export-oriented services such as information and repair services. Besides having a special kind of enterprise license, in which the above sectors are included, it is possible to have a license for being an

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<sup>58</sup> Papadopoulos & Malhotra (2007:151)

<sup>59</sup> Elliott (2006:108), Gachino (2006:22), EPZA, ILO (2007-03-14)

<sup>60</sup> EPZAb

<sup>61</sup> Ibid

<sup>62</sup> EPZAa

<sup>63</sup> Ibid (4)

EPZ developer/operator. A third license is the EPZ business service permit. The one regarding developers/operators is for firms involved in buildings and infrastructure improvement for new zones to develop. The latter is for businesses working within a zone but not being a candidate for the enterprise license.<sup>64</sup>

Today the EPZA is in the process of shifting the current zones to Special Economic Zones (SEZ). Purpose is to expand activities in order to be more active in meeting the objectives of the Vision 2030 economic pillar.<sup>65</sup> Vision 2030 is a long term developing plan for Kenya between 2008 and 2030 containing three pillars: the social pillar, the political pillar and the economical pillar.<sup>66</sup>

#### 4.2.2 Impact on the National Economy

For the years 1998-2008 the EPZA has tried to estimate the zones impact on the Kenyan economy. According to statistics received from the authority the importance of the zones on the country's GDP seem to have increased over time. 1998 the EPZ contributed to the GDP with 0,41% while in 2008 the figure was 2,29%.<sup>67</sup> It is possible that the increase in contribution is an effect of development of the zones and the EPZA. Improvement of attracting FDI and, nevertheless, keeping investors in the country is great factors to keep the zones sustainable and contributing to the national economy. Learning by experiences and listening to the needs of licensed enterprises, both domestic and foreign, in course of time results in economic activity that benefits for the whole country. In Figure 4 the development of EPZ's contribution for the period 2002-2008 can be seen. The graph verifies the increase of impact over time.

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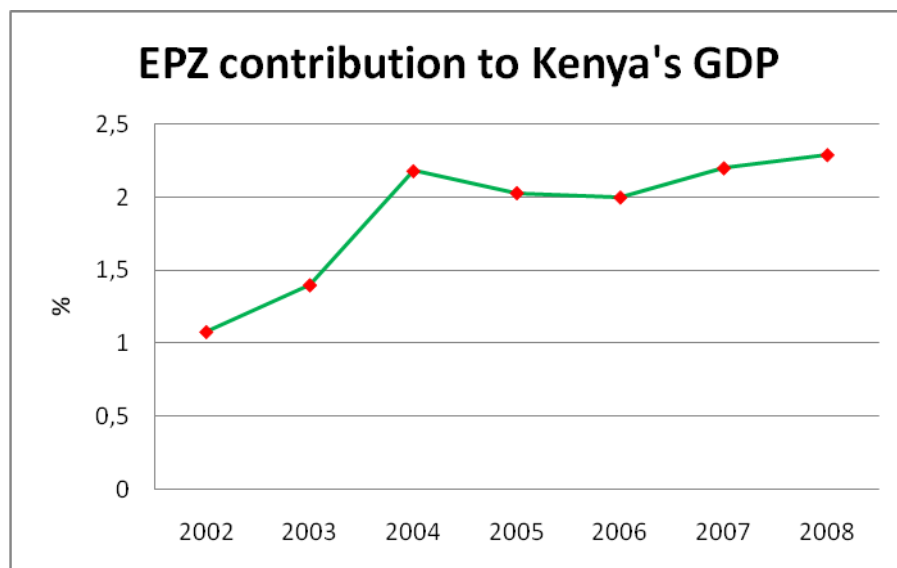
<sup>64</sup> EPZA (2009:4-7)

<sup>65</sup> EPZAa (2)

<sup>66</sup> VISION 2030, For more comprehensive knowledge see [www.nesc.go.ke](http://www.nesc.go.ke) or [www.planning.go.ke](http://www.planning.go.ke)

<sup>67</sup> EPZA (26-28)

Figure 4



Source: EPZA Kenya (see Table 3.3 in appendix 3)

#### 4.2.3 Enterprise Incentives and Duties

Firms can benefit from being EPZ-registered. Tax incentives include ten year income tax holiday followed by ten more years with 25% tax rate. A tax deduction of 100% on investments in EPZ buildings and machinery as well as customs import duty on inputs are also included. There are also other types of incentives which are of bureaucratic nature, as skipped change controls and licensing within 30 days, or infrastructure facilitate like storage warehouses and 24 hour security.<sup>68</sup>

As an EPZ enterprise i.e. obtainer of an enterprise license, one of the duties is to export more than 80% of output to non domestic market.<sup>69</sup> In that way EPZ companies do not compete with domestic companies which do not have any tax holiday and therefore the domestic market stays competitive.

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<sup>68</sup> EPZA b

<sup>69</sup> EPZA a (7), EPZA (2009:5)

#### 4.2.4 EPZA Objectives

One main objective of the zones is to give Kenya a role on the international market which includes creation of linkages between foreign and domestic market. Export expansion is also supposed to create job opportunities, diversification and productive investment increase.<sup>70</sup>

Some spillover channels are included in listed objectives by EPZA Kenya. These specific objectives are creation of linkages for a long-term development of domestic economy, skill upgrading and technological transfer for domestic workers and firms to absorb knowledge. Diversification and expansion of exports products and markets are also included. How these objectives are met by the domestic companies within the EPZ and the EPZA itself are also looked upon in this study.

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<sup>70</sup> EPZA b

# 5 METHODOLOGICAL FRAMEWORK

This section consists of four parts. The first part presents the procedure of how we got in contact with our respondents and how the data used for the analysis was collected. Second part is a presentation of the answer frequency. The third part explains the layout and the line of reasoning for the questions while the fourth part considers some methodological considerations.

## 5.1 PROCEDURE

Data for this report is collected through interviews with DECKs with an EPZ license. As the number of domestic export companies in EPZ is limited we inquired meetings with all of these companies. This resulted in companies from diverse sectors with a large variation with respect to size and type of business. Appointments are booked with the DECKs through e-mail, telephone and direct visits. A permit from EPZA was also received to ease the establishment of contacts with the DECKs.

When a contact was established, information about our purpose and a summary of our questions was sent to the company. This was to ensure that the respondent had received all the necessary information to be able to answer the questionnaire. Considering the aim of this paper interviews are done with the management of the company. Mostly interviewed is the manager or someone close to the manager with good knowledge about the structure of the company.

Throughout the process, personal meetings were preferred in place of answers through e-mail or telephone as this can ease the answering procedural in case of upcoming misunderstandings. However, some of the respondents did answer our questions through e-mail. The reason for this was that time was limited. The interviews were held during a period of five weeks. They were accomplished through a questionnaire with mostly closed questions that aimed to capture eventual effects of spillovers.

As a complement semi-open questions were asked to create a more comprehensive picture of our respondents' everyday reality within the EPZ and on the export market. These questions were asked on a later occasion through e-mail.

## 5.2 ANSWER FREQUENCY

Most appointments are booked through direct visits. Unfortunately, problems occurred getting in contact with the companies due to incorrect addresses. In some cases people did not show up at booked meetings and this made the group of respondents smaller than we first hoped for. The initial target group include DECKs with a minimum of 90 per cent of Kenyan investors and this requirement fits 25 of the EPZ companies (out of totally 99). The final answering frequency is 40 per cent (10 companies) for the questionnaire and 16 per cent (4 companies) for the exhaustive questions.

The answer frequency is lower than expected. Due to this, the answers are not representable for the whole group. The companies willing to answer may as well have a more positive attitude towards the questions. This can result in answers that confirm the spillovers to a greater extent than what is representable for the initial target group.

## 5.3 THE QUESTIONNAIRE

For this study we created a questionnaire. Since it has not been used in any empirical study before we believe it is of importance to discuss it, both the layout and the thoughts behind the questions chosen.

The questionnaire is divided into five different parts (see attached appendix). In each section only questions which are grasping the core of the spillover are asked. By dividing the questionnaire into sections and not asking too many questions we want to avoid that respondents get tired and that the answers are unattended in the end of the interview.

In the first section, typical figure based questions about profit, number of employees, investments and age of the companies are asked while the remaining four parts treats each one of the spillover. We require figures three years back to get an average picture of the size of the companies. If the respondents represent a service company they can consider the questions



treating their service as a product. Some of the questions distinguish between production process/technology, type of product and leadership/management. The reason for this is that there can be a disparity in between e.g. the source of idea for the technology, the sources of idea for the type of product and the source of idea for the leadership/management.

Many of the companies in our target group are newly established. If any spillovers are to be found we anticipate that imitation spillover are the one that will reoccur most often since young companies still have their sources of ideas fresh in mind. In contrast, older companies are believed to have more cooperation and contacts with foreign export companies as well as more knowledge about them.

A major part of the questions are closed. This is an active choice to, in our opinion, be able to achieve the most information about the spillover channels. If we had chosen open or semi-open questions solely we would have to educate every respondent on the subject to set their thoughts in the required direction.

Methodological considerations about the questionnaire will be discussed further down.

### 5.3.1 Questions on Imitation Spillover

The first three questions in this section are chosen to see if the respondent has received ideas to the creation of the company's product/technology/leadership from any FECK, i.e. if any imitation spillover has occurred. They are followed by questions about similarities between the DECKs and the FECKs as greater similarities could generate a greater spillover.

By asking how many of the employees that are also working for a FECK we intend to capture signs of a possible channel for innovation where information and knowledge could spread from one company to another.

Cooperation with other companies presents a possibility for spillover, which primarily is the reason to why questions on this topic are included. Questions about cooperation also complement the ones about sources of ideas and influences as well as similarity. Answers to the former questions can be hard to address and estimate whereas cooperation with FECKs with certainty is within the knowledge of the management. The respondents are to fill in the number instead of choosing between alternatives. This choice is made as diverse sectors and branches contains of diverse number of companies. Thereby, given alternatives will not tell if a certain fraction of companies in one sector would be the same fraction in another sector.

### 5.3.2 Questions on Skill Acquisition Spillover

We want to investigate if the respondents personally have experience from employment in a FECK. If this is the case there is a possibility for skill acquisition spillover. In case of a positive answer, we also ask how dated the knowledge from the former employment is since some information do tend to age and value less after a couple of years. As work assignments can vary between employments a question about to which extent the respondent believe knowledge is brought from the FECK is added.

The following three questions consider similarities just as in the section about imitation spillover, but in this case specifically between the employers. If the companies are similar there could be a greater possibility that the knowledge from the FECK affects the DECK.

The next question addresses received training within the FECK. The FECK may want knowledge of different kind to spread among the workers by using training as a method. Employees with training experience generate a greater chance for the DECK to gain skill acquisition. Even though training is received there is no actual guaranty for value of it in the respondent's current work. Therefore we include a question in search for the respondents' opinion of the value and usefulness of the training in their work at the DECK.

### 5.3.3 Questions on Competition Spillover

The questions in section four aims to capture if there exist effects of crowding in or crowding out due to competition from FECKs. The first three questions consider components in the market. In the first question the price of the product is asked about, if it is perceived to being set by FECKs to any extent. Experience of costumer competition and high payments to workers are the contents of the other two questions.

Last three questions points out whether competition from FECKs has at some level forced the Kenyan owned company to change anything with their product, production process or management. The questionnaire does not directly distinguish between positive or negative effects here since it can vary over time for the same change and the current conditions might not reflect the final outcome of the change.

### 5.3.4 Questions on Export Spillover

The section about export spillover is build upon two questions. The first question inquires if any new export contacts of value have been received due to any FECK. The second question deals with possible improvements of already existing export processes. The processes can be of diverse kind e.g. more effective cooperation or knowledge of how the trade works in a certain foreign market.

### 5.3.5 Exhaustive Questions

Since the companies within our target group are registered as EPZ companies, we also want to know more about the respondent's experiences and thoughts about the zones. Three questions about the EPZ and the EPZA are asked and the respondents are to answer them freely from his/her mind. The topics covered are the goals set up by EPZA, cooperation with the authority, and possible benefits from being an EPZ company. Three additional questions are asked regarding general experience of foreign export companies and the export market. Here the questionnaire searches for positive as well as negative experiences and thoughts by our respondents.

## 5.4 METHODOLOGICAL CONSIDERATIONS

As the questionnaire is devised specifically for this study and has not been used as the basis of any earlier research it is important to discuss possible deficiencies. For example, it became clear during the interviews that some respondents misinterpreted question number 3.1. The reason appeared to be a difficulty in distinguishing between the employer as a *foreign export company* or a *domestic export company*. During most of the interviews the differences were clarified before the questionnaire was filled in, however, on occasion, this misinterpretation still occurred.

When considering questions 2.1.1-2.1.3, respondents may struggle to grasp certain business concepts or ideas and that their responses may be based on an imperfect interpretation of the question. One possibility is that the respondent places equal importance

on the idea and its replication and therefore gives an answer that reflects this. It is also possible that the respondents do not want to admit that an idea have been inspired by a foreign company. We did, however, make efforts to explain that the focus of our research is on the extent of the impact of foreign influences rather than the issue of replication.

Both cooperation and contacts between domestic and foreign companies are likely to differ between branches and sectors. Therefore, looking at a small group of companies comprising several branches means the responses need to be viewed with a degree of caution. Possible spillover patterns are more likely to be seen in larger research samples where a higher number of observations are made and where the difference between business sectors becomes more apparent. Furthermore, when the respondents are asked about the FECKs that they are aware of, they tend to see only their own sector, even though they are encouraged to take a broader view during the interviews.

In the questionnaire, among the choice of answers, a possibility to choose *I do not know* is omitted. That option would assist with ensuring the accuracy of the questionnaire, even though, during the interviews there were no indications that respondents were uncertain about their answers.

Since the questions about profit and investments appear to be too sensitive to answer for many of the respondents, we do not include any deeper analysis about its relationship to the different spillovers.

# 6 ANALYSIS

The analytical section of this thesis is divided into seven parts. The first four parts consider each type of spillover focused on in this study, i.e. imitation, skill acquisition, competition and export. The fifth part gives a summary of spillovers found. Thereafter the analysis concludes with one part detailing EPZA experiences followed by one about the DECKs business environment.

## 6.1 IMITATION SPILLOVER

*“Advantages [with presence of FECKs] Could secure sub contract in periods of low season Borrow some technical know-how from them [FECKs]” (Anonymous respondent)*

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There are signs of imitation spillover among our respondents, even though the spillover does not reach all of them. When looking at where the DECK’s ideas come from, the answers vary widely and do not show a clear pattern. However, the type of product and the management style is the element most affected by FECKs. When observing similarities between the companies, it is clear that they exist. There are channels for spillovers to pass through but they are not particularly well used. Neither employees nor cooperation are great channels for imitation spillover to reach the DECKs.

### 6.1.1 Ideas

FECKs do not generally seem to have a lot of impact on the sources of the domestic companies’ ideas concerning the production process/technology used. However, some of the respondents answer that the idea does come from a FECK to a certain extent.

The inspiration for the types of products being produced by the responding companies seems to come from a wide range of sources. Some influences appear to have come from observations of foreign companies but not necessarily foreign export companies situated in Kenya. Some respondents have also been working or studying abroad and some have strong connections with other countries. Still, a majority of our respondents are influenced by FECKs to a large extent, while the other ones got their ideas from other sources. Therefore, for our target group the notion of imitation spillover is significant.

Influences and ideas can reflect the absorptive capacity of the DECKs. Without having tools for transferring ideas into reality the ideas do not reach as far. Level of absorptive capacity of handling influences from FECKs much depend upon whether the spillovers are coming through horizontal or vertical linkages. Ideas coming from glancing at a FECK in another sector are naturally harder to transform due to differences in products made, technology used etc.<sup>71</sup>

### 6.1.2 Similarities

Most respondents see little or no similarities between the managements of their employing companies and this is probably connected to that the management of a company is not always official, well-defined or easily understood by an outsider. The explanation is that the low impact from a FECK on a DECK's management idea results in minor similarities in management and vice versa.

A majority of companies state that they are only aware of a few FECKs producing the same product as them. The absence of similar companies in terms of products made suggests a small number of sources for spillover, even though the DECKs with existing sources have received ideas for their product from a FECK. Over all, the answers to the three questions about similarity are rather analogous. It could be that FECKs producing the same product as the DECKs have a natural tendency to use the same technology and to be managed in a similar way.

Because of little similarity between the companies, imitation spillover has not impacted greatly on the DECKs through horizontal linkages it seems. Since there are significant signs of influences from FECKs among our respondents, it is more likely that imitation spillover has reached through vertical linkages.<sup>72</sup>

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<sup>71</sup> Ying-chun et.al. (2009)

<sup>72</sup> Blomström & Kokko (1998)

This result goes in line with Leshner & Miroudot's study (2008) which argues for vertical linkages as more common. This is the situation as increased production within a supplier/customer could increase the production within the company in question. Horizontal linkages are said to create greater competition.<sup>73</sup> Also in this study the horizontal linkages are more common as a channel for competition spillover than vertical linkages as can be read further down.

### 6.1.3 Connection through Employees and Cooperation

Neither employees, nor cooperation are channels for imitation spillover to reach the DECKs. A majority of the respondents report that none or just a few of their employees also work for a FECK and therefore this connection does not seem to be a major channel for imitation spillover among our target group.

There is an absence of cooperation between our respondents and FECKs in all three areas asked about, i.e. production process, product development and management. In fact only a minority of the responding companies cooperate with FECKs and no one with more than four companies. It is even stressed that cooperation between domestic and foreign companies actually is rarely seen in Kenya.

## 6.2 SKILL ACQUISITION

***“Working in a foreign export company has given me good knowledge in handling different people and costumers in different sectors and countries. There is always something useful to take with you from a work.”*** (Anonymous respondent)

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A minority of the respondents state they have working experience from a FECK. Knowledge received from working in a FECK is in some way used in these respondents current work at the DECK. The ones who have received training in a FECK can also take advantage of this in

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<sup>73</sup> Leshner & Miroudot (2008:7-10)

their current employment at the DECK. The respondents in question do see some similarities between the foreign and the domestic company, though the extent varies.

### 6.2.1 Experiences in FECK and Similarities

Due to a small number of respondents, answers should potentially not be considered as representative for all DECKs. The number of respondents (40%) with working experience in a FECK is not in accordance with Gershenberg's (1987) Kenyan study, which found that 16% of the managers had working experience from a TNC. The reason for this is most likely the larger amount of TNCs acting within the Kenyan business society today. However, the experience of the respondents in our study is that they have been able to bring a notable share of knowledge from their former employment in to their current one, suggesting that there is evidence of a channel for skill acquisition spillover. The former experiences in FECKs are not always in the same sector as the DECK. Experiences in customer service, transportation, and cultural diversities have for some been received from an entirely different business sector.

The positive outcome from experiences in FECKs is not in line with Görg & Strobls' (2004) findings in Ghana where experiences from TNCs have a negative impact on the domestic employer if the sectors differ from each other. Reason for contradictions in our findings can be differences in sectors included in the studies or differences in absorptive capacity among the domestic companies heard.<sup>74</sup>

Despite the variety in sectors there are some similarities between the former and current employing companies. The similarities in particular relate to the production process/technology used. With more similarities between the companies there is a possibility for more skill acquisition to take place through transfer of technology and knowledge. Smaller technology gap does not have to mean less technology spillover as in the case of Poland earlier referred to.<sup>75</sup> As the idea of skill acquisition spillover illustrates, information and knowledge is hard to keep separated from the outside world and for these cases the knowledge is in some ways used outside the FECK.

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<sup>74</sup> Görg & Strobl (2004), Ying-chun et.al. (2009)

<sup>75</sup> Nicolini & Resmini (2009), Greenway & Görg (2003:3-4, 30), Glass & Saggi (2002:495-498)



## 6.2.2 Training

Not all of the individuals with knowledge from a FECK have received training there, but the respondents who have all claim it is of importance in their current work. Even though the educative company might not wish their information to be spread, knowledge does possess the ability to expand, in particular with labour movement. Trained labour has a deeper understanding on certain issues and they do possess more firm or sector specific knowledge to bring with them to their next employer.

As the employees recognize the training as being of importance in their current work this matches one of the outcomes claimed by Glass and Saggi (2002). Training advantages for the DECKs come, according to their study, as either higher payment to workers or, as more accurate here, technology transfer.<sup>76</sup>

## 6.3 COMPETITION

***“[...] companies in the Epza export their products to the more developed countries who will not accept any inferior products. And in order to achieve this all the investors do what it takes to match the already congested market.”[sic]*** (Anonymous respondent)

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The competition from FECKs seem to have most impact in terms of wage levels, otherwise direct competition comes from other domestic companies. When changes in production or management have been made as a response to competition by FECK they had a positive outcome in terms of efficiency and quality for our respondents.

Some companies claim that they do not experience almost any competition from FECKs. This is likely to be a result of them feeling unique in their market area. Since the investors come from all over the world there might be a few of them operating in the exact same place outside Kenya.<sup>77</sup> It is important to note that competition can also be perceived to

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<sup>76</sup> Glass & Saggi (2002: 495-498)

<sup>77</sup> EPZAa

be coming from other sectors that may offer similar products/services e.g. production of components, primary goods.

Other respondents state that they find the competition from FECKs to be an exhausting process. One opinion is that TNCs tend to have more substantial resources and possess the ability to attract more investors due to their experience. Domestic companies, especially the smaller ones, can then more easily be crowded out. Though one positive point of view for establishments within the EPZ, and the reason why many of the respondents are located there, is the tax reductions. With this benefit the companies can easier set competitive prices. This factor, together with the facilities EPZ provides, reduces the tendency for crowding out.

Another attitude among the respondents is that TNCs have a mixed effect on the economy. There is a risk of a less competitive market but TNCs can also support the market when production is low. As they often are of more substantial in size, they also possess the ability to employ DECKs through sub-contracts, leading to “crowding in.” Mixed thoughts about TNCs’ impact on domestic economy can be referred to differences between short run and long run. As seen in Japanese manufacturing, there are more tendencies of negative effects on domestic companies in the short run before adaption to the new market condition is made than in the long run.<sup>78</sup>

There could be higher requirements of the labour force’s educational background if the company is exposed to high competition. This is not clearly shown among our respondents. The companies which have many or all of the labour with education on university level do not experience higher competition in terms of prices, salaries, change of production process/technology or leadership/management in relation to the other DECKs.

### 6.3.1 Empowerment

Most competition comes from other domestic companies. In relation to domestic competition some of the respondents explain the competition from foreign companies is relatively rare. It is possible that the foreign export companies already are well established in their home country when starting to export from Kenya. By this time they may have achieved a certain size and the domestic and the international companies do then compete in the same sector but in diverse markets.

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<sup>78</sup> Murakami (2007)

If the presence of FECKs has created a monopoly situation within a specific sector, it will of course not show from interviews with domestic companies as they still are situated on the market. If the FECKs on the other hand are experiencing crowding out, this could be seen by domestic export companies through higher competition for the same customers, experience of lower prices on products and higher payments to workers. Fewer companies within the same sector of the market is another factor which could indicate a monopoly situation. There is a tendency towards this kind of competition according to the DECKs, even if opinions differ as to how widespread it is.

Analysing views on price-setting in return to competition gives an indication of that price-setting by FECKs exists when competition for the same customers exists, and vice versa. This suggests that the presence of spillover does affect DECKs on several levels. A few companies show significantly different opinions. On one hand there is little experience of price-setting by FECKs, even though the competition for the same customers is experienced as high. On the other hand, there is experience of a high degree of price-setting by FECKs even though the competition for the same customers is low. Competition can be high even though the price is not affected as the relationship with the price-setting foreign company can be as a supplier or a customer e.g. vertical.

Of all of the questions regarding competition as a spillover, the one dealing high payments to workers affects most companies. These companies are affected by this factor more than any other actions of their competitors. This confirms what Papadopoulos & Malhotra (2007) finds when summarizing literature on EPZ benefits. Even though they find a high level on wages being positive, our respondents experience it somehow obstructing.<sup>79</sup>

### 6.3.2 Changes

Companies have diverse opinions about how many changes due to competition by FECKs they have had to establish. About half of the companies have made changes on product type and management as well as technology. Technological changes due to competition from FECKs do not need to be of poor value. Changes can lead to an improvement and this has been the case for some of the companies we spoke to. Competition has forced them to become more efficient and this is one of the obvious effects of competition spillover.

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<sup>79</sup> Papadopoulos & Malhotra (2007:155)

This could be in line with the discussion about efficiency gap. At some point, domestic firms face difficulties benefiting from productivity spillovers which, with time and adaption, can be absorbed later on.<sup>80</sup>

Comments are made which argues that competition is a pathway to help reach EPZA objectives since standards are higher in developed countries that import the products made by the DECKs. Hence, products and services from Kenya need to keep of higher quality if continued export to an international market is to be maintained. It seems to be the case that competition, as a spillover, generates the objectives through a demand for higher standards.

According to some respondents, it appears that companies aim to reach for these available spillovers as much as they possibly can. Companies are positive about changes from competition, which in many times result in improvements.

Many of our respondents consider themselves as newly established. According to the earlier discussed study made by Tang & Youxin Hu (2003), newly companies do with more ease adapt to changes such as new technology, equipment and management skills.<sup>81</sup> There could be that the new established companies within the EPZ make the DECKs more willing to change the three above mentioned factors to become more efficient.

## 6.4 EXPORT

***“We don’t share clients with the foreign companies and don’t think many Kenyan companies do actually. For us we sell to them who knows us and trust us much.”[sic] (Anonymous respondent)***

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Our group of respondents does not experience any major problems on receiving new export contracts due to the presence of FECKs. FECKs’ impact on improvement of existing export processes is only slight among our respondents.

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<sup>80</sup> Girma & Görg (2007)

<sup>81</sup> Tang & Youxin Hu (2003)

### 6.4.1 Advantages of the Presence of FECK

The DECKs participating in our study do not experience any large impact from FECKs on their exports. A reason for this result could be that the domestic firms have already acquired the knowledge they need in terms of exporting goods and services. This could be connected to Glass & Saggi's (2002) reasoning which is discussed in the empirical section of this paper. They mean that the impact of FDI and export spillover from FECK could be greater for more unproductive domestic firms or for firms not integrated in the export market.<sup>82</sup> Firms in our target group are already to some extent productive enough to take part in Kenya's export market. Therefore our findings also confirm Leshner & Miroudot's (2008) reasoning that domestic export-oriented firms benefit less than non-exporting firms from TNC presence.<sup>83</sup> Why the respondents' experiences do not respond to the U.K. manufacturing is probably due to differences in development context.<sup>84</sup>

Some respondents believe FECKs' requirements on products and services to be linked to an improvement of export processes. It is also important to note that domestic companies, by watching and listening, create opportunities to take advantage of institutions developed by export companies.

Another issue raised during the interviews was the problem of being situated close to other companies due to being an EPZ enterprise. This creates unwanted imitation spillover and respondents especially experience the disclosure of sensitive trade information to be a severe problem. Nevertheless, this kind of information probably moves in both directions and thereby imitation spillover can also affect the DECKs. If commercially confidential information about trade is disclosed, there is a possibility of export spillover.

## 6.5 SPILLOVER SUMMARY

Table 2 shows a summary of the spillovers analysed in this study. Here we can get an indication on whether any of the suggested spillovers exist and in such case through which channels they reach the DECKs and also if they are spread.

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<sup>82</sup> Glass & Saggi (2002)

<sup>83</sup> Leshner & Miroudot (2008)

<sup>84</sup> Girma et.al (2008)

We did expect to find the imitation spillover be dominant in our findings since many of the companies in our target group are newly established. Young companies still have their sources of ideas fresh in mind. However, imitation spillover concerns only a minority of companies and occurs through observations of FECKs.

Skill acquisition also reaches a minority of companies and does so through flexible knowledge picked up at FECKs and labour movement. Similarities between FECKs and DECKs also work as channels for skill acquisition because of easier adaption of knowledge. A majority of companies are affected by competition, but only partly. There are worries for crowding out caused by high levels of wages and price setting on one hand. On the other hand, sub-contracts give an effect of crowding in. Development is used as a channel for competition since the DECKs have to keep up with the FECKs in terms of supply and quality. Export spillover is the only spillover not found among the EPZ companies in this study.

In comparison with the EPZ study made in Malawi 2007, this study shows more positive results in terms of spillover.<sup>85</sup> In Kenya we do find vertical linkages, productivity diversity and transferring of skills. As mentioned in the empirical section, even though both Ghana and Kenya are found in the African context, they still possess a range of different qualities and conditions which can affect the ability to gain from EPZ spillovers.

**Table 2**

SPILOVER	EXISTENCE	CHANNELS USED	COMPANIES AFFECTED
Imitation	Yes	<ul style="list-style-type: none"> <li>• Observations</li> </ul>	Few
Skill acquisition	Yes	<ul style="list-style-type: none"> <li>• Similarities</li> <li>• Flexible knowledge</li> <li>• Labour movement</li> </ul>	Few
Competition	Partly	<ul style="list-style-type: none"> <li>• Costs</li> <li>• Prices</li> <li>• Sub-contracts</li> <li>• Development</li> </ul>	Many
Export	No	<ul style="list-style-type: none"> <li>• None</li> </ul>	None

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<sup>85</sup> Nkohoma (2007)

## 6.6 EPZ EXPERIENCES

***“Organization like EPZA helped us, by organizing seminar, trade exhibition, trade fair, training seminars, customer database, product comparison, to achieve these goals [EPZA objectives].”[sic]*** (Anonymous respondent)

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The objectives promoted by EPZA are a part of the domestic companies’ reality within EPZ Kenya, at least in the opinion of our respondents. They express a clear positive answer about their possibilities to achieve these goals.

The EPZA itself, in various reports, explains the difficulties they face when trying to be effective in realizing their objectives. There have been policy changes made without consultation with the persons and companies most affected, which unfortunately has lowered the incentives of being an EPZ enterprise. Production costs are high due to expensive electricity which is also unreliable, as are the water supply and the condition of the roads. Another challenge is the size of the domestic market. Many investors have done their calculation on the EAC countries as foreign market which is to be included in the domestic market due to tariff reductions within five years. This while an EPZ registered company at most can sell 20% of its annual production to the domestic market.<sup>86</sup>

The EPZA's expression of difficulties can be connected to studies that stress the importance of infrastructural and institutional support as important conditions for spillover absorption.<sup>87</sup> Lack of reliable channels of these kinds lower the chances for domestic companies to develop as well as to benefit from FECKs advantages. Among our respondents, a reliable infrastructure is though thought of as one of the advantages of being established within the EPZ. A trustworthy reputation among customers is a further positive outcome by having an EPZ license according to our respondents.

The companies that do receive support from EPZA do so through concrete actions such as seminars, trade and fair trade exhibitions and conferences and the establishment of a customer database, among others. It is, however, argued that not all of the diverse sectors

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<sup>86</sup> EPZAa (6-8), EPZA (33-37)

<sup>87</sup> Gachino (2007:25)

within the EPZ benefit to the same extent. The objectives could be seen as more directed towards the manufacturing sector. Another opinion is that the specific objectives set by the EPZA can open up for domestic markets that are in an initial stage. Many of our respondent companies are young and the objectives could be of more value for them than for more established companies. Even though the objectives in some way seem to be of importance for the respondents, the EPZA is only a linkage to actual spillovers.

If we once again return to the list of EPZ benefits in Papadopoulos & Malhotra (2007), discussed in the empirical section, there are evidences in our study which confirm their findings.<sup>88</sup> Infrastructure is crucial for a positive development and efficiency and is believed to be a great benefit from being registered as an EPZ enterprise. Technology and knowledge transfer do occur within the EPZs in Kenya, both from FDI and DECKs, and wages are changing. The latter very much depends upon FECKs setting the levels and do not always come across as something positive for our respondents.

## 6.7 BUSINESS ENVIRONMENT

***“By giving trade licenses for same trade in same EPZ area creates indirect losses like immigration of skilled staff, revelation of trade Information etc.”[sic]*** (Anonymous respondent)

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Within the EPZ there are several similar companies that are active in same sectors. This has been perceived as a negative factor in terms of skilled labour moving between companies. Movement should, in theory, occur in all directions but in reality FECKs often have an advantage in their ability to pay higher wages to workers generating a situation where DECKs loose competent staff. In contrast, there is positive experience of FECK employment in terms of decreasing unemployment among the locals. The locals are a great source for positive spillover and by employing them the chances for knowledge leakage increases.

EPZ companies being close to each other can also mean sharing each other’s problems. Employee grievances within one unit can lead to a similar situation within another. Meanwhile, useful knowledge circulates between the companies within the EPZ as well.

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<sup>88</sup> Papadopoulos & Malhotra (2007:155)



## 7 FURTHER RESEARCH

As this is a minor field study there is plenty of scope for discovering more about the issue of spillover in Kenya's EPZs. Most of the companies participating in this study are relatively young. In a few years the impact of spillovers on these companies may have changed or those impacts may be coming through other channels, which is why a similar study can be made without telling the same story.

An alternative future research path could be to distinguish between sectors since different spillover channels vary between them.

Even though reports on the EPZs contribution to the national economy are made, a study which compares spillover impacts on companies within the EPZ against companies outside the EPZ could be of interest. It would help the EPZA as well as the existing and soon-to-be registered companies to measure some of the objectives set up by the authority.

## 8 CONCLUSION

This field study examines the extent to which FDI spillovers reach domestic EPZ companies in Kenya. The aim has more specifically been to distinguish if, how much and through which ways spillovers reach the companies in question. The spillovers examined more closely are imitation, skill acquisition, competition and export. The study has also considered the opinions of the DECKs concerning their establishment within the EPZ and the impact TNCs have on local companies.

The idea of this study is based on the Kenyan government's notion of the EPZ as a source of economic growth and EPZ Authority's goals for the zones which included some of the named spillovers.

The study is conducted in Kenya through interviews based on a questionnaire and semi-open questions. It is important to remember that the choices made of variable definitions as well as the questions asked could to some extent have affected the answers received. This thesis is not an exception to this rule.

As with earlier studies made on the existence of spillover, the net-results are not fully conclusive. However, with closer examination of each of the four spillovers there are certain specific conclusions to be made. Relating to imitation spillover there are signs of smaller linkage sources through which the spillover is entering. The spillover in question is of significant but not of greater aggregated value, despite the FECK's influence on the type of product and management.

The most evident spillover found is that of skill acquisition. The number of companies affected is small but the spillover is in all cases very clear and knowledge gain from FECKs to DECKs is significant. Most of the respondents had also received training in a FECK, leading to a degree of knowledge transfer.

In terms of competition spillover the results are mixed, even though the spillover affects many of the companies. Competition is mostly experienced in the form of higher payments to workers or positive changes of efficiency, otherwise it is believed to come primarily from other domestic companies.

Among the invested spillover, export is the one with most insignificant outcome. There was even some suggestion of spillovers working in the opposite direction.

Given the size of this study, the absence of apparent spillovers can be due to the large technology gap between Kenya and foreign investors, as Kenya is not yet considered as fully developed. However, we also know that the foreign investors come from all directions in the world and therefore in some cases the technology gap does not have to be that large.

The opinion from the respondents' point of view is that all of them do measure up to the objectives made by EPZA. Some companies are even believed to be targeting spillovers. The linkages mostly claimed to be the reasons for spillover to exist are positive changes regarding efficiency and product improvements due to competition. Also tax reduction is strongly believed to be of importance to avoid crowding out. In fact, competition is the spillover engaging most of our respondents. The opinions are, however, a mixture of positive and negative experiences, which correlate to the results of the questionnaire.

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# APPENDIX 1 questionnaire

## QUESTIONNAIRE

This questionnaire is a part of an analysis on spillover effects between foreign and domestic export companies in Kenya. The questionnaire is divided into five different sectors each containing 2 to 14 questions. We would appreciate if you could take time to answer all of the questions. If you find some questions difficult to answer it is preferable to answer approximately than not answering at all. This company will not be investigated separately but as a part of a larger group of export companies.

Name of this company: \_\_\_\_\_

Location of this company: \_\_\_\_\_

Position in this company of the person answering this questionnaire: \_\_\_\_\_

### 1. Statistics about the company

**Please fill in the numbers**

1.1 What year was this company *started*?

Year \_\_\_\_\_

1.2 If this company is situated within an Export Processing Zone, for *how many years* has it been established there?

\_\_\_\_\_ years

1.3.1 What was the *profit* of this company *year 2009*?

\_\_\_\_\_ Kenyan shilling

1.3.2 How many *employees* did this company have *year 2009*?

\_\_\_\_\_ employees

1.4.1 What was the *profit* of this company year 2008?

\_\_\_\_\_ Kenyan shilling

1.4.2 How many *employees* did this company have year 2008?

\_\_\_\_\_ employees

1.5.1 What was the *profit* of this company year 2007?

\_\_\_\_\_ Kenyan shilling

1.5.2 How many *employees* did this company have year 2007?

\_\_\_\_\_ employees

1.6.1 How much was *invested* in this company year 2009?

\_\_\_\_\_ KSh

1.6.2 How much was *invested* in this company year 2008?

\_\_\_\_\_ KSh

1.6.3 How much was *invested* in this company year 2007?

\_\_\_\_\_ KSh



## 2. Knowledge about Foreign Export Companies in Kenya

Please mark the answer you find most appropriate.

2.1.1 To which extent did you get the idea of the *production process/technology* used by this company from a foreign export company in Kenya?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

2.1.2 To which extent did you get the idea of the *type of product* made by this company from a foreign export company in Kenya?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

2.1.3 To which extent did you get the idea of *the management/ leadership* of this company from a foreign export company in Kenya?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

2.2.1 How many of the foreign export companies in Kenya, that you are aware of, are *using the same technology* as this company?

1) No one 2) A few 3) About half 4) Many 5) Everyone

2.2.2 How many of the foreign export companies in Kenya, that you are aware of, are *producing the same product* as this company?

1) No one 2) A few 3) About half 4) Many 5) Everyone

2.2.3 How many of the foreign export companies in Kenya, that you are aware of, are *managed in a similar way* as this company?

1) No one 2) A few 3) About half 4) Many 5) Everyone

2.3 How many of this company's employees are *also working* for a foreign export company in Kenya?

1) No one 2) A few 3) About half 4) Many 5) Everyone

**Please fill in the number you find most appropriate.**

2.4.1 How many foreign export companies in Kenya do your company cooperate with when it comes to *production process/ technology*?

\_\_\_\_\_foreign export company/companies

2.4.2 How many foreign export companies in Kenya do your company cooperate with when it comes to *development of new and/or already existing products*?

\_\_\_\_\_foreign export company/companies

2.4.3 How many foreign export companies in Kenya do your company cooperate with when it comes to *management/ leadership*?

\_\_\_\_\_foreign export company/companies

### 3. Working and educational background

Please mark/ fill in the answer you find most appropriate

3.1 Have you been or are you currently *working* at a foreign export company in Kenya?

1) YES 2) NO

3.2 If you are still not working in a foreign export company in Kenya, how many year has passed since you did?

\_\_\_\_\_ year/ years

3.3 To which extent have you brought *knowledge* from the foreign export company in Kenya into this company?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

3.4.1 To which extent is / was the foreign export company you work/ worked for similar to this company in terms of *production process/ technology*?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

3.4.2 To which extent is / was the foreign export company you work/ worked for similar to this company in terms of *type of product*?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

3.4.3 To which extent is / was the foreign export company you work/ worked for similar to this company in terms of *management*?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

3.5 Have you received any *training* in the foreign export company?

1) YES 2) NO

3.6 To which extent can you take advantaged of this training in your current work?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

3.7 How many of this company's employees have been *studying at a university level*?

1) No one 2) A few 3) About half 4) Many 5) Everyone 6) Do not know

## 4. Competition

Please mark the answer you find most appropriate

- 4.1 To which extent do you perceive the *price of your product* being set by foreign export companies in Kenya?
- 1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent
- 4.2 To which extent do you experience *payments to workers* being high due to labour competition of foreign export companies in Kenya?
- 1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent
- 4.3 To which extent do this company compete for the same *customers* as foreign export companies in Kenya?
- 1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent
- 4.4.1 To which extent have this company changed its *production process/ technology* due to competition from foreign export companies in Kenya?
- 1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent
- 4.4.2 To which extent have this company changed its *type of product* due to competition from foreign export companies in Kenya?
- 1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent
- 4.4.3 To which extent have this company changed its *management/ leadership* due to competition from foreign export companies in Kenya?
- 1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

## 5. Export

Please mark the answer you find most appropriate

5.1 To which extent have this company established *new valuable export contacts* through any foreign export company in Kenya?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

5.2 To which extent have this company *improved its existing exporting process* due to the presence of foreign export companies in Kenya?

1) Not at all 2) To little extent 3) To medium extent 4) To large extent 5) To full extent

Thank you for answering our questionnaire. You will receive access to the final report when it is completed. If you have any question, please do not hesitate to contact us.

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# APPENDIX 2 exhaustive questions

Dear Sir or Madame,

We are now in the procedure of making the analysis out of the answers we have received. Unfortunately the number of companies answering the questionnaire have been too few to be able to do a regression analysis. Therefore our hope is in the companies we already have been in good contact with. We do now contact you again with some more exhaustive questions which we hope you can and want to answer. The answers will be used so we can extend the discussion part of the analysis. Your company will not be mentioned by name in the final report.

*We would appreciate exhaustive answers*

1. The Export Processing Zone Authority promotes certain objectives including technology transfer; skill upgrading; diversification and expansion of exports products and markets; creation of linkages. Do you believe that the companies within the Export Processing Zones can measure up to these goals? Why/Why not?
2. How has the Export Processing Zone Authority and existence of the Export Processing Zones helped you to achieve these goals?
3. What do you believe are the benefits and losses of an establishment within the Export Processing Zones?
4. The presence of Foreign Export Companies can help as well as disable domestic companies. What is your opinion in this issue? Why?
5. In which ways do you experience advantages and/or disadvantages for your company caused by the presence of Foreign Export Companies.
6. What kind of changes in the export market do you believe could improve the situation for domestic export companies?

Thank you.

Please, if you do not have time to answer we would appreciate a corresponding mail so we are aware of this.

Yours Sincerely,

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# APPENDIX 3 figures and diagrams

**Table 3.1** (numbers used in Figure 2 and Figure 3)  
FDI inflow as percent of GDP

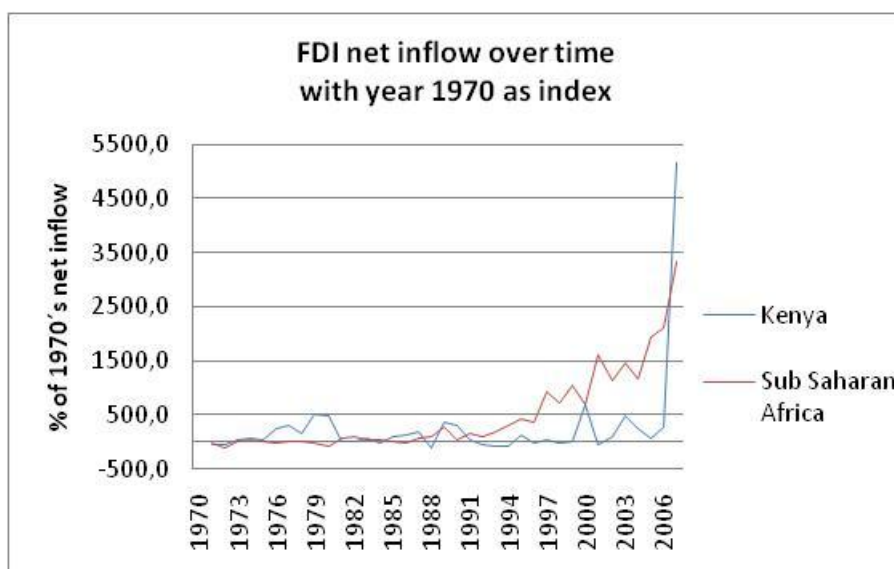
Year	Kenya	Sub-Saharan Africa	Tanzania	Uganda
1979	1,25	0,47		
1980	1,07	0,00		
1981	0,12	0,36		
1982	0,05	0,37		
1983	0,16	0,36		
1984	0,06	0,19		
1985	0,38	0,35		
1986	0,38	0,20		
1987	0,11	0,42		
1988	-0,02	0,39		
1989	0,74	0,72		
1990	0,66	0,30		
1991	0,23	0,69		
1992	0,08	-0,19	0,26	0,11
1993	2,53	0,52	0,48	1,70
1994	0,10	0,68	1,11	2,21
1995	0,34	0,50	2,28	2,11
1996	0,88	0,95	2,31	2,00
1997	0,43	1,55	2,06	2,79
1998	0,10	1,25	2,06	3,19
1999	0,21	2,05	5,98	2,34
2000	0,87	1,74	5,10	2,60
2001	0,04	4,94	4,12	2,59
2002	0,15	2,78	3,97	2,99
2003	0,54	2,35	3,00	3,06
2004	0,26	1,41	2,91	3,73
2005	0,06	2,03	3,49	2,12
2006	0,12	0,63	4,17	6,47
2007	2,57		3,85	6,16

Source: World Bank, Africa Development Indicators



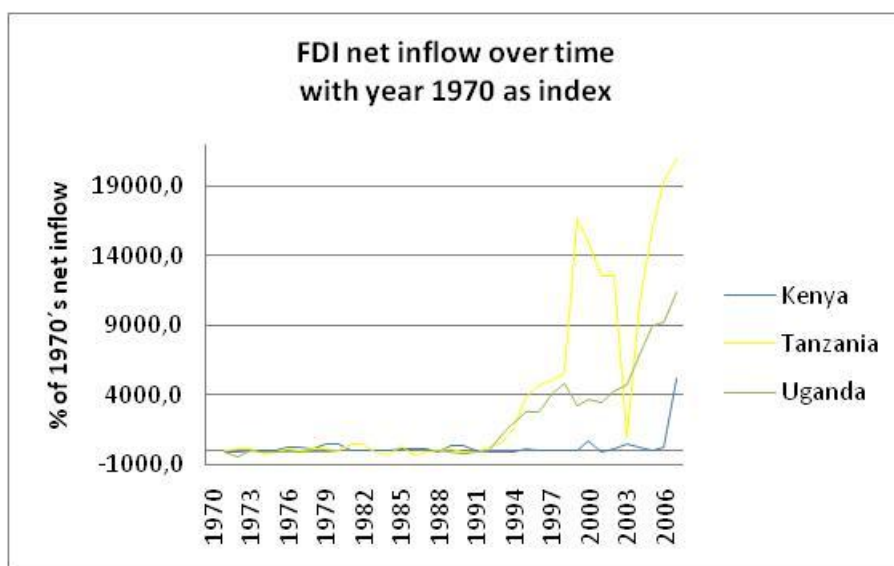
To give a more comprehensive picture of the FDI development in Sub-Saharan Africa as well as Kenya and some of its neighbouring countries we choose to present figures of FDI net inflow as well. In **Figure 3.1** and **Figure 3.2** year 1970 has been chosen as index year. Reason is that this year is the first year for which numbers for the specific countries can be found in the official World Bank data base. It is important to keep in mind that the figures show a pattern not only depending on the real numbers but also depending on the specific index year chosen. Therefore a look at **Table 3.2** can give a more comprehensive understanding of the development of FDI net inflow during the period 1970-2007.

**Figure 3.1**



Source: World Bank, Africa Development Indicators

**Figure 3.2**



Source: World Bank, Africa Development Indicators

**Table 3.2**

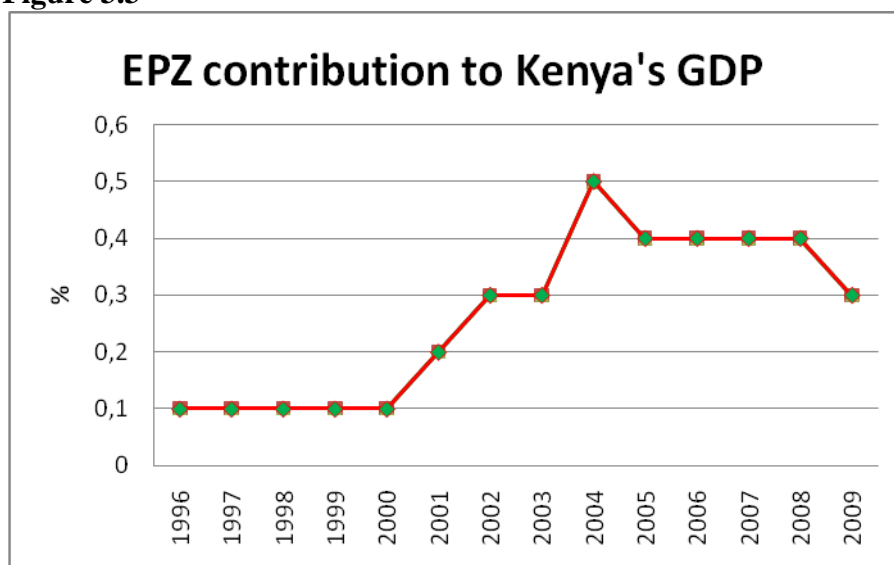
FDI net inflow period 1970-2007 current USD, thousands

Year	Kenya	Sub-Saharan Africa	Tanzania	Uganda
1970	13800	831376	3070	4200
1971	7400	716272	5150	-1200
1972	6300	3986	7690	-11900
1973	17260	846563	6030	5200
1974	23420	1165982	-2060	1700
1975	17159	813006	-870	2100
1976	46372	671987	6560	2050
1977	56545	845746	2940	800
1978	34414	826281	6120	1970
1979	84010	643212	8020	2000
1980	78974	188289	4580	4000
1981	14148	1507975	18920	-
1982	13001	1533313	17310	2020
1983	23739	1147837	1520	-
1984	10754	1043363	-8420	-
1985	28846	904245	14510	-4000
1986	32726	630873	-7490	-
1987	39381	1457972	-470	-
1988	394	1551991	3760	4700
1989	62190	3034868	5840	-1760
1990	57081	1198928	10	-5910
1991	18831	2046374	10	1000
1992	6363	1585720	12170	3000
1993	1569	2317779	20458	54600
1994	3729	3406592	50001	88200
1995	32471	4392780	110037	121200
1996	12746	3946148	150066	121000
1997	19666	8494983	157885	175000
1998	11414	6765088	172306	210000
1999	13821	9459475	516701	140200
2000	110905	6681276	463401	160700
2001	5303	14159759	388800	151496
2002	27618	10161330	387600	184648
2003	81738	12947797	30820	202193
2004	46060	10587909	330600	295420
2005	21210	16816163	494050	379810
2006	50670	18496257	596950	393180
2007	727730	28564115	646970	484040

Source: World Bank, Africa Development Indicators

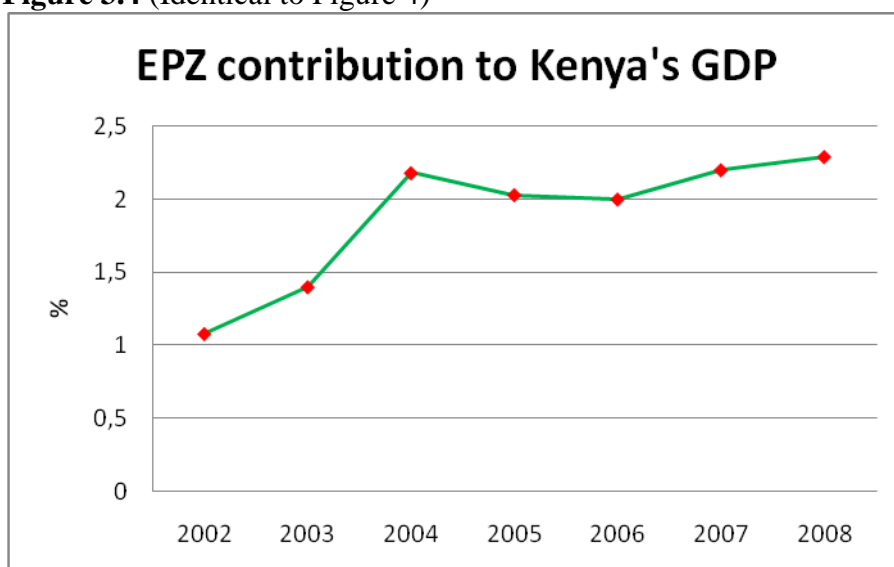
Figure 4 shows the EPZ's contribution to GDP according to the EPZ Kenya. However, their numbers are notable different from the ones received from KNBS. Even though all the numbers shows an average up going trend, which is the main object pointed out in this thesis, the difference should be brought up. These differences may occur as a result of variety in estimation and definition of various components included in the calculation. Data received from KNBS and EPZA are shown in Figure 3.3 and Figure 3.4 respectively. The data is also shown in Table 3.3.

**Figure 3.3**



Source: KNBS

**Figure 3.4** (Identical to Figure 4)



Source: EPZA Kenya

**Table 3.3**

Contribution to national GDP in percent according to KNBS versus EPZA Kenya

Year	KNBS	EPZ
1996	0,1	
1997	0,1	
1998	0,1	0,41
1999	0,1	
2000	0,1	
2001	0,2	
2002	0,3	1,08
2003	0,3	1,40
2004	0,5	2,18
2005	0,4	2,03
2006	0,4	2,00
2007	0,4	2,20
2008	0,4	2,29
2009	0,3	

Sources: KNBS and EPZA Kenya