



The Geese That Fail To Fly: The AGOA, Textile and Apparel related FDI and implications for technological spillovers in Sub-Saharan Africa

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ABSTRACT

Many countries in Southeast Asia have used technological spillovers from textile and apparel related Foreign Direct Investment (FDI) to industrialise and diversify their economies and integrate their markets to the global economy. In a bid to promote similar industrial activities in sub-Saharan Africa (SSA), the African Growth Opportunity Act (AGOA) was implemented by the American government in 2000 to give countries in SSA tariff free access to American markets on specific products, including textiles and apparels. While few SSA based countries have utilised this opportunity to attract textile and apparel related FDI, create employment and grow exports to the US, even fewer have benefited from spillovers. This study prescribes policy options for SSA countries to attract textile and apparel related FDI and how technological spillovers can be obtained from such activities. The study revealed that an Export Processing Zone and an East/South Asian connection established before the implementation of the AGOA, low cost of inputs and good industrial relations served as magnets for FDI. The study also revealed that the lack of local ownership of textile and apparel firms and mid-level management skills in the SSA countries, the nature of the locating firms and restriction of global value functions to production by the foreign firms were obstacles to FDI spillovers. The study recommends promoting the establishment of local firms and situating them in proximity to foreign firms, skills upgrading of the local labour force especially in upstream value chain functions, promoting backward and forward linkages with foreign firms and encouraging FDI by large multinational textile and apparel firms rather than small family-owned businesses.

Keywords:

Foreign Direct Investment, Technological Spillovers, Textiles and apparel; AGOA, Sub-Saharan Africa

1.0. Introduction

The textile and apparel industry is the most geographically diffused industry in the world and employs the largest share of the global labour pool (Kim *et al.*, 2010). This has been due to many factors. First, the textile industry has been for many countries a stepping-stone to industrialisation. Because the industry employs low wage and low skilled labour, simple technology and low capital base, it was the choice for the newly industrialised countries to achieve structural change and economic development. Many countries, especially in Southeast Asia have progressed from making simple items such as textiles, apparels and toys to more complicated capital products such as computers, steel and automobiles. This progression has been enabled by Technological spillovers, which refers to the unintended technological benefits gained by firms due to the actions of other firms. These actions improve productivity of other firms operating in the same technological area (Bransetter and Sakakibara, 2002). Through learning and competence building, such countries have been able to evolve from the production of simple to complex products thereby developing production and innovative capabilities along the way. These innovative capabilities have propelled countries from those that are trying to catch-up with developed countries to those at the frontier of various technological paradigms. Second, the United States because its position as the largest importer of textiles and apparels, has been able to influence the growth of the industry in specific countries through trade restrictions devised to protect the growth of its own industry. Quota hopping and avoiding US trade restrictions on textiles and apparels have gifted some developing countries not affected by such restrictions the opportunity to host related Foreign Direct Investment (FDI) and use the industry to enjoy beneficial technological spillovers, capacity building and economic development. Most recently, data from Mexico, a country that has enjoyed preferential treatment from America by the North American Free Trade Agreement (NAFTA) and the Caribbean by the Caribbean Basin Initiative (CBI) show increases in textile and apparel production with attendant favourable effects on socio-economic indices in terms of employment and balance of trade (Kim *et al.*, 2010). Third, the cost of production has also been a factor in the dispersion of the industry all over the world. As the

per-capital income of some countries undergoing industrialisation increased, so did labour wages. In a bid to keep production costs low, firms moved production facilities to countries with lower wage labour. Because the textile and apparel industry is sensitive to labour costs, the cost of production and special access to markets has been key drivers for the global dispersion of the industry.

The movement of the textile and apparel industry in South-East Asia is reported to have had concomitant effects on structural change and economic development of the series of hosts of Japanese textile and apparel production activities. This trend inspired writings that regard the trajectory of economic development in South-East Asia as the ‘V’ shape formation of flying geese with Japan in the lead. Developed by Akamatsu (1962), the *Flying Geese* model depicts a pattern of development due to the movement of production activities in the textile and apparel industry in the region. The author noted that Japan’s path to structural change started with the import of textiles and apparels from America and Europe. Due to import substitution initiatives, locally produced textiles and apparels gradually replaced imports. The implementation of export promotion programmes resulted in the former exporters, America and Western Europe being recipient markets for the Japanese producers. These initiatives culminated in a large share of Japanese made textiles and apparels in the imports of the West. Akamatsu (1962) reported that rising labour costs in the West compared with the low wage economy in Japan at the time, enabled the latter comparative advantages in textile and apparel production. Akamatsu (1962) further reported an inverted “V” shape in the time series curves of the import, production and export data of this phenomenon, representing the flying formation of geese. Another phenomenon noted by Akamatsu (1962) was that Japan achieved structural change from progressing from the manufacture of crude simple items such as textiles and toys to capital products such as cars, electronics and textile and apparel production machinery. Akamatsu (1962) reported that the curves for the time series data for the production of these items were also “V” shaped with the curves of the simple items rising and falling earlier than those of capital items. While the flying geese model has been criticised for not been able to fully account for how capability building for

structural change actually occurs, many frameworks have reiterated that simple production activities can lead to more complex production activities which can bring about structural change and economic development (e.g., Ramos, 1987; Bell and Figueiredo, 2012)

In a bid to initiate similar development opportunities in SSA, the American government initiated the Africa Growth and Opportunity Act (AGOA) in 2000. The AGOA is a trade agreement, which grants selected countries in Africa preferential access to the United States market by providing duty free concessions for about 3000 products including textile and apparels. The Act was designed to strengthen the private sector in Africa and integrate the economies of SSA countries in to the global economy. Since the implementation of the AGOA and despite the fact that many countries in SSA are qualified to participate, very few countries have been able to benefit from the act. By 2017, 40 countries in SSA were AGOA beneficiaries (AGOA.info, 2018). Out this, only 17 countries were recorded as having exported textile and apparels to the US and only nine had exported values of over a million dollars (Office of Textiles and Apparels, 2018). Countries such as Mauritius, Madagascar, Lesotho, South Africa and Kenya have been able to attract textile and apparel related FDI, which have made a considerable impact on creating employment opportunities in those countries. The aforementioned countries have also been able to initiate and grow exports of textiles and apparels to the United States. Despite this achievement, these countries have not been reported to enjoy beneficial FDI spillovers. In addition, countries such as Nigeria despite having a thriving albeit now failed textile industry have not made appreciable progress in exploiting the AGOA provisions by attracting textile and apparel related FDI. By 2017, Nigeria's total textiles and apparel exports to the US was \$153,000 compared with Mauritius, Madagascar, Lesotho, South Africa and Kenya who exported textiles and apparels worth \$21.8m, \$45.0m, \$65.1m, \$15.3m and \$93.2m respectively in the same year (Office of Textiles and Apparels, 2018)

2.0. Focus of the Study

FDI has the ability to promote technological development. Most countries therefore consider strategies to encourage inflows of FDI as part of a

country's development strategy (Crespo and Fontoura, 2007; Margeirsson, 2015). FDI has been described by the IMF (2011) as a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. What then are the policy options open to SSA countries that may want to attract FDI in form of textile and apparel production activities? In addition, how can technological spillovers be obtained from such activities? The aim of this study is therefore two-fold. The first is to examine the factors that have contributed to AGOA related FDI and development of the textile and apparel industry in selected countries in SSA. While Kim *et al.*, (2010) have elucidated on some of these factors in Mauritius, Kenya and South Africa, this study updates literature and extends the study area to Lesotho and Madagascar to capture more factors. Second, the study also intends to examine the factors that have impeded technology spillovers in the economies of those countries. This will be done with a view to explore policy implications for promoting beneficial technological spillovers in SSA. The study will be conducted as a desk review based on available literature. Interventions will be based on channels that promote technology spillovers (Crespo and Fontuora, 2007) namely; demonstration effects (imitation) (Das, 1987; Wang and Blomström, 1992), labour mobility (Fosfuri *et al.*, 2001; Glass and Saggi, 2002), exports (Aitken *et al.*, 1997; Greenaway *et al.*, 2004), competition (Wang and Blomström, 1992; Markusen and Venables, 1999) and backward and forward linkages (Lall, 1980).

3.0. Factors that Attracted Textile and Production Firms to Countries in SSA

3.1. Export processing zone (EPZ)

One of the major factors that attracted textile and apparel industries to countries in SSA was first-mover advantages in constructing an EPZ or industrial zone prior the implementation of the AGOA in 2000. This meant that firms could easily relocate to an AGOA benefitting country, which already had the infrastructure and facilities in place (Shakya, 2011). The availability of infrastructure (Electricity, freight and ease of access to export facilities) which have a strong bearing on raw material inputs served as a source of attraction. In the case of Mauritius, the EPZ established in 1970,

was unfenced making the whole Island within the EPZ. Other attractions in the zone included zero tax for first ten years, no custom duty, duty free imports for raw materials and equipment, no custom controls and zero tax on buildings rented by the firms in the zone (Robeck *et al.*, 2012). In the case of Lesotho, a land locked country inside South Africa, the construction of industrial zones started in 1991. These zones were constructed with road and rail links to Johannesburg. This EPZ was tied to strong export and investment promotion activities. Because of the challenges of acquiring land in Lesotho, serviced factory shells were constructed in the zones to assist investors. The Lesotho government, as a targeted response to AGOA, offered textile and apparel operators subsidized rent for the first 5 years (Shakya, 2011). Other incentives were a low corporate tax rate, free repatriation of profits, tax exemptions on imported machinery and equipment, and full rebates on imported inputs for exporting (Bennett 2006; Staritz and Morris, 2012). In Madagascar, the EPZ promotional law was enacted in 1989 to boost FDI flows into the country (Fukunishi and Ramiarison, 2012). This led to a massive growth in industrial activities especially in the textile and apparel sector. In Kenya, the development of EPZs started in 1990. Potential tenants were attracted with fiscal and infrastructural incentives such as tax holidays, value added tax (VAT) and stamp duty exemptions, serviced factory shells and easy access to custom offices among others (Chemengich, 2010).

3.2. A prior east/south Asian connection

A prior East/South Asian connection in textiles and apparels was also a factor that prepared these countries for the introduction of the AGOA. Most importantly, this served to create the necessary infrastructure (such as transport and export channels, port facilities, and specialised services) that host countries could build on with the commencement of the AGOA. Therefore the introduction of the AGOA simply brought in a second albeit bigger phase of the development of the sector. This Asian connection also brought with it links to organised supply networks where some firms that located to Africa served as quasi sub-contractors to parent companies in Asia (Lall, 2005). In Lesotho, there was a period of rapid growth in the sector in the late 1980s where Taiwanese owned companies were a major part of the textile and apparel sector. These companies

initially based in South Africa relocated to Lesotho to avoid sanctions on the apartheid regime. However, this period was cut short by a series of industrial unrest caused by alleged unfair treatment of textile mill workers (Manoeli, 2012). With respect to Mauritius, labour was brought into the country from China and India in early 19th century to work in the sugar cane fields. This formed the source of the initial stock of labour for the textile and apparel industry on the island (Wright, 1974; Robeck *et al.*, 2012). After independence from Britain in 1968, the Chinese were encouraged to start businesses in the country. Spurred by the political upheavals caused by the tensions between China and Taiwan, Chinese owned textile and apparel firms were encouraged, with the establishment of the EPZ and earlier ties to the country, to locate to Mauritius (Lim Fat, 2010). In Kenya however, most of the credit for establishing and growing the textile and apparel industry have been accorded to the Indians. Between 1960 and 1980, about 85% of firms operating in Kenya were owned by Kenyan-Indians. The expansion was made possible by ties between Indians based in Kenya and their counterparts in India. The country also shares a colonial history with India (Mangieri, 2006).

3.3. Costs of inputs

Labour costs represent a large portion of total costs in the sector, in some cases as much as 40%. South African clothing firms relocated to areas where they can pay lower wages and do not have to contribute to sick leave or provident funds. While this may be a significant factor in locating to Africa, there may be some other influencing factors. Hourly wage rate for the countries under study ranged from 14 to 179.4 cents an hour in 2005 (Shakya, 2011). The wage rates for South Africa (179.4 cents) and Mauritius (125 cents) were higher than China (72 cents), Sri Lanka (35 cents), Pakistan (26 cents) and Bangladesh (21 cents). However, rates for Lesotho, Kenya, Madagascar and Ghana were 46, 30, 26 and 18 cents respectively. Daily productivity however told a different story. While 16 to 22 shirts were made daily in India and China respectively, productivity was below 15 shirts in the countries under consideration with the exception of Lesotho where productivity was as high as 18 shirts. Lall (2005) however contends that quota privileges enjoyed by AGOA countries seem to be a more significant

factor in locating textile and apparel firms than cost structure. Other factors, which may offset labour costs, are an undervalued currency and cheap capital (Morris *et al.*, 2015) In Lesotho, the textile and apparel industry accounts for about 50% of labour employed in the formal sector. The preference for factory work over working on sugar plantations by Mauritians provided abundant labour for the companies locating to the EPZ.

3.4. Labour peace

Aside labour productivity and costs, *labour peace* has also been considered as a factor in the success of the textile and apparel industry in Asia. According to Kim *et al.* (2010), ability of the government to control labour unions and the use of young women in high labour content work served as magnets to textile and apparel based FDI. The excellent work ethic and passive behaviour of the South Korean textile and apparel labour force was reported to have aided the development and implementation of developmental policies. Labour unrest was however, a cause of an initial exodus of Asian owned textile and apparel firms in Lesotho (Manoeli, 2012).

4.0. Channels and Factors Affecting FDI Spillovers

4.1. Channels

Crespo and Fontoura (2007) in a review of literature report that FDI spillovers may occur through five main channels namely; demonstration effects (imitation) (Das, 1987; Wang and Blomström, 1992), labour mobility (Fosfuri *et al.*, 2001; Glass and Saggi, 2002) and exports (Aitken *et al.*, 1997; Greenaway *et al.*, 2004). Others are competition (Wang and Blomström, 1992; Markusen and Venables, 1999) and backward and forward linkages (Lall, 1980). The perceived risks in producing an item of manufacture or using a particular technology may be reduced for local firms if foreign firms are seen to be using it successfully in a venture. Local firms can also be encouraged to imitate business models of foreign firms. Through imitation, local firms can reduce the costs of market entry and achieve significant productivity gains. Labour mobility is another channel of spillovers. Local firms can attract skilled labour from foreign firms who are able to utilise effectively modern technology and thus improve the productivity of local firms. Export is another channel of FDI spillovers. Local firms can benefit

from export oriented FDI by using the export infrastructure (such as rail system, haulage industry, port facilities and services) set up by or for foreign firms. Through export activities, local firms may gain access to the tastes and quality standards demanded by foreign markets. By competing with foreign firms, local firms can be forced to look for ways to make more efficient use of their resources and/or adopt new technologies in order to survive. Competition encourages the introduction of new products or services and cost reductions. Competition can however be based on products for local or export markets or both. Lastly, FDI spillovers may occur through backward or forward linkages. Forward linkages will entail foreign firms being embedded in the upstream value chain of the local firms. That is, the products of foreign firms serve as inputs in the production processes of the local firms. This may influence the quality of products of local firms. If inputs are of a higher quality, upgrading of the production process by local firms may be necessary. It is also possible that local entrepreneurs will have the opportunity to set up firms that utilise these products. Existing firms may also have to upgrade their production technologies to accommodate improved quality of inputs. Backward linkages involve the local firm's products being inputs to the activities of the foreign firms. This may however entail quality requirements from the foreign firms. In order to meet these requirements, local firms may have to upgrade production facilities, employ skilled labour especially at mid-level management cadre, and seek new sources of raw materials.

4.2. Theoretical arguments and empirical of factors affecting the occurrence of FDI spillovers

Crespo and Fontoura (2007) also provide a review of theoretical arguments of the determinant factors of FDI spillovers. Some of these factors include absorptive capacity, technological gap between local and foreign firms and development level of the host country. Others are size and export capacity of domestic firms, language and cultural differences entry mode of FDI, and degree of foreign ownership (Crespo and Fontoura, 2007). Du *et al.* (2014) argue that tax subsidies and tariff liberalisation affects FDI spillovers. Meyer and Sinani (2009) also mention institutional framework and human capital.

Chief among these factors is absorptive capacity (Crespo and Fontoura, 2007). This may be described as the ability to apply externally generated knowledge to commercial ends (Cohen and Levinthal, 1990). It is a function of prior related knowledge generated through technical knowledge, R&D and production or operational activities. Narula and Marin (2003) define absorptive capacity as the ability to internalize and modify external knowledge to fit specific applications, processes and routines. According to Crespo and Fontoura (2007), to benefit from FDI spillovers, there must be a technological gap between the host and foreign firm. Secondly, the domestic firms must have the absorptive capability to be able to benefit from the technological gap. Too small a gap may translate in to too little spillovers. If the gap is too wide, domestic firms may not be able to benefit from the existence of the foreign firms. To be able to imitate the activities of foreign firms and compete by introducing new products and services, domestic firms must be able to adopt and use the technologies employed in production activities of the foreign firms. The ability to use these technologies depend mostly on components of absorptive capacity, especially human capital and managerial knowledge, which is mainly determined by the level of technical and managerial education and requisite experience. Spillovers may therefore only occur where the domestic firms have the basic knowledge and skills.

The level of development of the host country is also a factor that determines FDI spillovers through a number of ways. Meyer and Sanani (2009) argue that low level of economic development implies that substantial gaps in technology and human capital exist between domestic and foreign firms. They further argue that there are significant initial spillovers to be gained by local firms from attracting expatriate personnel. Lipsey and Sjöholm (2004) however argue that low economic development implies that domestic firms may not have the financial ability to attract and pay the wages of personnel from foreign firms who may command higher wages (Crespo and Fontoura, 2007).

The export capacity of domestic firms is also a factor that may facilitate FDI spillovers. Domestic exporting firms are already exposed to foreign competition and may thus have little benefits to

gain from FDI as opposed to non-exporting firms or those with low export capacity (Blomström and Sjöholm, 1999; Crespo and Fontoura, 2007). Schoors and van der Tol (2002), however argue that domestic firms exposed to foreign competition by export activities may have greater capacity to absorb technology and to compete with foreign firms in the export market.

Spillovers may also be confined by the distance between the contributing and recipient firms. Crespo and Fontoura (2007) argue that Spillover effects from labour turnover, demonstration effects and backward linkages (due to transport costs) may be constrained by geographic proximity. These factors are more efficient in agglomeration of such firms such as in the case of industrial clusters (Porter, 2000, Jia *et al.*, 2014).

Firm size may also be a significant factor where technology adoption may depend on economies of scale. Firms without a large customer base may not be willing to adopt foreign technology if adequate returns depend on scale economies (Aitken and Harrison, 1999; Crespo and Fontoura, 2007). Source of FDI has also been argued as an important factor on the occurrence of spillovers. Social factors such as culture and language have also been found to have significant effects on FDI spillovers.

5.0. Factors Impeding Technological Spillovers in the Textile and Apparel Sector in Sub-Saharan Africa and Policy Implications

5.1. Ownership of the textile and apparel firms

In Lesotho, all of the textile and apparel firms were foreign owned. The prevailing narrative in the country was that the textile and apparel sector was an “Asian thing” to local investors and the government saw it as a job-creating scheme (Staritz and Morris, 2012). Thus, policies to promote entrepreneurship were not vigorously pursued. This does not bode well for the industry, as these companies are likely to relocate their production activities once trade agreements no longer favour their production activities in the country. In Madagascar however, Fukunishi and Ramiarison (2012) report that in 2008, about 23% of the textile and apparel firms in the country’s EPZ belonged to locals. The authors attributed this to linkage effects via sub-contracting, labor mobility and imitation of garments by the local firms.

Policy implication - Promote local entrepreneurship

Ownership of firms in the industry is a major factor that may determine the long-term survival of the industry in Africa. A majority of ownership on the part of foreigners may not bode well for the host country. With the ease of mobility of textile production facilities, foreign firms that have located majorly to circumvent trade restrictions may relocate immediately after such restrictions have been lifted. Ownership structure in the industry has largely been determined by greater access to capital and longer experience in textile and apparel production (Gibbons, 2003). As mentioned earlier, a credible strategy firms in highly competitive industries employ is imitation. Firms referred to as followers may imitate the products, organisational structure or business models of highly successful firms in an industry. If foreign firms are seen to be successful, local firms may be encouraged to imitate their products including the process technologies used in production, marketing techniques and organisational innovations. In the case of textiles and apparels, local firms may imitate designs and use export channels employed by the foreign firms. In a bid copy foreign firms successfully, the local firms may need to acquire process technology and upgrade the skills of staff to use these new technologies and business models. These capacity building strategies may serve to build local capabilities may be eventually be utilised in other industries. For FDI spillovers to occur there must be local firms to enjoy the benefits. However, local ownership of textiles and apparel firms is still a challenge in majority of the countries studied. Policy mechanisms may therefore seek to promote local entrepreneurship in the textile and apparel sector with novel funding procedures specifically set up to imitate the strategies of foreign firms. Public initiatives may also support building up local skills in step with the qualifications of staff of foreign firms. In addition, if spillovers are easier when local and foreign firms are in close proximity, both can be encouraged to co-locate in the same area such as industrial or export processing zones to facilitate the occurrence of spillovers.

While initiatives to spur entrepreneurship locally are vital, competition between local and foreign firms should also be encouraged. Competition has been found to encourage innovation. Competition

may thus force local firms to acquire the necessary inputs to be able to innovate and compete successfully (Wang and Blomström, 1992; Markusen and Venables, 1999, Crespo and Fontuora, 2007). Innovations may be focused on reducing production costs, bringing new and improved products to the market or strategies that incorporate both. In addition, because of the high quality requirements of the market in the US, local firms may also be forced to engage inputs that will ensure that those quality requirements are met. This may involve some technological learning on the part of local firms.

5.2. Gaps in human capital

In Lesotho, there was a lack of a long-term strategic plan to upgrade local enterprises to initiate export-based manufacturing activities. A dearth of middle level managers, equipment technicians and staff trained in design and market also analysis plagued the sector in Lesotho and Mauritius. Following stability in the relations between China and Hong Kong, some textile and apparel industrialists left Mauritius to go back to China leaving behind their equipment (Lim Fat, 2010; Robeck *et al.*, 2012). Evidence of lack of competence in the industry was apparent in Mauritius when the Chinese left for Madagascar because of the rising labour costs. The Mauritians left with equipment of the Chinese could not compete on quality when the Multi-Fibre Agreement (MFA) expired. As quality became stagnant and in some cases inferior, most of the foreign orders were cancelled. Some training initiatives were however, undertaken in 1999 by the Lesotho Garment Center. Similar initiatives, (the Clothing technology center) were undertaken in Mauritius around the same time. Two universities in the country also offered courses in fashion and textile design. South Africa boasts of many textile and apparel related degree programs such as diplomas and degrees in fashion clothing management and textile technology (Kim *et al.*, 2010). The lack of institutions especially in the tertiary category to bridge the skills gap in textile engineering was common in the study sample, especially Lesotho and Mauritius and some to some extent South Africa. While both the government and the foreign firms acknowledged the skills gap of local enterprises, none was willing to take up the responsibility of skills upgrading.

Policy implication - skills upgrading of the local labor force

In order to enjoy technology spillovers, which may be beneficial to the local economy, supervisory, technical (engineering, marketing and design) and managerial positions need to be occupied by locals (Lall, 2005; Fukunishi and Ramiarison, 2012; Manoeli, 2012). Another avenue is sub-contracting to local firms. However, Meyer and Sanani (2009) suggest that low level of economic development in SSA countries implies that substantial gaps in technology and human capital may exist between domestic and foreign firms. There are significant initial spillovers to be gained from imitating foreign firms and attracting expatriate personnel. These benefits may however increase from competitive challenges, as domestic firms are more able to compete with foreign firms. In order to close these gaps in human capital of the SSA labour force, especially in mid-level management, capabilities have to be upgraded so that the benefits of technological spillovers may be enjoyed. The upgrading of locals in these tasks may bring the necessary skills to fill in productivity gaps between local and foreign firms.

5.3. Lack of backward and forward linkages with the local economy

According to Lall (2005), the Lesotho government failed to encourage linkages between the foreign and the local firms by localising aspects of the value chain. The author claimed that the textile and apparel sector was more or less isolated from the local economy and no local firm was able to replicate the entire production process in the industry. Another factor that exacerbated the lack of linkages with the local industry in Lesotho was the language and cultural barrier. There was a dearth of local mid-level managers in production operations. Therefore, expatriates had to be brought in from China. These personnel were neither proficient in Basotho (Lesotho language) nor English (Lall, 2005). This made communication and the transfer of skills difficult. Lall (2005) revealed that the foreign firms were unwilling to subcontract parts of the production process to local firms, as they did not think the local firms could meet up with quality requirements of the export market. Another problem was the financial capability of local producers. Most were unable to purchase the equipment needed for special orders after inspections by the contractees. In addition,

changes in the design requirements of apparels led to longer turnaround times as workers were experienced in very few designs. Linkage mechanisms such as labour mobility, subcontracting and imitation have been responsible for local ownership of textile and apparel firms in Madagascar. Fukunishi and Ramiarison (2012) also reported that about three quarters of local firms employed foreign managers to gain expertise and knowledge. These linkages are accountable for the comparable capital intensity, productivity and profits between local and foreign firms.

Policy implications - Promote backward and forward linkages

Backward linkages in this case would imply local firms that supply inputs such as raw materials, engineering services, production machines and packaging materials to foreign firms, while forward linkages involve the establishment of local firms, which add value to the production output of foreign firms. The presence of foreign firms, which require inputs such as buttons, zippers, yarn and so on, may encourage the establishment of local firms that may supply these inputs. Because of the export orientation of these foreign firms, quality demands may be high. Therefore, local firms may be forced to acquire latest technology and requisite human resources to be able to meet these quality requirements. Foreign firms may also provide inputs such as sewing machines, textiles and engineering services. When foreign firms provide inputs this is referred to as forward linkages. The encouragement of backward linkages based on engineering services would however be most beneficial. Ramos (1998) reported that the local production of engineering services in the forest industry in Finland provided important spillovers, which was used in making production machinery in other industries. Rosenberg (1963) reported that the competence developed in making machines for the sewing industry in the US played a major role in the development of the machine tool industry in the country. The author further reported that these skills were subsequently transferred to making guns, bicycles and later on automobile engines.

5.4. The nature of locating firms

Lall (2005) noted that the firms, which located to Lesotho, were tight close-knit family owned firms. The author argued that these types of firms are not conducive for skills transfer to locals. It may be

argued that family members may be favoured over locals for middle cadre positions. Lall (2005) makes a distinction between large MNCs and family businesses. The author argued that MNCs have well developed training and technology transfer procedures to standardise operations and boost cost reduction strategies. Manoeli (2012) reported that the type of firms that relocated to Lesotho were those with out-dated industrial machinery who could not compete with rising productivity levels in Taiwan. Lall (2005) also reports that the productivity of foreign firms in Lesotho is 50% of those in East Asia confirming Manoeli's (2012) later observation. Smaller firms tend to bring in experienced albeit less educated line managers as *expats*. It is likely that these managers will not be well versed in English and/or good in communication skills. In the case of Mauritius, majority of the firms were part of conglomerates headquartered in Asia or Europe (Kim *et al.*, 2010). Madagascar also benefitted from these firms as most of them moved from Mauritius to the country to avoid labour shortages and rising labour costs. The motivation of the investing firms is also a major factor in the occurrence of spillovers. While firms that located mainly because of trade restrictions may leave when those restrictions are lifted, those that locate for other reasons such as low wages, labour conditions, weak currency, skilled labour, close markets and infrastructure may intend to stay for the long term. Firms that intend to stay for the long term may be interested in forming and upgrading skills of local linkages (Staritz and Morris, 2012).

The foreign firms' position in the textile and apparel global value chain is also important. The textile and apparel global value chain consist of functions including input sourcing, product development and design, logistics, production, merchandising and marketing. Staritz and Morris (2012) report that the dynamics of global value chains in a country has a significant effect on upgrading prospects, local linkages and technical skills development. Comparing Taiwanese and South African firms based in Lesotho, the authors discovered two value chains with corresponding target markets. The first is made up of Taiwanese firms mainly supplying the US market and the other comprised of South African firms supplying the South African market. The Taiwanese firms producing for the US market performed all value

chain functions except production outside Lesotho. Therefore higher value chain functions such as product development and input sourcing are performed at the head offices in Taiwan. It is unlikely that these firms will look to upgrade skills or form linkages with local firms to perform these functions. Consequently, local firms cannot enjoy the benefits of upgrading their skills through knowledge transfer in functions where they do not participate. However, the South Africa firms seeking low wage labour and conducive labour relations were looking to transfer the value chain functions from South Africa to Lesotho

Policy implication - attract large multi-national textile and apparel firms

Learning by interacting with skilled staff is a proven method of developing human capital. Local firms may therefore seek to lure the staff of foreign firms. The ability of local firms to use new technology and increase productivity may be increased through the employment of skilled workers from foreign firms. Most of the textile and apparel firms resident in the sample of countries have however been reported to be small firms who merely undertake the production stage of the apparel value chain. These firms are reportedly staffed by mostly uneducated Asians whose command of the lingua franca of most African countries is limited. In addition, these firms are likely to be family owned. This may make it more difficult for local firms to be successful in attracting this cadre of employees. The under-developed status of most African countries may also imply that local firms may not have the financial wherewithal to pay likely high wage demands of *expats* (Lipsev and Sjöholm, 2004). Lall (2005) however reported that big multi-national firms have structures that are more elaborate, more educated staff and are more likely to aspire to transfer certain skills to locals firms in order to reduce costs. A strategy may then be to attract large textile and apparel MNCs with requisite incentives rather than small family owned firms. Size of FDI may be used for tax and other financial incentives. Technology transfer agreements with large MNCs may also serve to develop the capacity of local firms. Foreign firms should also be encouraged to undertake higher value chain functions locally so that FDI spillovers can occur in these functions.

6.0. Conclusion

There are great opportunities to be reaped by SSA countries that host textile and apparel FDI as shown by its attendant industrialisation effects in the wake of its trajectory in Southeast Asia. Governments of countries in SSA who have succeeded in hosting related FDI have however concentrated on the industry creating job opportunities and enhancing export earnings. FDI spillovers however bear more long-term benefits. Two major factors were however seen to be hindering the occurrence of spillovers. First, the lack of the existence of local ventures that will be the recipients of the spillovers and second, the gap in the required human capital with the ability absorb and utilise the benefits of FDI spillovers. Governments of countries in SSA have to be creative in designing interventions in this regard.

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