Harnessing Foreign Direct Investment for Local Development?
Spillovers in Apparel Global Value Chains in Sub-Saharan Africa

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List of Abbreviations

AGOA African Growth and Opportunity Act
EPZs export processing zones
FDI foreign direct investment
GVCs global value chains
LICs low-income countries
MFA Multi-Fibre Arrangement
SSA Sub-Saharan African
Abstract

At the beginning of the 2000s, the introduction of the African Growth and Opportunity Act (AGOA) combined with Multi-Fibre Arrangement (MFA) quotas contributed to a boom in foreign direct investment (FDI) in the Sub-Saharan African (SSA) apparel industry, leading to a major growth in exports and jobs. Beyond this, the possibility of exploiting the spillover potential of this FDI raised significant hopes of developing a locally-embedded SSA apparel export industry. The paper explores the level and nature of FDI spillovers and the factors supporting and constraining them focusing on three of the leading SSA apparel exporter countries – Kenya, Lesotho, and Swaziland. We find that despite significant investments to attract FDI, virtually no locally-owned apparel firms are exporting or subcontracting, local value added remains low, local participation in management is limited, and domestic suppliers are almost absent in core and even most non-core inputs. In addition to domestic absorption capacity, the potential for and the nature of FDI spillovers is determined by the strategy of foreign investors and the governance of global value chains (GVCs). We find across all countries FDI strategies that severely limit spillover potential, including a concentration in low value added activities, external control of sourcing, and reliance on expatriates in managerial and technical positions. This is aggravated by a weak domestic absorptive capacity through weak skills development, barriers in the domestic business climate, ineffective policies to support local small and medium enterprises, and a missing local

Keywords: Foreign direct investment; spillovers; global value chains; apparel; Sub-Saharan Africa
1. Introduction

Foreign direct investment (FDI) has increased rapidly over the last two decades, in part due to the expansion of global value chains (GVCs). Until recently the majority of FDI took place in industrialized countries but this changed in 2012 with 54 percent of global FDI inflows going to developing countries in 2013. This is also related to policy makers in developing countries having competed fiercely to attract FDI given their high expectations that FDI will have positive impacts on economic growth and development. At the macroeconomic level, gains from FDI can materialize through increases in investment, employment, foreign exchange and tax revenues. At the microeconomic level, FDI can lead to competitive pressures that force local producers to increase productivity as well as to increased demand for inputs produced by local firms or the provision of inputs to be used in local production. But the main reason to attract FDI from a development perspective is its potential to deliver “spillovers” that advance knowledge and technological and managerial capabilities of local firms and the local economy more broadly (Paus/Gallagher 2008; Farole et al. 2014).

In contrast to the strong policy focus on FDI, the vast quantitative (econometric) and qualitative (case study) empirical literature on FDI-generated spillovers provides mixed results. In some countries, FDI has been a catalyst to economic growth and development but in many other countries it has had enclave character and failed to deliver on the expected benefits. Hence, existing empirical evidence shows that the theoretical postulated spillover effects do not automatically materialize just because a country is able to attract FDI in the first place (Paus/Gallagher 2008; Farole et al. 2014). This is reflected in the critical literature on FDI and local economic development that stresses the self-contained or packaged nature of FDI in developing countries (Streeten 2001) with few externalities – whether in the form of knowledge transfer or indirect employment impacts (Phelps et al. 2009). However, with the increasing importance of GVCs and the greater permeability in the international division of labor, FDI has become less self-contained which may lead to more significant spillover possibilities in host countries.

The vast empirical FDI spillover literature, particularly in economics, has focused on the technology gap between home and host countries and the local absorptive capacity in understanding the existence (or absence) of FDI spillovers (for a recent overview see Perri/Peruffo 2016). These factors are clearly important but they tend to adopt a host country perspective in analyzing the conditions under which FDI leads to benefits in developing countries, focusing on host country firm characteristics and policy conditions. But not all FDI is equal in the nature of the benefits it may provide (Narula/Lall 2006; Phillips/Henderson 2009). As stressed particularly in the International Business literature, foreign firm strategies and the broader competitive industry dynamics in which FDI takes place importantly impact on the FDI spillover potential which together with local absorptive capacities determine the extent and nature of actual FDI spillovers (Dunning 1979, 2000; Meyer 2004; Paus/Gallagher 2008; Perri/Peruffo 2016; Ietto-Gilles 2014).

Of particular importance in this respect is the rise of GVCs. Today, 80 percent of global trade and a rising share of global GDP and employment are structured around fragmented and geographically dispersed GVCs (UNCTAD 2013). Even though outsourcing and non-equity modes of international production have increased in importance, FDI plays an important role in GVCs and multinational corporations’ foreign affiliates accounted to one third of total global exports (UNCTAD 2014). In this context, the potential for and the nature of FDI spillovers are strongly determined by the specific GVC dynamics, particularly in terms of competitive industry dynamics, inter-firm relationships and governance structures, corporate strategies of lead firms and the global production and sourcing strategies of foreign investors. Few FDI studies have explicitly considered such GVCs dynamics and how they

This paper adds to this literature by exploring the level and nature of FDI-generated spillovers and the factors supporting and constraining them taking onto account that an important part of FDI takes place within GVCs and that GVC dynamics and the strategies of foreign investors importantly shape FDI spillovers. Following Paus and Gallagher (2008), factors that determine FDI spillovers are categorized in “FDI absorption capacity” and “FDI spillover potential”. Absorption capacity captures the capabilities of local firms and workers and the policy dynamics of the host country. These include the size of the local economy, firm-level capabilities, the learning and innovation infrastructure, and the underlying local institutions and government policies. Spillover potential captures the characteristics and strategies of FDI. These include the type and ownership of FDI, sector and GVC dynamics, and foreign investors' global production and sourcing strategies. The role firms have within GVCs and the strategies of foreign investors significantly impact on the FDI spillover potential. In locally-owned firms, which functions are performed in a location and which production methods are used is primarily a question of local conditions. Foreign-owned firms are able to leverage the functions, skills and expertise of their head offices and other production plants, so the choices on what and how to produce in a given location are based on how that location fits into their global production network. The realization of spillovers is conditioned by the spillover potential of FDI, the host country’s absorptive capacity and the interaction of these two factors (Paus/Gallagher 2008).

Empirically, the paper focuses on the apparel industry in Sub-Saharan Africa (SSA), specifically on three of the leading SSA apparel exporter countries – Kenya, Lesotho, and Swaziland. The apparel sector is of particular importance given its globalized character - exports are dominated by developing countries having expanded their share from around 25 percent in the 1960s to more than 80 percent currently – and its central role in the industrial development process of many low-income countries (LICs) (Dickerson 1999). The apparel industry is organized in buyer-driven GVCs where FDI is less important than in producer-driven value chains as lead firms generally focus on non-production related activities such as design, branding and retailing and outsource all or most of the manufacturing process to a global network of suppliers (Gereffi 1994, 1999; Gereffi/Memedovic 2003). However, there are important exceptions and in particular LICs are often integrated into apparel value chains through FDI (Gereffi 1999; Staritz 2011). This is also the case in Kenya, Lesotho, and Swaziland where the introduction of the African Growth and Opportunity Act (AGOA) combined with Multi-Fibre Arrangement (MFA) quotas contributed to a boom in FDI in the apparel industry in the beginning of the 2000s (Morris et al. 2011, Morris et al. 2016).

The paper is structured in the following way. The following section provides an overview of FDI in the export-oriented apparel industry in SSA. The third section discusses data sources and methods. The fourth section presents the empirical findings on the level and nature of FDI spillovers and the determining factors for the different spillover channels, including supply chain, labor market, and imitation spillovers. The last section concludes.
2. FDI in the apparel industry in Sub-Saharan Africa

Over the past decade, several SSA countries have developed or expanded export-orientated apparel sectors, in particular Kenya, Lesotho, Madagascar, Swaziland, and Mauritius (where the process started in the 1970s). This took place, first, within a policy framework of “export-led growth” as governments hoped that the sector would play a central role in (starting) the industrialization process as it did in other countries and, second, in light of MFA quota restrictions on large Asian producing countries and based on agreements securing preferential market access to developed countries, in particular AGOA. SSA apparel exports increased from $1.3 billion in 1997 to $3.2 billion in 2004 (Table 1) and dramatically changed composition. Exports to the EU stagnated while those to the US more than doubled peaking at $1.8 billion for all SSA AGOA beneficiaries in 2004. The share of SSA apparel exports in global apparel exports increased to 1.3 percent in 2004; in the US, the region’s share reached 2.6 percent in 2004.

The phase-out of the MFA at the end of 2004 and the consequent ability of China and other low-cost Asian apparel producing countries to export to developed country markets without being hampered by quota provisions as well as the global economic crisis of 2008/09 resulted in a major decline in terms of exports, employment and number of firms in the apparel sector in all the main SSA apparel exporter countries (Kaplinsky/Morris 2006; Staritz 2011). The total value of SSA apparel exports decreased by 27 percent from 2004 to 2010 (Table 1); exports to the US declined by more than half over this period. The net result is that the region’s global market share fell to 0.7 percent in 2010, similar to the 1995 level. But exports increased in 2011 and have continued to increase through 2014 – in total by 26 percent (2010-14) accounting for 0.8 percent in global market share in 2014. Further, the sector still constitutes the most important manufactured export from SSA (Kaplinsky/Morris 2008).

Table 1: SSA top apparel exporters to the world

<table>
<thead>
<tr>
<th>Partner</th>
<th>Value ($US, Millions)</th>
<th>Share of SSA Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSA Total</td>
<td>2,184</td>
<td>3,293</td>
</tr>
<tr>
<td>Growth Rate (%)</td>
<td>50.8%</td>
<td>-12.6%</td>
</tr>
<tr>
<td>Global Share (%)</td>
<td>1.1%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Mauritius</td>
<td>1,031</td>
<td>999</td>
</tr>
<tr>
<td>Madagascar</td>
<td>370</td>
<td>563</td>
</tr>
<tr>
<td>Kenya</td>
<td>50</td>
<td>307</td>
</tr>
<tr>
<td>Lesotho</td>
<td>153</td>
<td>494</td>
</tr>
<tr>
<td>South Africa</td>
<td>406</td>
<td>486</td>
</tr>
<tr>
<td>Swaziland</td>
<td>37</td>
<td>191</td>
</tr>
</tbody>
</table>

Source: UN COMTRADE 2016; apparel represents HS92 61+62; exports represented by world imports (retrieved 10/30/16).

1. These are not real exports of locally made apparel but rather from 2007 onwards trans-shipment of imports largely from China.
FDI has played a crucial role in the development of export-oriented apparel industries in SSA. In the three SSA countries analyzed, the overwhelming majority of export-oriented apparel firms are foreign-owned. In Lesotho, there are 31 apparel firms and one textile mill operating in the formal apparel and textile manufacturing industry in 2012; 16 firms are Asian-owned (largely Taiwanese), 14 South African-owned and one firm is Mauritian. There are no locally-owned firms.¹ In Swaziland, there are 13 apparel firms and three textile mills. Of the apparel firms, 9 firms are Taiwanese-owned, three South African-owned and one is locally-owned. In Kenya, there are 17 apparel firms operating in export processing zones (EPZs) – six firms are Indian-owned with two having head offices in Dubai, eight are from Asia (largely Taiwan and China), two have joint ownership structures and one is locally owned.² Broadly, three types of export-oriented FDI firms exist in the apparel industries in Kenya, Lesotho, and Swaziland with distinct characteristics, export destinations and spillover potentials (Staritz/Frederick 2012; Morris et al. 2016).

**Asian-based transnational producers:** Apparel firms, in particular in the “Big Three” (Hong Kong, Taiwan, Korea) but more recently also in other Asian countries (i.e., Singapore, Malaysia, China and India) and the Middle East, developed from only producers to transnational intermediaries organizing far-flung transnational production and sourcing networks. This was related to MFA quotas, cost pressures in their home countries, and high demands from global buyers (Appelbaum 2008). They established triangular production networks in the Asian region in the 1970s and 1980s, extending to Latin America and SSA in the 1990s (Appelbaum 2008; Gereffi 1999; Azmeh/Nadvi 2014). Transnationals have a clear division of labor between the head office and a few core plants in Asia and globally dispersed manufacturing plants. Decision making power and skill-intensive activities (product development and design, input sourcing and financing, sales and marketing, logistics and buyer relationships) usually stay in the headquarters with largely labor-intensive activities being relocated. The strategy of these firms is global – exporting long run, basic products almost exclusively to the US market (Gibbon 2003, 2008; Morris et al. 2016).

**More locally embedded Asian investors:** These are typically single operations that have their head offices and sourcing and sales competencies in Africa. The General Manager is generally also the owner (or at least part owner) of the firm and not an employee. These firms are not part of tightly organized global production networks with a more fluid division or labor. They generally have not created close buyer or supplier relationships. Most work with sourcing offices in India, Taiwan and/or Hong Kong or the US for orders and input sourcing. They overwhelmingly export to the US market.

**Regional investors:** Regionally embedded manufacturing networks emerged in SSA to benefit from lower labor costs and preferential market access in the context of regional integration efforts. Their investments are based on geographic proximity to the head office, cultural proximity and affinity, and regionally based competitiveness strategies. Mauritian manufacturers have invested in Madagascar, and South African firms have invested in Lesotho and Swaziland (Morris/Staritz 2014; Morris et al. 2011). The South African firms have head offices and their sales and merchandising, input sourcing, product development and design teams in South Africa and run the plants in Lesotho and Swaziland as CMT operations. But some have more decision-making power locally and due to the geographical proximity there is a less strict division of labor with more interaction in sourcing, design and product development between head offices and manufacturing plants.

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¹ There were two locally-owned apparel firms in Lesotho engaged in subcontracting that are no longer in operation.
² There are also foreign-owned apparel firms outside the EPZs in Kenya that are largely Indian-owned. In contrast to the EPZ firms that export to the US, these foreign-owned firms focus on apparel and often also textile production for the local and to a lesser extent regional market.
3. Data sources and methods

The paper is based on a survey and complementary interviews conducted in the apparel industries of Kenya, Lesotho, and Swaziland in 2012. The aim was to assess the level and nature of interactions between foreign investors and the local economies in the apparel industries of the three SSA countries and enabling and constraining factors for spillovers. Hence, the survey was designed to capture: (i) a quantitative understanding of the degree to which foreign investors are linked to the local economy, and (ii) a qualitative understanding of the factors which contribute to or hinder the degree of interaction and spillovers between investors and the local economy.

The survey covered a representative sample of 39 foreign investors (operating for on average 10-12) years as well as a smaller sample of domestically owned apparel firms and suppliers. The Kenya, Lesotho and Swaziland survey covered respectively 15, 13 and 11 FDI firms, accounting for 83 percent, 42 percent and 93 percent of the foreign-owned export-oriented apparel firms; and 13 domestically-owned apparel firms and 11 largely domestically-owned suppliers in Kenya, and one domestically-owned, export-oriented apparel firm in Swaziland. Secondary reference sources such as investment promotion databases, industry association membership lists and internet searches were used to identify relevant firms, and personal referrals from new and existing contacts in the relevant industries were utilized to compile the sample. In addition, 30 institutional interviews were carried out covering government ministries and agencies, support institutions, trade unions, industry bodies, and non-governmental organizations.

Table 2 shows an overview of the interviews according to the three types of FDI firms. Figure 1 shows the nationality of the foreign-owned apparel firms interviewed with 90.7 percent being Asian owned in Kenya, 53.9 percent in Lesotho, and 72.2 percent in Swaziland. In Kenya, Indian investors dominate Asian FDI with 50.7 percent while in Lesotho and Swaziland Taiwanese investors dominate. In Lesotho and Swaziland, South African investment is also important accounting for 46.2 percent (including one Mauritian investor) and 27.3 percent respectively. Exports to the US dominate in Kenya accounting for 93 percent of the firms interviewed. In Lesotho and Swaziland exports from South African owned firms to South Africa are also important with a share of 48 and 74 percent respectively.
### Table 2: Types of export-oriented apparel firms (2012) (percentage of totals) and number of interviews (2012) (percentage interviewed)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Firms</th>
<th>Types of export-oriented apparel firms (estimated)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Firms*</td>
<td>No. of Firms Interviewed</td>
<td>No. of Firms Interviewed</td>
</tr>
<tr>
<td></td>
<td>**</td>
<td>Inter-viewed</td>
<td>**</td>
</tr>
<tr>
<td>Kenya</td>
<td>17**</td>
<td>16 (94%)</td>
<td>11 (65%)***</td>
</tr>
<tr>
<td>Lesotho</td>
<td>31</td>
<td>13 (42%)</td>
<td>11 (36%)</td>
</tr>
<tr>
<td>Swaziland</td>
<td>13</td>
<td>12 (100%)</td>
<td>4 (31%)</td>
</tr>
</tbody>
</table>

Source: Fieldwork 2012.

* These are estimated from industry sources complemented by interview data.

** In Kenya, this primarily includes export-oriented firms. Outside of the EPZs there are Indian-diaspora and locally owned apparel firms that primarily focus on the domestic market, with a recent increase in regional exports particularly to the EAC.

*** There are also a few firms included that are based in EPZs that just do subcontracting work for transnational producers (for a detailed breakdown of types of EPZ firms in Kenya, see Staritz/Frederick 2012).

### Figure 1: a) Nationality of foreign-owned apparel firms in interview sample; b) Export destinations of foreign-owned apparel firms in the survey (2012)

Note: * Africa includes South Africa in Lesotho and Swaziland and one Mauritian investor in Lesotho.
4. Spillovers in the apparel industry in Kenya, Lesotho and Swaziland

Commonly spillovers are referred to as the diffusion of knowledge (intended or unintended) from foreign to local firms and workers. This encompasses both technology and all forms of codified and tacit knowledge related to production, including management and organizational practices. Based on the assumption that foreign investors enjoy technological advantages and therefore higher levels of productivity, these spillovers are assumed to benefit local firms and industries as they can tap the superior knowledge of foreign investors. Three possible channels for spillovers are usually differentiated in the literature and are assessed in this paper: linkages or supply chain spillovers, human capital or labor turnover spillovers, and demonstration and imitation spillovers (Paus/Gallagher 2008; Hoekman/Javorcik 2006; Günther 2003, 2005; Gallagher/Zarsky 2007).

There are two types of supply chain linkages with foreign-owned apparel firms that are important in the apparel industry: inputs and services for apparel production (backward linkages), and subcontracting of apparel production. Backward linkage inputs include: (1) direct raw material (fabric, yarn); (2) apparel trim and accessories (buttons, zippers, thread, elastic, labels); (3) non-essential (packaging); (4) capital equipment and machinery parts manufacturers or suppliers; (5) industry-specific services such as embroidery, laundry, and printing; and (6) general broad services differentiated into specialized services (logistics, shipping, ICT and training), and non-specialized services (catering, local transport, construction, cleaning, security, and general human resources).

Subcontracting of CMT activities is an important linkage channel to exporting for locally-owned firms. Given the difficulties in establishing direct relationships with buyers and sourcing networks, fulfilling subcontracting work for foreign owned firms offers entry and experience in export-oriented apparel production. Local subcontractors may learn to meet international standards and technological efficiency that increases overall productivity. TNC affiliates might help local producers upgrade technological capabilities – directly through sharing production techniques and product design and assisting with technology acquisition, quality standards or production set up, or indirectly through the expectation of high standards and feedback on suppliers’ output (Paus/Gallagher 2008).

Regarding labor market spillovers, FDI creates large scale employment for low- and semi-skilled, often female, workers. But there is also an important share of higher-skilled technical and management positions in apparel manufacturing. Foreign firms provide workers with knowledge and skills, and these may be carried over to local firms through labor mobility or by starting their own firms.

Demonstration effects from direct imitation or reverse-engineering might generate spillovers as local producers are exposed to foreign firms’ products, marketing strategies, and production processes. The extent and potential for this type of spillover depends on the extent of knowledge transfer from head offices to foreign affiliates, and on the degree of interaction between foreign and local firms.

4.1. Supply chain spillovers

**Level and nature of spillovers**

Supply chain linkages between foreign and local firms are very limited as there are very few local firms in export-oriented apparel or input manufacturing in the three countries. In Kenya, where locally owned firms do exist, there are limited interactions and linkages between foreign and local firms in terms of input provision or subcontracting. In terms of the overall
value of goods and services purchased by foreign-owned apparel firms, the share from locally-owned firms was less than 5 percent for all three countries (Figure 2a). Kenya had the highest share at 4 percent of purchases whereas the share in both Swaziland and Lesotho was 1 percent, and all purchases from locally-owned firms were limited to services (Figure 2b). Some foreign firms have invested in broader functions, including vertical integration into textiles (e.g. Nien Hsing in Lesotho and Tex-Ray in Swaziland) and embroidery, dyeing and screen printing, but this is primarily for their internal consumption.

Figure 2:  a) Source of foreign-owned firms’ purchases of goods and service by value (%); b) Foreign-owned firms’ purchases from locally-owned firms by type (%)

Note on b): for Swaziland and Lesotho there may be a lack of accuracy in distinguishing between knowledge on nationality of supplier firms between South African or Swazi-owned or Basotho-owned supplier firms.

In Lesotho, there are no locally owned firms in the export sector. There is one Taiwanese textile mill that supplies textiles for its own apparel production and other apparel firms in the region. There are also two Taiwanese embroidery firms and three screen printing firms – two are South African and one is locally-owned but has no foreign-owned customers. With regard to packaging, there is one corrugated paper sheet and cardboard factory and two paper and cardboard box factories (all Taiwanese-owned) and three (Chinese, South African, and Taiwanese) firms producing plastic bags, plastic hangers, and plastics. There are also service firms mainly used in transport and freight. Eight transport firms were named in firm-level interviews that are largely locally-owned (only two are South African). One local customs service and one local forwarder and shipping service firm were cited. South African firms are used for security services and business services such as accountants, ICT and legal issues. There are limited linkages to foreign-owned suppliers operating in the country as only 1 percent of the total value of purchases came from this category (Figure 2a). Purchases from locally-based firms are limited to packaging materials and services (Figure 2b). Overall, 97 percent of purchases were imported from either parent firms or other foreign-owned firms abroad.

In Swaziland there is one locally owned export firm. Similar to Lesotho, 93 percent of purchases were imported from either parent firms or other foreign-owned firms abroad (Figure 2a), most fabric and trim from Asian countries. Textile, trim, and packaging capabilities exist, but they are all foreign-owned, and the majority of the goods produced are for internal consumption – e.g. the Taiwanese-owned knit textile firm, Tex-Ray, which also
has its own dyeing, embroidery, printing and hanger production facilities. Another foreign-owned yarn plant, Spintex, produces entirely for export. The only trim suppliers are also foreign-owned. A Japanese-owned firm, YKK, has a zipper manufacturing facility in Swaziland, but the majority of the zippers are exported. Non-core inputs such as packaging and services come from mostly South African-owned firms in Swaziland. Of total apparel purchases, 6 percent were from foreign-owned firms operating in the country and only 1 percent was from Swazi-owned firms involved in security and cleaning services.

The one local owned apparel export firm in Swaziland started out in the apparel industry as a subcontractor for a few of the foreign-owned firms engaged in exporting to the United States. However, over the last decade it has acquired its own customers in the South African market. These connections stemmed from personal networks through the industry association and by attending apparel trade meetings in South Africa. The firm now maintains an 80 and 20 split between their own contracts and subcontracting for foreign-owned firms. This is a successful example of how local firms can develop through subcontracting relationships with FDI firms.

Other local apparel firms exist in Lesotho and Swaziland but they are very small-scale and are essentially individual tailors or workshops. They produce made to order products for the local markets in niche areas – school uniforms, traditional apparel or dresses and suits for specific events. Some traditional apparel tailors also export to South Africa and Botswana. This business is very distinct from apparel exporting firms with regard to the order, design and production process, equipment (machinery), and inputs used. There is no interaction between foreign-owned apparel firms and these workshops.

In Kenya, only 4 percent of the value of purchases made by foreign-owned apparel firms surveyed was from locally-owned firms – another 12 percent came from foreign-owned suppliers operating in Kenya, and the remaining 84 percent was imported from third-party firms in other countries (63 percent) or from parent companies abroad (21 percent) (Figure 2a). As seen in Figure 2b, purchases from domestically-owned firms were predominately services (58 percent), followed by packaging materials (29 percent), and parts and materials (13 percent). There is one local export-oriented EPZ apparel firm which primarily works as a subcontractor for foreign-owned firms, but is now moving into direct relationships with work wear and uniform clients in Europe and the US. This firm started outside the EPZ producing for the local market and doing some subcontracting work for one of the EPZ firms, and then moved into the EPZ to expand its subcontracting relationship. There are still close interactions between these two firms involving production set up advice, productivity improvements, and quality. The firm has recently started selling about 20 percent of output to their own clients with the remaining 80 percent as a subcontractor to the other EPZ firm.

The apparel and textile firms outside the EPZs have very little interaction with EPZ firms. They are located in separate industrial areas and pursue different production and sales strategies for the local market and increasingly also regional markets. There are around 35-50 formal firms with around 50-100 machines and many more small- and micro-scale informal firms. These firms tend to be less interested in exporting and also not able to fulfill the requirements in terms of volume, finance, and networks. For instance, formal local firms may have an output of around 300 pieces per day compared to 10,000 and up to 50,000 pieces per day for EPZ firms. There are around 12 textile mills left that use rather outdated equipment with limited experience in supplying global markets. They cannot supply EPZ firms with their different requirements regarding volume, quality and lead time.

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3 Some reports estimate up to 170 formal firms (Chemengich 2010) but based on our fieldwork, we estimate the total number of formal apparel and/or textile firms to be in the range of 35-50.
There are several locally-owned supplier firms that supply trims (threads, elastics, labels and packaging) to EPZ and local firms. There are four foreign owned EPZ firms for zippers and hangers that are globally nominated suppliers of US buyers. Two local trim firms operating in the EPZs have closed. One locally-owned firm still supplies some EPZ firms with labels but this is minimal as their focus is on local and regional markets. There are a few other non EPZ firms that supply EPZ firms in the area of trim, however the focus of firms outside the EPZs is mostly on local and regional markets. There are more firms that supply non-core inputs such as packaging and services, most importantly transport and freight, security, and IT business services. Six EPZ firms mentioned having some interaction with locally-owned firms however this was limited to purchases of non-core inputs or subcontracting with the one locally-owned firm in the EPZ.

Interviews were also conducted with 11 supplier firms including seven packaging material suppliers and four trim suppliers (two for labels, one for hangers, and one for thread and buttons). Nine were locally-owned and the remaining two were fully and partially foreign-owned. These firms primarily sell to other firms operating in Kenya – 53 percent of sales were to Kenyan-owned firms, 38 percent were to foreign-owned firms; only 15 percent of sales were exports. Of the sales to foreign-owned firms, Indian was the nationality mentioned most often, followed by African and Chinese; hence mostly to non-EPZ firms. Only half of purchasing agreements between these input suppliers and foreign-owned firms operating in Kenya are formal contracts; the other 45 percent are set-up as trial contracts, ad-hoc purchases or regular orders with no formal contract. Non-formal contracts create a difficult operating environment for suppliers because they do not provide a way to plan and limit the likelihood of buyers engaging in long-term relationship building, including supplier development. Out of 11 input supplier responses, six firms (54 percent) have obtained ISO 9000 quality certification, of which half of the firms did so as a requirement to supply a foreign-owned customer in Kenya. Only three firms stated that foreign-owned customers in Kenya provided any form of assistance to help them meet their requirements. Even when assistance was provided, the firms perceived it as providing very minimal improvement.

Determining factors

Sourcing policies of buyers and foreign investors are crucial to determine the extent of backward linkages particularly into textile production. Input sourcing decisions are generally made at FDI head offices, either in Asia or, in the case of Lesotho and Swaziland, in South Africa, where inputs for all production plants are sourced on a global or regional scale to get better prices and secure conformity. Transnational producers often also own textile mills in other countries that are used to supply their apparel manufacturing plants. A global sourcing model for textiles also limits opportunities to develop local capabilities for other less important inputs such as trim. Even if local capabilities exist for trim, if textiles are sourced from abroad, other inputs can easily be sourced abroad as well and shipped in the same box. One firm manager in Kenya describes: “Inputs are sourced from Taiwan and all inputs come to Kenya in a package together; the head office orders in bulk for all of the different factories, including the factory in Kenya. Since the fabric is imported, it makes little sense to increase local sourcing for other inputs as fabric is the most important input impacting lead times.”

Another issue is the fact that many global buyers nominate suppliers for textiles and sometimes trim that have to be used for their orders. The motivation behind this is threefold: First, many buyers have long-established relationships with textile producers that fulfill their specifications with regard to quality, reliability, and costs. Second, nominating textile mills helps with quality control, particularly with dyed textiles, and helps to assure that inputs used by different apparel manufacturing facilities have the same color. Third, buyers often have more purchasing power than the apparel manufacturers and can negotiate better rates. This
is more important for US buyers than South African buyers since only few South African nominate suppliers. For the three country cases, roughly three quarters of all sourcing decisions are made by external decision makers, including parent firms abroad, buyers, or foreign sourcing agents (Figure 3).

For firms that have sourcing competencies in the host countries and where purchases are not determined by global buyers, there is more scope for local sourcing. In Kenya, Swaziland, and Lesotho, roughly one-quarter of sourcing decisions (29, 25 and 14 percent respectively) are made by local management within the country (Figure 3). For these firms, the lack of availability of suitable local inputs, particularly regarding the more capital, skill and scale intensive textile production, is a crucial competitive concern (Figure 4). The lack of local suppliers at all levels precludes the possibilities of spillovers through demand and technical assistance effects – including supplier requirements and assistance for standards and certification, as well as support on technical and non-technical upgrading. In Kenya where local suppliers exist, interactions between export-oriented firms and locally-owned firms are limited due to their distinct business models, end markets, and locations but also due to lack of adequate quality and uncompetitive pricing. Nearly all local firms are outside of the EPZs and, in this context, EPZ regulation acts as an impediment to local linkages. Only 20 percent of total sales can be sold to customers in Kenya, Uganda, or Tanzania (given the EAC common market) for manufacturing operations, and local sales are not permitted at all for commercial establishments (i.e., importers of trim or equipment in the EPZ zone). Domestic market customers have to pay VAT and import duties as if the products were coming from outside the country.

**Figure 3: Supplier decisions by value (percent)**

![Supplier decisions by value (percent)](image)

Source: Authors’ survey and interviews.
4.2. Labor market spillovers

**Level and nature of spillovers**

FDI in the apparel sector has created local skills in the three countries, but these skills are largely limited to basic production. In all three countries training is mostly informal, conducted by floor supervisors, and focused on basic production and standardized assembly activities. However, in Lesotho and Swaziland, the South African owned firms provided more training given their more flexible production set up (Morris et al. 2011). Embedded Asian investors also place more importance on skill development due to more local decision-making power and more functions conducted locally.

To deal with the shortage of skilled labor for management, technical, and to a lesser extent supervisory positions, these have often been filled by expatriates. Expatriates can have a crucial role in local skill training but language and cultural barriers result in limited knowledge transfer to local workers. There have however been improvements in all three countries with regard to localization, in particular at the supervisory and line management levels where the majority of workers are now locals. In top management there are still only foreigners in FDI firms while in middle management positions there is a mix – foreigners tend to be in technical and financial positions while locals are in human resource positions.

In Swaziland, 79 percent of technical and management positions are expatriates. In Lesotho, half of the technical and management positions are filled by expatriates (46 percent) (Figure 5a). There are few locals in the top and middle management levels, but locals do exist in the areas of human resources and machine maintenance. Previously in Swaziland and Lesotho most line supervisors were expatriates, but today there is more local participation – 34 and 19 percent of supervisors are expatriates respectively. Expatriates are largely in charge of technical and production related issues, while local supervisors are in charge of management and communication issues. The skill gap is smaller in Kenya where localization has improved and the use of expatriate workers is less common. The share of expatriates in management and technical positions was only 32 percent and 15 percent at the supervisor level (Figure 5a). The larger number of locals in Kenya can be attributed to the longer history...
of an apparel industry that has produced workers with many years of experience, and the availability of local training institutions. In Lesotho and Swaziland the large majority of local managers and supervisors have been promoted from within the organization (89 percent and 93 percent respectively). In Kenya this share only accounts for 47 percent (Figure 5b).

**Figure 5:** (a) Share of expatriate workers in non-production related positions (percent); (b) Foreign-owned firms where local managers were promoted from within the firm

Determining factors

An important reason for the high use of expatriates is the lack of industry specific training institutes. Generally in SSA, with the exception of South Africa and Mauritius very little formal training of skilled personnel, technicians, supervisors, and managers occurs and if it occurs the quality is often perceived as low. In **Kenya**, there is a vocational training center in the EPZ Athi River. There is also a textile college and a Department of Textile Engineering at the University in Eldorat, as well as the Kenya Textile Training Institute (KTTI) that is run by the Ministry of Labor. However survey respondents (Figure 6a). indicate that only 27 percent of firms used these facilities. The rest felt they could provide better quality training in their own facilities with the primary reasons being obsolete machinery and the lack of relevant focus. Furthermore, many firms stated there is a readily available pool of labor due to the diminishing size of the overall industry in Kenya.

In **Lesotho** there are two Skill Development Centers since 2008 and 85 percent of firms reported using them (Figure 6a). However, there are complaints that they do not offer advanced technical and managerial training. The South African firms show more engagement in the skill development centers than Taiwanese firms that are largely interested in basic in house skill training for their long run standardized production (Staritz/Morris 2012). In **Swaziland**, there are virtually no apparel training centers. Machinists are trained on line. The University of Swaziland offers a B.S degree in Textiles, Apparel Design, and Management, however only 11 students have graduated since its inception in 2003. All 11 firms confirmed there was not a relevant public or private training facility, and many saw this as an impediment to future growth (Figure 6a).
Labor turnover differentially limits foreign investors' willingness to invest in training in the three countries (Figure 6b). Only 20 percent cited labor turnover as a problem in Kenya. This can be explained by the longer existence of industry-specific training facilities. In Lesotho and Swaziland, 82 and 62 percent of firms viewed labor turnover as a problem, with 36 and 62 percent respectively admitting this deterred them from investing in training workers (Figure 6b). The high incidence of HIV also affects firms’ investments in training and workers’ attitudes towards upward mobility in both countries.

*Figure 6: a) Presence of relevant training facilities and facility use (percent); b) Labor turnover and impact on willingness to investment in training*

4.3. Demonstration spillovers

**Level and nature of spillovers**

FDI may transfer proprietary technology and knowledge related to both production and non-production related activities from head offices to affiliates, but the extent depends in part on the role the specific affiliate has in the production network. As firms in the three countries largely engage in CMT production using standard machines and production technology, the spillover potential is limited from the outset. Overall, the lowest value-adding activities in the apparel value chain are performed in SSA countries. No foreign-owned firm in any of the three countries claimed to engage in R&D internally, and only roughly half of firms are responsible for distribution with even fewer (one-quarter) engaged in sourcing (Figure 7). Moreover, few have undertaken significant process innovations after their initial investment, limiting the ongoing exposure of workers to new technologies.
There are however important differences across types of investors. Plants of transnational producers are part of strictly organized production networks and tend to be locked into a particular set of assembly processes as a deliberate strategy of the head offices and their global production networks. More embedded Asian investors are often single plant operations with a more fluid division of labor that allows for the relocation of broader functions to their plant in SSA if capabilities exist. Both types of firms predominately export basic products to the United States using relatively standard machines and production technology. South African firms in Lesotho and Swaziland in turn focus on shorter runs and more fashionable products for the South African market that require a more flexible production set up and some higher worker skills (Morris et al. 2016).

**Determining factors**

The limited existence of local manufacturing firms that could absorb potential spillovers through demonstration is also a main constraint for this spillover channel. In Kenya we asked locally-owned apparel firms how they viewed their operations and how they feel they compare to FDI firms in the sector. Locally-owned apparel producers perceive there to be differences in the degree of sophistication of their production process as well as a technology gap between their firm and their top foreign-owned competitor (Figure 8a). On a scale from 1 to 4 on average firms rate their general degree of sophistication at 2.8; the technology gap to the top foreign-owned competitor firm is seen as 2.3. Although this difference provides the potential for learning from foreign-owned firms it also may limit the interest of foreign-owned firms to establish interactions and linkages in the first place. There are no mandatory requirements in any of the three countries for FDI firms to share or license technology with domestic firms. Between one-quarter and one half of FDI firms solicit process improvements from firms. However, only firms in Kenya (and only 50 percent) provide any type of reward if the improvements are implemented (Figure 8b).
Figure 8: (a) Locally-owned firms in Kenya perceptions of technology and sophistication compared to FDI; (b) FDI firms encouraging and rewarding process improvements

Source: Authors’ survey and interviews.

The majority of foreign firms in all three countries reported collaborating with other firms in the apparel sector; however the vast majority of these interactions were with other foreign owned firms. In Kenya, 93 percent collaborated with other apparel firms in the country, yet only 14 percent of these interactions were with locally-owned firms. The reported levels of collaboration were somewhat lower in Lesotho and Swaziland (Figure 9a), but in both cases virtually all interactions remained solely within the FDI sector (Figure 9b). In Lesotho, interactions between FDI are further divided between Asian-owned firms and the South African firms. These firms target different markets, operate in different geographically areas of the country, and run two independent (and almost mutually exclusive) industry associations.

Figure 9: a) Share of firms collaborating with other firms in the sector; b) collaboration with FDI versus local firms

Source: Authors’ survey and interviews.
5. Conclusions

Apparel FDI has benefited Kenya, Lesotho and Swaziland significantly in terms of entering apparel GVCs and generating employment and exports. It has also created and revitalized operating skills and industrial capabilities and led to the improvement of trade-related infrastructure. However, the three countries have been less successful in initiating spillovers to the local economy despite significant emphasis on attracting FDI. FDI has been largely related to low local value added, limited local linkages and participation in management, inadequate skills development and productivity improvements, and missing local entrepreneurial response.

FDI characteristics and strategies as well as host country local absorption capacity have severely limited FDI spillovers across the three spillover channels. With regard to FDI, it is critical to recognize the role that locations have within apparel GVCs and the strategies of foreign investors. These have a significant impact on the potential for FDI spillovers in the first place. Broadly, the three types of FDI firms in Kenya, Lesotho, and Swaziland, have different spillover potential.

The spillover potential of Asian-based transnational producers is limited. Because their activities based in SSA tend to be strictly limited to manufacturing, local management has little control over sourcing decisions and most inputs are sourced globally. Moreover, these firms sell mainly basic products on long runs to the US market, which also limits subcontracting and local supply potential due to manufacturing strategies and conformity requirements. Finally, because the SSA-based facilities are simply assembly plants there is limited potential for local skill development outside of sewing machine skills; moreover, management positions are largely filled by expatriates, and language and cultural barriers also hinder knowledge transfer.

More locally embedded Asian investors have higher spillover potential as they are not part of tightly organized global production networks, and so control more decision-making locally. However, they tend to lack close relationships with buyers, which makes them more vulnerable in their GVCs, and therefore less likely to advocate to their buyers to make use of local suppliers. Furthermore, many of them use sourcing agents in Asia. Thus, local supply potential remains limited. Spillover potential is stronger for skill development, as all functions related to the business are controlled locally.

Regional South African investors resemble transnational producers in that their local units conduct manufacturing, with higher value activities taking place in the South African head offices. However, head office proximity allows for greater interaction, which opens up more scope for shifting higher value functions to local units and testing the use of local suppliers (where available), and allows for greater skills transfer to local workers. In addition, because these firms produce shorter runs with higher fashion content where technical skills are more important, there is a greater potential for local skill development.

Finally, as the apparel operations in Kenya, Lesotho and Swaziland largely fulfill manufacturing processes using standard production technology, the technology spillover potential is limited from the onset. When foreign investors initially came they brought crucial knowledge and capabilities with regard to production set up and processes. However, few firms have undertaken major process innovations after their initial investment. In Lesotho and Swaziland, the South African firms have invested more in process upgrading given their different production model.
But host country local absorption capacity is also a crucial limiting factor for spillovers. Even where FDI is interested in transferring more functions and sourcing to host countries there is a lack of local firms able to absorb potential spillovers as input suppliers or subcontractors. Supply conditions also limit absorption capacity through skilled labor. While FDI firms invested little beyond basic training for manufacturing, limited skills are also related to the lack of industry-specific training institutions dedicated to the apparel industry and the mismatch between skills provided by these institutions and the needs of investors. These local conditions are in particular constraining for more locally embedded foreign investors and investors with a less well-developed and more fluid international division of labor.

These findings on Kenya, Lesotho and Swaziland, are particular for these countries and the specific development of their export-oriented apparel industries and contrast with the situation in other apparel exporting countries where FDI has played a more important role in developing local industries through spillovers (see e.g., Staritz 2011). Also within SSA, Madagascar is a case where certain types of FDI have had more spillover potential. This is the case with European-diaspora investors that are embedded in Madagascar as well as in end markets and GVCs, particularly ending in France, as well as Mauritian investors that have established regional production networks. The strategies of these investors and the dynamics of the GVCs they are integrated in have led to more spillovers potential that has been partly used by local firms, particularly through subcontracting relationships (Morris/Staritz 2014). This shows that understanding the dynamics of distinct GVCs and foreign investor strategies is critical in identifying the possibilities for FDI-related spillovers and broader local industrial development.
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