

WORKING
PAPER

CHINA★AFRICA
RESEARCH INITIATIVE

NO. 32

SEP 2019

Export, Employment, or Productivity? Chinese Investments in Ethiopia's Leather and Leather Product Sectors

Tang Xiaoyang



JOHNS HOPKINS
SCHOOL of ADVANCED
INTERNATIONAL STUDIES

sais-cari.org

NO. 32 | SEPTEMBER 2019:

“Export, Employment, or Productivity? Chinese Investments in Ethiopia’s Leather and Leather Product Sectors”

by Tang Xiaoyang

TO CITE THIS PAPER:

Xiaoyang, Tang. 2019. *Export, Employment, or Productivity? Chinese Investments in Ethiopia’s Leather and Leather Product Sectors*. Working Paper No. 2019/32. China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC. Retrieved from <http://www.sais-cari.org/publications>.

CORRESPONDING AUTHOR:

Tang Xiaoyang

Email: tangxyang@gmail.com

NOTE:

The papers in this Working Paper series have undergone only limited review and may be updated, corrected or withdrawn. Please contact the corresponding author directly with comments or questions about this paper.

Editor: Daniela Solano-Ward

ABSTRACT

**SAIS-CARI WORKING PAPER
NO. 32 | SEPTEMBER 2019:**

“Export, Employment, or
Productivity? Chinese
Investments in Ethiopia’s
Leather and Leather
Product Sectors”

by Tang Xiaoyang

THIS PAPER FOCUSES ON CHINESE INVESTMENT IN Ethiopia’s leather sector and its impact on local development. I examine Chinese investors’ contributions to employment creation, increases in productivity and export figures, as well knowledge transfer mechanisms from Chinese investors to Ethiopian entrepreneurs and workers. This study can help us understand foreign investments’ spillover effects and the specific characteristics displayed by increasing Chinese investments in Africa. Investigating Ethiopia’s leather and leather product sectors’ development trajectory clearly demonstrates that Chinese investments have indeed contributed a great deal to both exports and employment in these related sectors. However, closer examination of the interaction between Chinese and Ethiopian stakeholders puts sustainable growth and effective knowledge transfer into question. Through comparison, we can see that all of the Chinese tanneries and manufacturers attach great importance to market mechanisms. They develop their expertise and capabilities according to client demands. The Ethiopian government has a pro-active attitude towards sectoral development and sets supportive industrial policies. Some policies, like the incentives for foreign direct investment, have worked. However, the lack of insight into international business realities has also caused numerous mistakes.

INTRODUCTION

THE ETHIOPIAN GOVERNMENT HAS IDENTIFIED THE LEATHER and leather products sector as a priority industry for development. Given that Ethiopia has the largest livestock population in Africa and a long tradition of making leather products, there is enormous potential for these industries to lead in the agriculture to industry transformation and compete internationally. The Growth and Transformation Plans I and II aim to encourage the development of the leather sector with the following four targets: increasing foreign exchange earnings, improving productivity and technology, creating employment, and building agri-industrial linkages.¹ Given that domestic manufacturing enterprises are weak and uncompetitive in the international market, the Ethiopian government acknowledges the need for foreign investors to achieve such sectoral development.² Consequently, the Ethiopian government is making efforts to attract foreign investments into the leather and leather products sector. Currently, the majority of new foreign investors are Chinese, but also include investors from Hong Kong and Taiwan.

This paper focuses on Chinese investment in Ethiopia's leather sector and its impact on local development. I examine Chinese investors' contributions to employment creation, increases in productivity and export figures, as well knowledge transfer mechanisms from Chinese investors to Ethiopian entrepreneurs and workers. This study can help us understand foreign investments' spillover effects and the specific characteristics displayed by increasing Chinese investments in Africa. Compared to Ethiopia, China has well-developed leather and leather product sectors. In 2010, Chinese exports of leather products were estimated at US\$ 8.3 billion, while Ethiopian exports were estimated at only US\$ 3.7 million. As of 2008, formal Chinese firms employed almost 3 million workers while Ethiopia's formal firms employed a mere 7,600 workers.³ Can the arrival of Chinese investors bring advanced technology and management skills to Ethiopia's leather sectors and help Ethiopia achieve their sector development goals?

METHODOLOGY

I HAVE BEEN TRACKING THE DEVELOPMENT OF ETHIOPIA'S leather sector since 2011 and between 2011-2018 conducted five related field research trips to Ethiopia and three trips to Shanghai and Guangdong, China. For this specific project, I obtained an updated list of all existing foreign and local firms in the leather processing sector and in the leather manufacturing sector in Ethiopia from the local business association. Using this list, I interviewed all of the Chinese tanneries and manufacturers of leather products, specifically producing gloves and shoes. For a few key companies, I visited and interviewed the managers several times and carried out week-long, on site observations. Through these interviews and site visits, I gathered first-hand information about the size, performance, and impact of Asian (with an emphasis on Chinese) investments. Through open-ended questionnaires, I identified firms' growth history, business strategies, and linkages with local enterprises. Through semi-structured interviews with the Ethiopian Ministry of Industry (MOI), the Leather

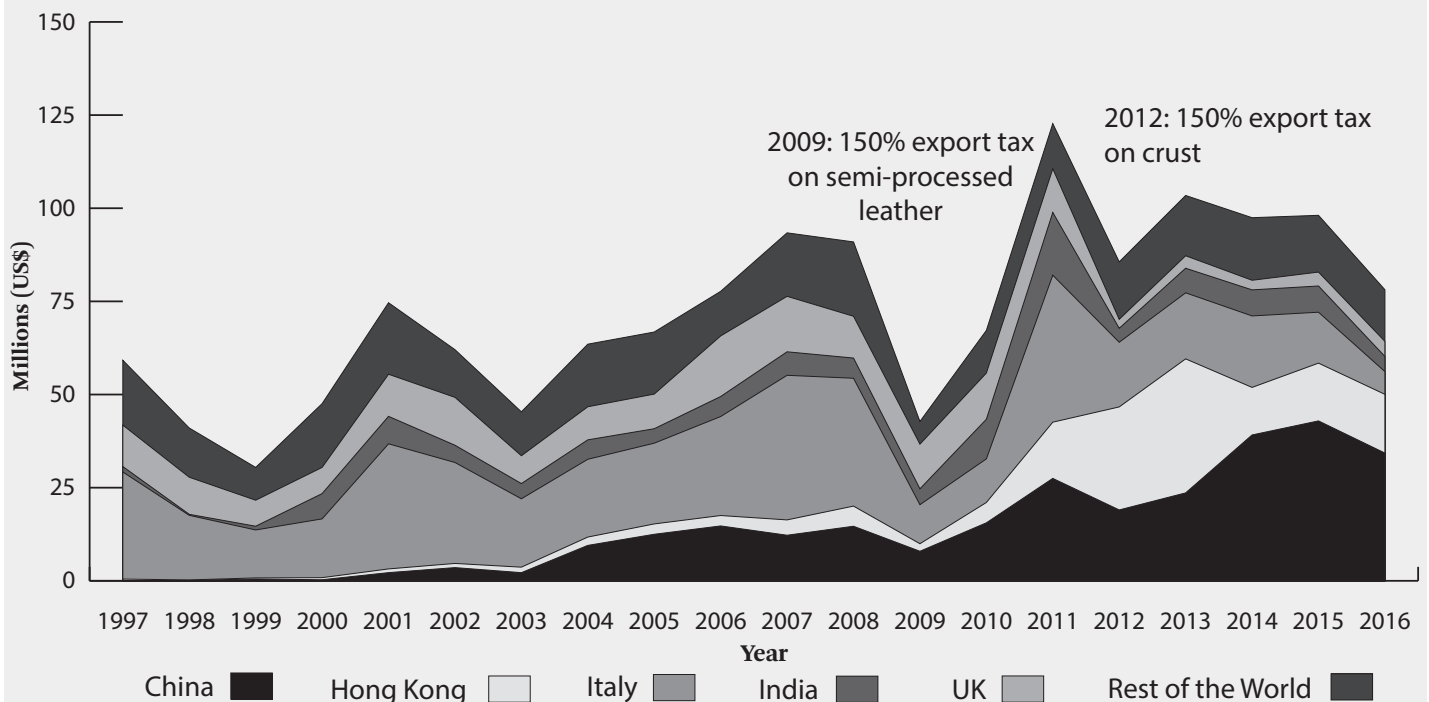
Industry Development Institute (LIDI), local business associations, Chinese economic counselor's offices, and other key informants, I learned about policy incentives and other efforts to engage foreign manufacturers and promote manufacturing capacity in Ethiopia's leather value chain. In addition, I interviewed a number of Ethiopian-owned tanneries and shoe factories to learn their opinions on the impacts of Chinese investors in these sectors.

BACKGROUND

OVER THE PAST DECADE, THE ETHIOPIAN GOVERNMENT has made two significant policy changes to boost the technical level of production in the leather processing sector. First, in order to promote local manufacturing, in 2008 the government imposed an up to 150 percent export tax on semi-processed leather, known as wet blue. The second policy was declared in December 2011, imposing a 150 percent export tax on crust to encourage the export of finished leather and leather products.⁴ Although both policies caused an immediate decline in leather exports, especially as traditional buyers from Europe sharply reduced their orders, exports recovered quickly in both cases. After 2012, exports to China, including Hong Kong, contributed to the largest gain; however, the other three major export markets (Italy, India, and the UK) have not yet returned to pre-2011 levels (see Figure 1).

From 2010 to 2018, nine Chinese (including from Taiwan and Hong Kong) firms have established tanneries in Ethiopia, making China the largest investing country in Ethiopia's leather sector (see Table 2). Apart from Chinese investors, one British firm

Figure 1: Ethiopia's Leather Exports to Major Countries 1997-2016 in US\$



Source: UN Comtrade

Table 1: Leather Processing Overview & Key Definitions

Process Stage	Defintion	Where Process Occurs
Slaughter/Collection	Rawhides/skins must be conserved after the animal has been slaughtered (sometimes at an Abattoir) and before reaching the Tannery .	Carried out by small and large collectors.
Tanning	Chemicals are absorbed by the hides and skins to turn them into wet blue . By tanning, the skin/hide is irreversibly chemically preserved and converted from wet blue into crust .	Tannery
Finishing	Using different chemicals and equipment, crust can be dyed, treated with coloring, waterproofing, and more. Finished leather is then ready to export or to be used in factories for the manufacturing of leather products.	Tannery
Key Definitions		
<ul style="list-style-type: none"> • Skins - originate from smaller animals and in the case of Ethiopia refers specifically to leather originating from goats and sheep. • Hides - originate from large animals and in the case of Ethiopia refers specifically to leather originating from cows. • Abattoir - a slaughterhouse/place where animals are butchered. • Wet blue - Moist, chrome-tanned leather. Wet blue is leather that is tanned but neither dried, dyed, nor finished. • Crust- At this stage in the process, the leather has gone through tanning and is dry, but has not yet been dyed and is not considered “finished” • Finished Leather - Dyed and treated with coloring, waterproofing, wax dressings, etc, as well as ironing or embossing. 		

and two Indian firms have also set up tanneries in Ethiopia over the same period. Even when Ethiopia's leather exports stagnated due to the global market slowdown, the portion of exports to China increased, with tanneries mainly targeting Chinese markets. A main reason for the change of export destination is the inflow of Chinese manufacturing investments to Ethiopia's leather sector. Chinese investors' interest in Ethiopia is mainly driven by two reasons. First, China was experiencing a shortage in leather supply and second, China's hardening environment regulations have forced tanneries to move out of the country and conduct their pollutant-rich processing abroad.

LEATHER PROCESSING SECTOR

IN THE BEGINNING, SEVERAL OF THE FIRST CHINESE TANNERY investments only produced crust. Forced by the 2012 taxation policy, all of the Chinese tanneries have since upgraded their products from crust to finished leather. However, the tanneries have struggled with the Ethiopian authorities while engaging in technical upgrading.

For example, a couple of the Chinese tanneries that continued exporting crusts for the first several years after the 2012 taxation policy was enacted were severely punished by Ethiopian authorities. Although all Chinese tanneries conform to the regulation and now export finished leather, they pointed out that there are still enormous challenges to exporting finished leather from Ethiopia.

The obstacles are related to markets rather than technology. Manufacturers of leather products need to follow the latest fashion trends, which in turn requires a quick response time to be able to produce new designs. As a tannery owner said, “[the risk is high [for exporting finished leather from Ethiopia], because it is not connected to the market. Time is too long for finished leather to go to the market. Color and style of skins do not match. For example, there are many shades of brown and even a small difference can make a product unsellable. Production must get connected with market frontiers for flexibility.”⁵ In addition, leather products’ manufacturers in China prefer to purchase leather in small quantities, in order to carry smaller quantities of many varieties. The tanneries in China then need to further adjust the finished leathers’ color and style in order to meet customer demands.⁶ Another constraint is the limited chemical supply in Ethiopia. Because the import of chemicals requires long lead times and small amounts of chemicals cannot be imported, the tanneries often cannot get their hands on the necessary chemicals to conduct more sophisticated processing.⁷

Local Ethiopian tanneries face many of the same problems. Although they invested in machinery in 2012, local Ethiopian tanneries find it increasingly difficult to

Table 2: Chinese Investments in Ethiopia’s Leather Processing Sector

Name	Origin	Founding/Start Date	Investment Type	Status
Friendship	Hebei	2011	New tannery	In operation
China-Africa Overseas	Henan	2010	New tannery	Close in 2017
East Africa	Hebei	2010	Acquisition	In operation
Zhang Jianxin	Guangdong	2014	New tannery	In operation
DX	Hebei	2014	Acquisition	In operation
George Shoes	Taiwan	2016	New tannery, for own use	In operation
New Wing	Hong Kong	2013	New tannery, for own use	In operation
Pelle	Zhe Jiang	2015	Acquisition	In operation
Hora	Hebei	2017	Lease	In operation

Source: Author’s interviews 2012-2018.

Almost all of the Ethiopian tannery managers interviewed believe that they just lag behind in technology and blame foreign investors for not bringing their best technology to Ethiopia. Ethiopians know that the finished leather exported by Chinese tanneries will still be further processed in China. In their views, this demonstrates the unwillingness of Chinese tanneries to use the most advanced technology in Ethiopia and transfer their knowhow.

find international buyers for their finished leather products. Compared to Chinese and other foreign investors, the local tanneries have fewer methods to overcome the aforementioned market obstacles and have difficulty keeping up with the changes in style and color in the finished leather market. Chinese tanneries have long-term clients or access to their own tanneries in China for further processing. Meanwhile, Ethiopians have lost their traditional buyers from Italy and, consequently, must begin the difficult task of seeking out new buyers. Only three Ethiopian exhibitors attended the All China Leather Exhibition in 2018, compared to eight exhibitors in 2012, and even the producers that did attend received very few inquiries. When asked about the challenge to his business, one Ethiopian manager pointed to the stands of other Thai and Brazilian producers, “they [the foreign companies] can sell whatever they want: wet blue, crust, or finished leather, but Ethiopians are not free to sell.”⁸

Ethiopian tanneries have responded to the new challenges in a variety of ways, although at times not entirely abiding by the regulations. When I visited one small local tannery in 2015, I found that their export products looked no different from crust. The director called the products “finished leather with natural color” – likely a strategy to get the unfinished leather through customs.⁹ However, as enforcement of regulations becomes stricter, such strategies will no longer work. Several tanneries supply wet blue and crust to other larger tanneries, but profit margins for unfinished leather are so low that few tanneries can survive using this strategy. Only a couple of local tanneries, which have their own abattoirs, can continue supplying unfinished leather to others. Additionally, because raw skins and hides allow for more control over processing, Chinese tanneries also prefer acquiring raw skins and hides directly over purchasing wet blue in Ethiopia.

Since 2011, several large foreign investors have set up shoe and glove factories in Ethiopia (see Table 3). Another outlet for the local tanneries is to supply finished leather to these manufacturers of leather products. Nonetheless, three manufacturers, New Wing, George Shoes, and Pittards, have built their own tanneries which supply 80 to 100 percent of the leather used in their factories. LYU glove factory holds minority shares in the East Africa tannery and sources most leather from East Africa. While the German Ottokessler glove factory used to source local leather, as of 2014 they have been importing 100 percent of their leather from different countries due to both the increase in Ethiopian leather prices and the decrease in its' quality.

Huajian shoe factory is the largest consumer of local leather. As of July 2018, the factory not only used local leather for 60 percent of its shoes produced in Ethiopia, but also sent Ethiopian leather to its shoe factories in China. It should be noted that these were not necessarily in-house Huajian decisions, but decisions made by the shoe agents who place production orders with Huajian.¹⁰ Two large US agents use local leather for most of their orders, whereas several others do not use local leather at all. The leather used is for generic, mid-level products. Sometimes there are problems, however. Huajian's procurement manager explained that on one occasion an agent ordered brightly colored leather from a local tannery, but the colors were uneven and diffused and, as a result, that client no longer places orders for that kind of leather.

Instead, foreign manufacturers source their leather mainly from four large tanneries: Batu, ELICO, Modjo, and United Vasn. The first three are local companies and the last one is Indian owned. Most Chinese tanneries are not interested in supplying Huajian shoe factories, as the profit margin is low and they have alternative, established sales channels in China. Only one small Chinese tannery supplies small quantities of leather to Huajian. Several small Chinese tanneries have started to sell the low-quality finished leather to local shoe factories, instead of exporting. Although selling to the local market may cause them to lose their import duty exemption, it was a necessary move in order to assure cash flow.

SUPPLY OF RAW MATERIALS

OVER THE PAST DECADE, IN ADDITION TO PRIORITIZING the export of finished leather products, Ethiopia's leather sector has also experienced significant changes in their supply chain. Chinese-owned tanneries have also played an important role in these changes. Ethiopian goat and sheep skins are known for their superior quality, whereas the quality of Ethiopian cow hides is only mediocre. In the last few years parasitic skin diseases have deteriorated the overall quality of both raw skins and hides, however. The problematic handling of skins and hides, characterized by backyard slaughtering, unorganized collection of skins and hides, inappropriate storage, and delayed transportation, have caused worsening quality as well as a shortage in raw materials available for leather processing. In order to address these obstacles, in March 2014 the Ethiopian government announced a new proclamation to regulate the provision of raw hides and skins.¹¹ The policy aimed to build different levels of trade and transportation systems to improve the professionalism and capacity of the various stakeholders at different levels.

Unfortunately, the new regulation has not been implemented effectively. The small collectors who are supposed to supply skins and hides to the larger collectors do not abide by the system, instead directly supplying the tanneries. Although this can reduce the monopoly held by large collectors, it enhances storage and transportation problems. As small collectors do not have the capacity to supply buyers in a timely fashion, they often store skins and hides for months at a time to build up their supply. Unfortunately, small collectors lack the knowledge about the proper conditions necessary to preserve skins, which results in a large number of raw skins and hides becoming rotten or spoiled. Furthermore, as the climate in Ethiopia becomes drier and parasitic diseases in animals increase, these combined factors are contributing to the overall deterioration of Ethiopian leather quality. It should be noted that the MOI and LIDI have little influence on the upstream supply of the leather sector, which falls instead under the Ministry of Agriculture. There are conflicts of interest and a lack of overall coordination between the different ministries involved in the development of the leather sector.

Some tanneries have tried to educate the collectors and abattoirs. For example, a wrong cut may result in the loss of three to four square feet of hide, or about US\$ 5

worth, which is equivalent to the total profit of a hide. China-Africa Overseas used to send people to the largest abattoirs in Addis Ababa to train local operators how to cut appropriately, using videos filmed in China's abattoirs. An incentive was also given to the operators when the hides were well-cut. However, because the MOI has asked abattoirs to rotate their projects to a dozen different tanneries – in an effort to reduce fierce price competition among the tanneries – the Chinese tannery cannot always secure their supply from the same abattoir. By the time that it was once again China-Africa Overseas' turn in the rotation, they found that operators had already forgotten the standard process they had previously been trained in.¹²

The tanneries are seriously affected by these quality problems. The owner of a local tannery admitted that most of the investment over the past few years had been spent on improving the leather quality, specifically focusing on raising lower-grade skins to higher grade. Further improvements require more chemicals and both machines and workers to use more mechanical steps. However, investment in these technologies does not generate greater value, but merely corrects the quality defects caused by suppliers. At the same time, fierce international competition, particularly with low-priced leather from India and Bangladesh, have forced Ethiopian leather suppliers to maintain the same prices, which has resulted in decreased profit margins.

Chinese tanneries, on the other hand, have more options available to overcome the deteriorating skin and hide quality. Some tanneries import skins from other countries like Mali, Saudi Arabia, Sudan, and Yemen. Importing skins and hides requires a great deal of capital because the logistics required for import are time intensive. Foreign tanneries also have more access to the foreign exchange needed to import raw materials, as compared to local tanneries.

Despite all the challenges, Ethiopian authorities seem satisfied with the increasing portion of leather supply the local industry is providing to the manufacturing of Ethiopian leather products. It is believed that the declining export of leather is partly caused by the growing supply to manufacturers in the country. LIDI's director estimated that before the arrival of foreign leather product manufacturers, 95 percent of finished leather was exported; however, as of 2018 only 40 to 50 percent of finished leather was exported. "Hopefully all leather should be processed in Ethiopia", he said.¹³

QUALITY IMPROVEMENT OBSTACLES

CHEMICALS ARE A CRITICAL COMPONENT OF LEATHER PROCESSING. Finished leather's quality and patterns are largely decided by the different ways' chemicals are used and applied. LIDI's director pointed out that chemical recipes are a priority for Ethiopian tanneries, whereas machinery improvement is secondary. However, apart from some basic ingredients like salt and lime, the tanneries in Ethiopia have to import almost all chemicals required for processing leather.

The delays associated with obtaining foreign exchange, transportation, and the customs clearance process, all necessary steps to import chemicals, seriously impact production timelines. It is reported that imports coming from Italy to Ethiopia can

usually take one to two months.¹⁴ This extended timeline often causes local tanneries to miss delivery dates. Machinery repair can be another factor causing delays. For instance, when a bearing of a processing machine was broken in an Ethiopian tannery, the bearing had to be sent to Italy and it took one month to complete the repair. The failure to deliver on time, which this kind of machinery incident can cause, is a main concern for Ethiopian leather customers and thus constrains tanneries' business expansion opportunities.

Although a 2012 export promotion regulation allowed foreign chemical producers to set up a bonded supply warehouse, only a few investors utilize this scheme. Companies consider the forms of incentives provided by Ethiopian authorities highly complicated and worry about implementation processes.¹⁵ Additionally, the size of the Ethiopian leather processing sector is too small to attract large chemical providers, even the chemical sellers that are present only store a few common types of chemicals in the bonded warehouse in Ethiopia. For small quantities of the specific chemicals which are needed to process sophisticated leather patterns, the tanneries must still import from abroad.

Ethiopian tanneries also lack sufficient financing, which prevents them from buying better quality materials or making improvements to their processing technologies. For example, a major local tannery supplied only low-priced generic leather to Huajian shoe factory even though the owner expressed his eagerness to upgrade the production so that he could supply leather of higher quality, better patterns, and more value added. Upgrading technology, itself, is not the big challenge, because the chemical suppliers would send technicians to the tanneries to instruct them; instead the obstacle is the shortage of cash and foreign exchange required to import the needed chemicals.

TRAINING, EMPLOYMENT, AND MANAGEMENT

DEVELOPMENT OF HUMAN RESOURCES IN THE LEATHER SECTOR is likewise important, as skilled engineers are required to manage the chemical recipes and control productivity and quality. Chinese tanneries hire large numbers of workers and the employment figures are still growing. When Chinese investors took over tanneries from local owners, they increased jobs by expanding production. Pelle tannery's predecessor, Mesaco, typically had no more than 80 workers during its peak. After acquiring the tannery, Pelle quickly increased the workforce to nearly 500. Hora tannery employed 250 workers when the Ethiopians were running it; after a Chinese firm leased the tannery, they added another 150 jobs. Given that the Ethiopian government eagerly wants to create jobs for its youth, these figures are welcomed by local authorities.

However, most of the local employees are low skilled laborers; very few tanneries have hired and trained locals for management positions. Apart from New Wing tannery, which serves its shoe factory only, all the other Chinese owned tanneries maintain approximately three to six percent Chinese managers and technicians. Even

Ethiopian leather's problematic quality and pricing are considered to be the major causes for declining exports. In a stagnating global market, leather manufacturers from the US and Europe have all lowered their prices. However, Ethiopian leather prices have not gone down because LIDI has set a minimum price for export. This policy, originally aimed at preventing tanneries from exporting unfinished leather instead of finished leather, has resulted in weakening the competitiveness of the Ethiopian leather market.

after years in operation, the proportion has not significantly decreased. Two Indian-owned tanneries in Mojo have similar expatriate involvement, whereas a British-owned tannery had only three expatriates among its 700 workers. Several local Ethiopian tanneries also employ a couple of foreign experts, mostly from India.

Most Chinese expatriates occupy management and technical supervising positions in Chinese-owned tanneries; however, a small number of Ethiopians have been promoted to management positions. A Chinese factory owner said, "Ethiopian managers are needed to communicate [with the workers] but using more Chinese can improve the quality."¹⁶ These local managers are either LIDI graduates or experienced managers from other tanneries. They serve mainly as intermediaries between Chinese managers and local workers, human resource managers, or specialists who know how to get good quality raw skins and hides. Those who can speak Chinese or communicate well with Chinese workers are likely to be promoted. As compared to Chinese managers, they are not entrusted with too much actual management responsibility, but rather play a secondary role assisting and coordinating. LIDI constantly urges Chinese tanneries to hire more Ethiopians to replace Chinese managers and technicians. However, in order to guarantee quality and operations, the tanneries stubbornly stick with three to six percent of their expatriate workforce serving as core management.

Only a very small number of Chinese technicians are knowledgeable about key technologies like chemical recipes, but other Chinese managers motivate workers to work hard, monitor the quality and quantity of production, and repair the machines. Even when local staff were promoted to vice general manager or assistant department manager in a specific tannery, that tannery still kept approximately 20 Chinese managers on staff, mainly to monitor production at each step of the process. By conducting a daily count of the pieces of leather produced in each procedure, covering about a dozen procedure groups, management can track electricity, chemical, and other material usage and discover problems in a timely fashion. According to Chinese managers, Ethiopians are not yet accustomed to such procedures. The Chinese managers are stricter about maintaining rules and motivating local employees.¹⁷

Based on my observations, the Chinese managers were able to maintain strict rules not only because of cultural differences, but also because of their employment status. Although the Chinese managers receive higher salaries than their peers in China and several times higher than Ethiopian managers, they are also at higher risk of losing their jobs if mistakes are made. A tannery owner fired a Chinese workshop manager simply because he did not follow the existing processing procedures, instead making arbitrary changes. It is much more difficult for a Chinese firm to fire local employees because of legal labor protections.

Apart from their management expertise, Chinese tanneries have gained key technical competitiveness from their market experiences and business practices. The technicians may not have received standard professional training, but they have

practical skills. For example, the owner of one tannery was a former salesman of chemicals used in leather processing for over 20 years before he started his own tannery business. He learned about chemical composition from practicing with his products. “I got to know how to achieve the best effect by experimenting, adding, and reducing small amounts of chemicals,” he said proudly “I can make the best black-colored leather in the world”. However, he admitted that this knowledge is not easily transferred. “Even my son cannot grasp it after three to four years of learning. You need to have some talent to learn it”.¹⁸ Similarly, the head of another tannery believed that he could control color difference better than local tanneries because he had worked in the finished leather business for decades and was familiar with the customers’ leather pattern requirements. Since the Ethiopian tanneries have only recently entered the finished leather market, they have very limited knowledge in dealing with various customers’ requirements.

LIDI has gradually learned characteristics of the pragmatic knowledge required in leather processing. The institute launched a program in 2011 to send Indian experts to 11 tanneries in Ethiopia to conduct bench-marking studies. The last group left in 2013 and local engineers have been in charge of technical processes in local tanneries since then. Reviewing the impacts of Indian experts, a manager of a local tannery said, “it was not as successful as expected, because they just tried to produce leather quality according to Indian standards, not according to market demand.”¹⁹ LIDI’s general director said that the institute could only provide general training and technical assistance, and that the specific techniques are developed or acquired by each tannery through their operations.

Therefore, LIDI encourages its students to do a practicum in one of the tanneries. Both foreign and local tanneries receive five to six interns from LIDI. However, the outcomes of the internship program have not been satisfactory. Several Chinese tannery managers complained that while the interns from LIDI only had theoretical knowledge learned in the classroom, they still had high opinions of themselves. “They just looked around and wrote down something without helping with anything.”²⁰ The main challenge is that upon graduation students were not willing to work in the tanneries. There are five universities and 40 vocational education centers training students in leather processing. Yet, few students stay in the leather sector after graduation. According to LIDI’s general director, the leather processing sector is the lowest paid sector in Ethiopia. Working in the tanneries, a graduate may earn 4,000 Birr (US\$ 140) but working as a teacher in a vocational education center, he could make 7,000 to 8,000 Birr per month. Many students choose to study leather processing only for the purpose of getting a university degree. One Chinese tannery had hired 20 LIDI graduates, but after two years only five remained.

MARKETING AND SALES

MARKETING SKILLS MAKE THE BIGGEST DIFFERENCE in terms of competitiveness. It was these skills that appeared to be a key factor in the divergent performances of the

Notably, exports to Africa have surged, becoming the second major export market after North America in 2013-2014. The overall amount of shoe exports is still small in comparison to leather exports, but the gap is closing. In 2010, the value of exported shoes totaled US\$ 7.96 million, or less than 12 percent of exported leather. By 2016, shoe exports reached US\$ 43.8 million, or more than 56 percent of the value of leather exports.

Chinese and Ethiopian tanneries after the government's policy change to encourage technical upgrading. Both Chinese and Ethiopian tanneries had upgraded and added machinery to produce finished leather. Yet, Chinese firms' strength in marketing and sales allowed them to change operating procedures without altering basic business patterns. Although they might have increased costs or cut profits to meet the new regulation requirements, their sales were only slightly affected. By contrast, although Ethiopian tanneries have upstream resources, they are weak in understanding and finding the downstream markets for their finished leather. After the policy change, the main exporting customers have changed from leather processing factories to leather product manufacturers; as such, they must look for new buyers and adjust their business practices to meet the demands and habits of their new customers. This transition, in general, has proven to be the least successful. Since 2010, a handful of Ethiopian tanneries have closed down while several others have been sold or leased to Chinese investors.

LIDI and the Ethiopian Leather Industries Association (ELIA) have expended great effort to help local tanneries reach out to international buyers. Since international leather fairs used to be the primary access point to market Ethiopian tanneries, these two organizations have organized the annual All Africa Leather Fair in Addis Ababa and provided partial financial sponsorship for local tanneries to attend international leather fairs in Europe, the US, and Asia since 2008. However, as the global market slows down and the quality of Ethiopian leather deteriorates, the tanneries find it more and more difficult to find customers. For example, in 2012 Ethiopia was the only African country which set up a country pavilion in the All China Leather Expo held in Shanghai, with eight Ethiopian tanneries in attendance that year. However, by 2018 the Expo only had three Ethiopian tanneries attend. The owner of one large local tannery said, "we are here just to show the presence of Ethiopia and do not expect much business".²¹ The size of the All Africa Leather Fair in Ethiopia was also much smaller in 2018 because of the country's political turbulence. A Chinese tannery which rented a booth revealed that it did not expect to get customers from this exhibition. Its participation was a symbolic show of support for the event, which was organized by LIDI and ELIA.²²

Even when Ethiopian tanneries stress the importance of marketing, their understanding is quite different from that of the Chinese tanneries. Almost all of the Ethiopian tannery managers interviewed believe that they just lag behind in technology and blame foreign investors for not bringing their best technology to Ethiopia. Ethiopians know that the finished leather exported by Chinese tanneries will still be further processed in China. In their views, this demonstrates the unwillingness of Chinese tanneries to use the most advanced technology in Ethiopia and transfer their knowhow.²³ Yet, Chinese managers explain that such arrangements are made to meet the customers' demands and to ensure timely delivery. They point out that Ethiopian tanneries do not know the markets and lack the right attitude and capability to serve the customers.²⁴

Ethiopian leather's problematic quality and pricing are considered to be the major causes for declining exports. In a stagnating global market, leather manufacturers from the US and Europe have all lowered their prices. US and European suppliers have also sold wet blues. However, Ethiopian leather prices have not gone down because LIDI has set a minimum price for export. This policy, originally aimed at preventing tanneries from exporting unfinished leather instead of finished leather, has resulted in weakening the competitiveness of the Ethiopian leather market. In addition, the scarcity of good-quality raw skins and hides has raised the cost of Ethiopian leather. The surviving Ethiopian tanneries can do relatively well mainly because they have good sources of raw skins and hides.

The tanneries fiercely criticized the Ethiopian government's export-oriented policy for ignoring market mechanisms. Even when the global market was weak, LIDI and the MOI carried on doing things according to their plan without analyzing the market. "They do not do SWOT [strength-weakness-opportunity-threat] analysis...It is command economy!" said one Ethiopian tannery manager.²⁵ Although the Ethiopian MOI invites all the tanneries to meet every month in the ministry, the tanneries find that their opinions are not respected by the government body. They merely go there to listen to what LIDI and the MOI want them to do. Chinese tanneries also consider the gatherings and activities held by ELIA unhelpful. Consequently, Chinese tanneries rarely attend the association's meetings; some have even withdrawn their membership.

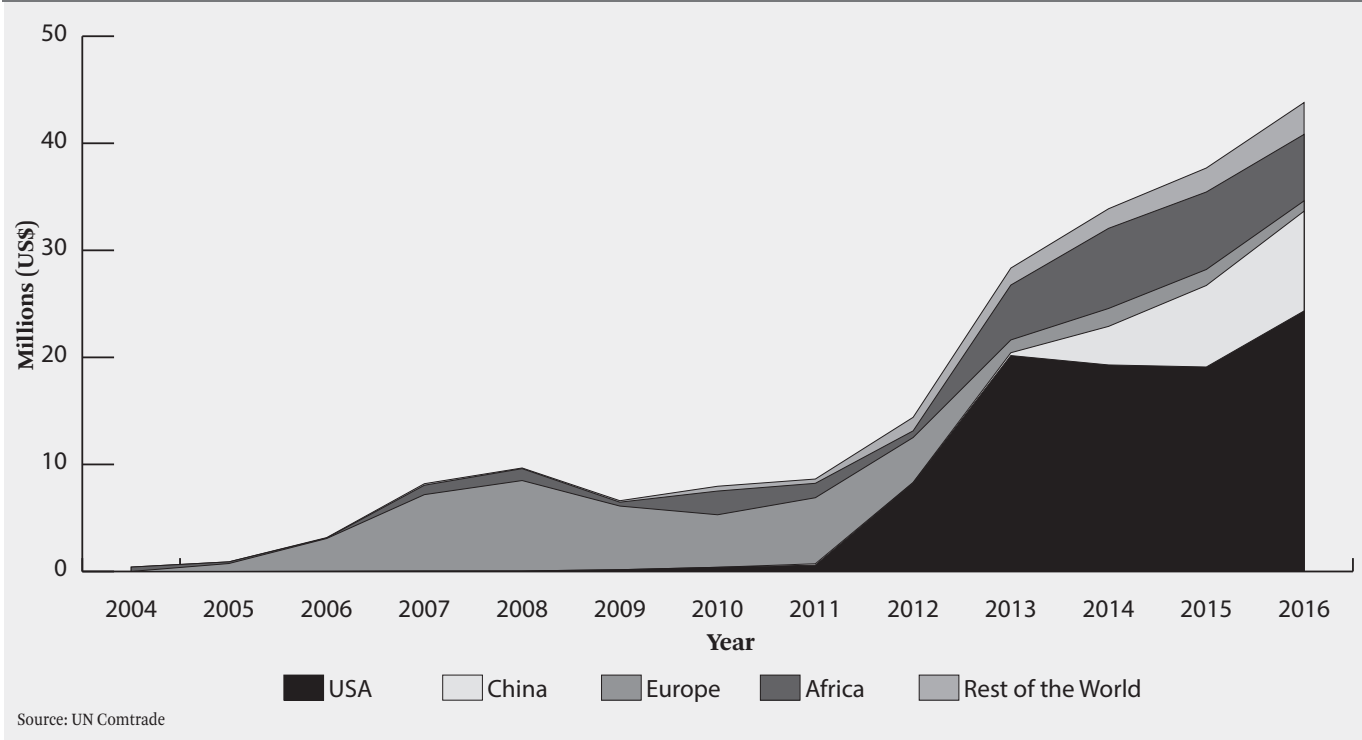
My interviews with the customers, namely leather product manufacturers abroad and in Ethiopia, suggest that the customers often do not have sophisticated requirements, but attach great importance to timely delivery and uniform quality. The Chinese tanneries are considered more reliable in these two aspects. As a Chinese tannery owner commented, Chinese owners used to specialize in market mechanisms, and it was the Ethiopians who had a better supply of raw materials. After many years, the Chinese have learned approaches to accessing better raw materials, but Ethiopian tanneries still do not know their market. The future for Ethiopian local tanneries does not appear promising even if the leather sector continues to grow.

LEATHER PRODUCTS MANUFACTURING

CHINESE INVESTMENTS ALSO PLAY AN IMPORTANT ROLE in the manufacturing of leather products. Ethiopia's export of shoes, mainly leather shoes, soared rapidly after three large Chinese shoe factories, Huajian, New Wing, and George Shoes, began their Ethiopian operations in 2012. The US is the top export destination and China is a rapidly growing market (see Figure 2). German shoe company, Ara Shoes, used to source from Ethiopia and set up a shoe factory to produce for the European market in 2009. However, since Ara was sold to New Wing in 2013 and exports to the European market have shrunk, local Ethiopian shoe factories have mostly concentrated on the domestic market, contributing little to exports.²⁶

Another thing to notice is that export destinations have diversified. In 2005 all exports went to four countries: Israel, Italy, Sudan, and the UK. By 2016, export

Figure 2: Ethiopia's Shoe Exports by Destination 2004-2016 in US\$



destinations had expanded to 67 countries across five continents. Notably, exports to Africa have surged, becoming the second major export market after North America in 2013-2014. The overall amount of shoe exports is still small in comparison to leather exports, but the gap is closing. In 2010, the value of exported shoes totaled US\$ 7.96

Table 3: Foreign Investments in Ethiopia's Leather Manufacturing Sector

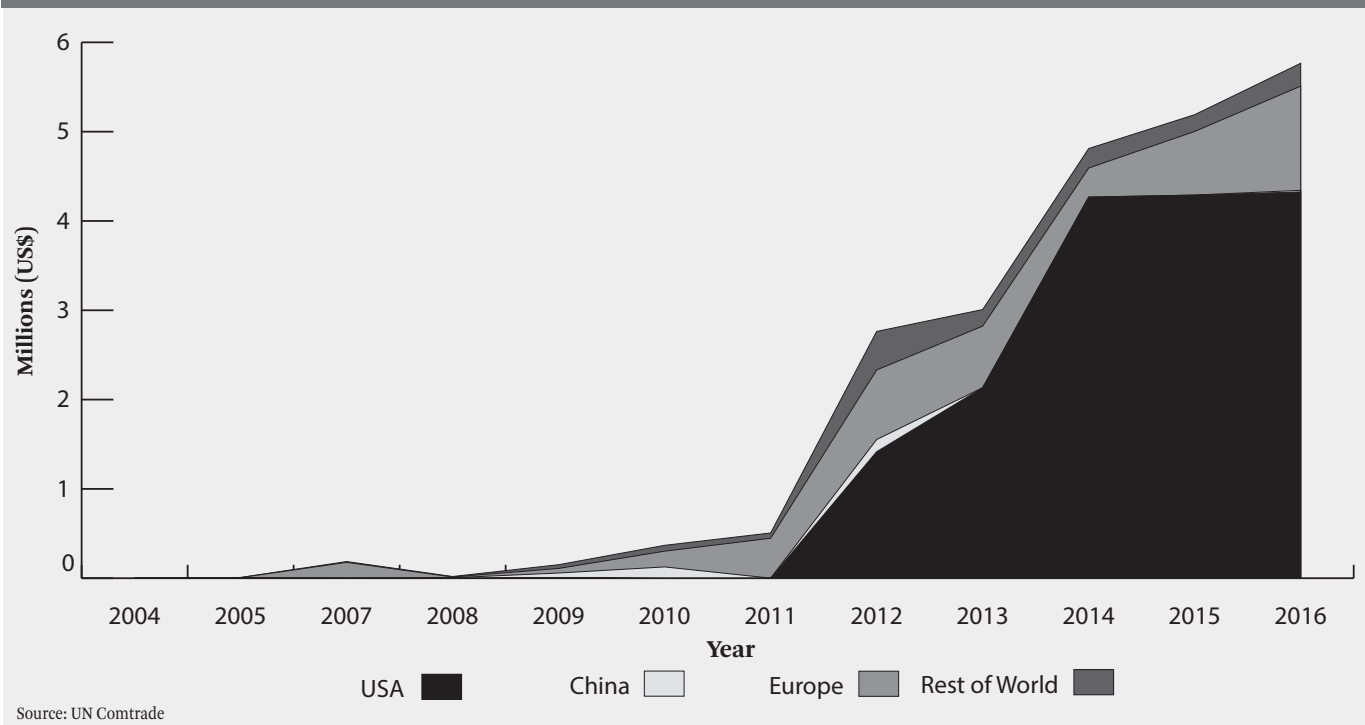
Name	Origin	Operation Start	Product	Status
Ara	Germany	2009	Shoes	Sold to New Wing
Huajian	Mainland China	2012	Shoes	In operation
New Wing	Hong Kong	2011	Shoes	In operation
George Shoes	Taiwan	2014	Shoes	In operation
Pittards	UK	2011	Gloves	In operation
Ottokessler	Germany	2010	Gloves	In operation
LYU	Mainland China	2015	Gloves	In operation

Source: Author's interviews 2012-2018.

million, or less than 12 percent of exported leather. By 2016, shoe exports reached US\$ 43.8 million, or more than 56 percent of the value of leather exports.

Apart from shoes, three foreign-invested glove factories have been established since 2010, including Pittards, which owns a tannery in Ethiopia, Ottokessler, and LYU. Both of the European factories hired Chinese technicians to train Ethiopian workers. These three factories have increased Ethiopia's export of leather gloves significantly during recent years (see Figure 3). Foreign investors in the leather product sector were attracted to Ethiopia for several reasons. First, Ethiopia has abundant leather resources to supply production. Second, the labor costs are cheap. In 2012, an unskilled worker in the factories was paid 600 Birr monthly, equivalent to US\$ 30. By 2018, the basic salary for an unskilled worker was raised to 800-900 Birr monthly; however, due to Birr depreciation, the salary calculated in dollars is still around US\$ 30. Third, the government has a pro-active attitude and preferential policies for investment in the leather products manufacturing sector. For example, exporting manufacturers may be exempted from income tax for up to seven years; in addition, there are also other customs and financial incentives. The Ethiopian government attaches importance to leather shoes and leather products as a strategic sector, to the point that high profile politicians took part directly in the campaign to attract foreign investors.

Figure 3: Ethiopia's Leather Glove Exports by Destination 2004-2016 in US\$



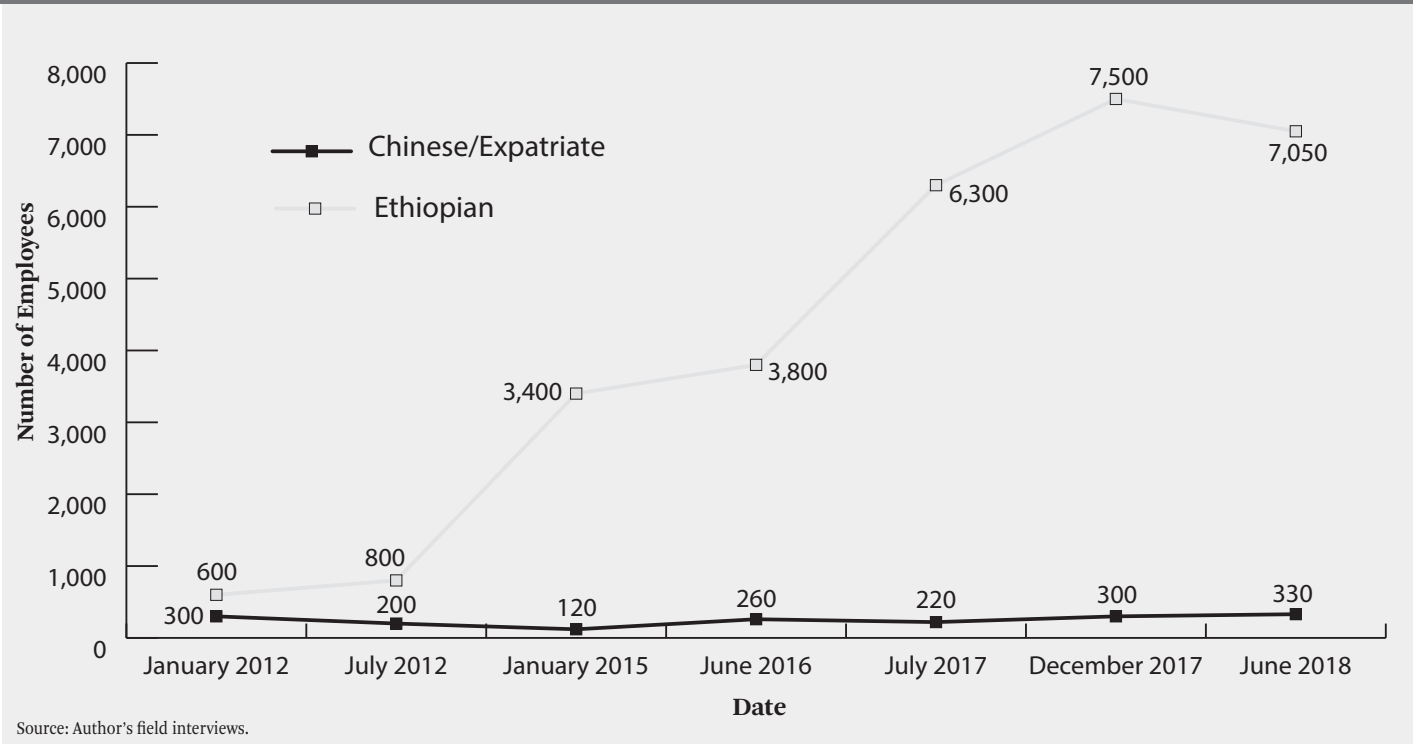
Huajian is by far the largest investor in the leather product sector in Ethiopia and one of the largest in the country's manufacturing sector overall. Its arrival in Ethiopia was a direct outcome of late Ethiopian Prime Minister Meles Zenawi's visit to China in

August 2011. During the visit, Meles met with the Huajian Group's president, Zhang Huarong, whom he invited to Ethiopia to explore investment opportunities. A month later, Huajian executives arrived in Ethiopia and were impressed by the investment climate. Apart from the cheap labor costs and abundant leather supply, the executives found that the political situation in Ethiopia was stable and the government actively promoted market-based economic reforms. Thus, in October of 2011, Huajian's Board of Directors decided to open their first overseas production base in Ethiopia. All of the foreign-owned manufacturers export 100 percent of their products. Aiming to lower their labor costs, all these factories have shifted a part of their production capacities from China to Ethiopia. However, their business strategies and growth trajectories in Ethiopia vary. Their impacts on the country's sector and technical development also have different characteristics.

TRAINING AND EMPLOYMENT

MANUFACTURING LEATHER PRODUCTS IS LABOR-INTENSIVE, and factories expend great effort to train and manage local workers. Figure 4 and Table 4 show the composition and changes in employment in shoe and glove factories. We can see that the factories had a higher percentage of workers from China and other countries at the beginning of operations. Huajian, for example, imported 300 technicians to Ethiopia to start production in 2012 and train Ethiopian workers. However, after a quick start and intensive training, Ethiopian workers replaced many expatriates. The percentage of expatriates reached as low as three percent after five years of operation. When factories expand operations, they might once again bring foreign technicians to train the Ethiopians; however, the numbers are usually quite low. While Chinese nationals make up the overwhelming majority of expatriates, firms have also hired Italians, Indians, and Koreans.

It is worth noting that Chinese companies have reduced the number of workers at their factories in China while expanding to Ethiopia. In 2012, Huajian had 24,000 workers in China; by July 2018, they had reduced the number to 5,000. New Wing made even sharper cuts, reducing the number of employees in China from 8,000 at peak to 200 workers. LYU kept only 200 workers in its China factory; by 2018 half of the workers were in marketing and sales departments. George Shoes also reduced its employees in China from 8,000 to 3,000; however, they also established another factory in Vietnam in May 2016. The Vietnam factory has grown very rapidly and was employing 2,000 workers on eight production lines as of July 2018. In comparison, George Shoe's factory in Ethiopia had only 1,100 workers for three production lines after nearly five years in operation; in other words, their production levels in Ethiopia were much lower than those in Vietnam. Data suggests that rising labor costs have forced Chinese manufacturers to actively seek other production bases overseas. Unfortunately, Ethiopia has not absorbed all of the relocated production capacity. Despite Ethiopia's abundant raw materials and cheap labor costs, Southeast Asia has proven to be a better destination for manufacturing. The manager of George Shoes explained, "Vietnam has

Figure 4: Nationality of Employees at Huajian Factory in Ethiopia 2012-2018

many skilled shoemakers; therefore, it is growing quickly. In Ethiopia, the language communication is a problem and the workers do not like to work hard to get more income.”²⁷ As a result of these sorts of challenges Asian investments in Ethiopia’s leather product manufacturing sector have grown only modestly since 2011.

Table 4: Employment in Four Chinese-owned Manufacturers of Leather Products

Date	New Wing		George Shoes		LYU Gloves		Huajian	
	Chinese & Expatriates	Ethiopians	Chinese & Expatriates	Ethiopians	Chinese & Expatriates	Ethiopians	Chinese & Expatriates	Ethiopians
July 2012	9	300	-	-	-	-	200	800
January 2015	31	1,150	60	1,100	-	-	120	3,400
June 2016	35	1,500	90	1,000	7	200	260	3,800
July 2017	25	1,000	60	1,125	8	480	220	6,300
June 2018	25	1,250	55	1,100	8	580	330	7,050

Source: Author's field interviews.

TRAINING PROGRAMS

AMONG CHINESE INVESTORS, HUAJIAN GROUP HAS THE MOST ambitious training program for the thousands of workers in its factory. In 2011, as soon as Huajian decided to invest in Ethiopia, they selected 86 local college graduates and young workers to send to its headquarters in Guangdong for a two-month training. These trainees worked together in the shoe assembly lines alongside Chinese employees and learned to speak Chinese. Between 2011-2018, approximately 500 Ethiopian workers were sent to China for similar training, with visits lasting anywhere from two months to a year. Although workers trained in China receive special attention from the company upon returning, they must also continuously prove their value to the company. From the first two groups which were sent to China, five managers have been promoted from production line manager to department managers. According to one of the Ethiopian department managers, he learned two highly critical skills from the work and training received at Huajian. First is communication. Chinese proficiency is an enormous help, in fact, all five department managers speak Chinese fluently. The second is work efficiency. Ethiopian managers learned that the targets set by management must be adhered to and met on time.²⁸

Within its factory in Ethiopia, Huajian has implemented a multi-level training system. Every newly recruited worker receives a week-long, pre-work education. Workers must take part in military style drills and learn the company's strictly disciplined culture. After that initial phase, workers are taught in the skill training center within the factory where they learn how to use sewing machines to stitch various patterns, starting from basic knowledge about sewing machines and stitching a square to stitching more complicated shapes like letters and animals. Once workers pass proficiency examinations, they can then begin to work on the production line. Training continues on the job. Every day, each production line supervisor monitors the performance of every worker and provides one-on-one tutoring. There is a "theory training center" within the workshop, as well. Employees occasionally gather in the center to receive instructions regarding enterprise management and technical updates.

Despite all these efforts, Ethiopian workers' productivity has not reached satisfactory levels according to the management team. The director overseeing Huajian's Ethiopian operations estimated that Ethiopian workers can only achieve 50 percent of the productivity achieved by Chinese workers. Often, Ethiopian workers cannot meet the already-lowered production plans. The director complained, "product quality requires attention, but local employees are easily distracted. This habit cannot be changed even after so many years."²⁹ Similarly, a Chinese supervisor observed that the biggest difference between Ethiopian and Chinese workers is the sense of responsibility. In China, a supervisor just needs to tell the workers the tasks and the workers go on to complete all the requirements. In Ethiopia, a supervisor must remind the workers again and again. For the same production line, the factory hired over 70 Ethiopian workers while only 40 workers were required in China.³⁰ The rate of unsatisfactory machine operation output in Ethiopia is also five to six percent, whereas

the rate is only two percent in China. Additionally, injuries occur more frequently in Ethiopia.

In the beginning, Huajian's machine operators were all Chinese, while Ethiopians only worked on simple manual procedures. After three years, all Chinese operators have been replaced by Ethiopians and only one Chinese worker remains on the production team. Apart from monitoring and urging the Ethiopians to work hard, the Chinese supervisor is mainly responsible for maintaining and repairing the machines. For each work procedure, there are instructions written in Amharic and posted in the factory to help Ethiopian workers understand and remember the processes. Quite a few Ethiopian workers in Huajian have university degrees in agriculture, accounting, and other majors, whereas most Chinese supervisors and managers in the factory have never attended college. However, Chinese managers have found that Ethiopian workers have more difficulty understanding the production process and machine mechanics than Chinese and other Asian workers, likely due to a lack of industrial experience. For other shoe factories and glove factories, learning by doing is also the most common approach to train Ethiopian workers, most of whom have no previous factory experience.

The most challenging step of the production process is changing the types of shoes produced. At Huajian, a production line requires two to three days to shift work to a new model of shoes, even when this line has already had several years of experience. Chinese supervisors teach and demonstrate almost every position along the assembly line during the transition, from using glue, pasting, cutting, to sewing; however, many simple mistakes continue to be made. Supervisors at George Shoes also noticed this problem. George Shoes' factory in Ethiopia produces exclusively for the company's own brand, "Top Gloria", sold in the Chinese market. Since the shoes made for the Chinese market are produced in smaller batches and include more model changes than shoes made for European and US clients, the management purposely increased the training time required for model changes.

All of the Chinese managers in the different factories stressed that knowledge should be transferred to local workers. However, one manager at George Shoes pointed out that even in China, Taiwanese technicians had spent seven- or eight-years training mainland Chinese workers, and they had no language barriers to overcome. Because the quality in Ethiopian factories' output is not yet stable, they focus on producing low and middle end products, and continue manufacturing high-end products in China.

In contrast to the intensive Chinese, overseas, and on-the-job training programs, Ethiopian factories instead often strive to bring in foreign experts. In collaboration with Indian Footwear Design & Development Institute, LIDI used to send Indian experts to several factories for technical instruction. However, the local manufacturers felt that the tutoring period was too short. Each expert stayed in a factory for two to three months, instructing dozens of workers on quality and productivity improvements; but they often left before they were able to see results or carry out evaluations.³¹ Two local shoe factories hired a handful of foreign technicians to train their workers. Four technicians from mainland China were recommended through the

Despite Ethiopia's abundant raw materials and cheap labor costs, Southeast Asia has proven to be a better destination for manufacturing. The manager of George Shoes explained, "Vietnam has many skilled shoemakers; therefore, it is growing quickly. In Ethiopia, the language communication is a problem and the workers do not like to work hard to get more income."

factory owners' Taiwanese friend and consultant: one for design, one for stitching, one for lasting, and one for cutting. These Chinese experts left after a year, claiming that they were homesick and other foreign experts were subsequently hired from Australia, India, and Italy.

TURNOVER AND SPILLOVER

HIGH TURNOVER IS COMMONLY SEEN AS A DETRIMENT to the formation of a reliable workforce and to the accumulation of production skills in the manufacturing sector. Some of the foreign shoe and glove factories in Ethiopia have experienced high local worker turnover rates, especially at the beginning of their operations. George Shoes' general manager complained, "the turnover rate is too high, and workers change all the time. Much training is wasted. The factory always has semi-skilled workers. It's hard." About 70 percent of workers in his factory were lost during 2016-2017.³² Other shoe factories also reported up to 10 to 20 percent monthly turnover rates. However, high turnover is also a problem in China, where managers reported turnover was even higher than in Ethiopia. Factory managers reported that new workers often found factory work exhausting and were unwilling to stay. Instead, workers preferred to go to construction sites to make 50-100 birr per day or to work as maids. Distance from home, the high cost of living in the city, and other factors may have also contributed to their premature departure. Employees with university degrees also tend to leave because they can find better jobs in Addis Ababa.

The situation is improving, however, as more and more experienced workers choose to stay in the factories where they have accumulated training. LYU gloves estimated that the turnover rate for the workers who passed the 45-day probation period was less than three percent per month. At George Shoes, nearly half of the Ethiopian employees have worked there for more than three years. Huajian also has more than 300 workers who started working in the factory before 2013 and have become highly skilled and reliable (see Figure 4).

During the peak season, shoe and glove factories may even compete for workers, particularly those factories located within industrial clusters. Factory managers shared anecdotes where Ethiopian workers would leave to work for another factory for just 100 Birr more. Shoe factories have reported losing sewing machine operators to nearby garment manufacturers, as well. Chinese factories have more advantages than the local factories in that they have stable relationships with international customers and hence can rely on regular export orders in order to maintain a more even demand for labor. Although wages are similar, the garment making process is considered more relaxed and less stressful. While turnover remains high, neither Chinese nor local factories seemed overly concerned about generic worker turnover. Even when 50 to 60 percent of the operators in the assembly line of his factory changed every year, one manager in an Ethiopian shoe company said that he did not care, "the firm can immediately get another one on the same day". The firm's priority is to keep the skilled workers.³³

Ethiopian shoe factories sell more in the domestic market and African regional markets, as market demands have increased in recent years along with a growing middle class. Thanks to tariff protections against imported shoes in Ethiopia, the margin in the local market is almost double as compared to exporting to European, Asian, and US markets.

The competition for skilled workers is a shared challenge for all factories. For Chinese factories, the local workers who can speak Chinese are most desirable, although workers who received training in China were more likely to leave to go to other Chinese firms because of their language and communication skills. As an example, of the first group of trainees sent by Huajian to China only two of the original 86 still worked for Huajian as of 2018. Huajian later amended contracts with all trainees sent to China to specify a required service period and increased penalties for breaking the contract, but a number of trained Ethiopians have still managed to move to other Chinese firms for higher positions and better wages. Ultimately, high turnover within this segment of workers discourages Huajian and other Chinese factories from providing overseas or intensive training.

UPSTREAM SUPPLY: LEATHER AND ACCESSORIES

FOREIGN EXCHANGE CONTROLS CREATE A BOTTLENECK for manufacturers in Ethiopia. As the country's fiscal situation deteriorates, it has become more and more difficult to obtain the foreign exchange necessary to import essential supplies. For instance, in May 2018, the Ethiopian national bank started to require all imports above US\$ 5,000 obtain guarantee letters from a bank as the third party. On top of the large sum of foreign currency they are already paying for expatriates, in addition to exporting products, this requirement added extra time and work for companies like Huajian. The ensuing delays created huge cash flow issues. Huajian wrote letters to the Ethiopia Investment Commission and the MOI, but they were unable to intervene as the policy had been established by Prime Minister Abiy Ahmed's new government. Huajian originally considered establishing a tannery; however, plans were delayed because of the need to import chemicals from abroad, which would require foreign currency. Local tanneries and factories also suffered from this new law.

Accessories as simple as thread, glue, and cartons used by the manufacturers must be imported because the quality of locally made carton (and other inputs) do not meet international standards. When two Chinese investors attempted to locally produce and supply cartons to the factories, they found out their prices would be too high compared to the imported alternative. As they later found out, shoe and glove factories import their cartons duty-free because the cartons are used for export, whereas locally made cartons are not exempted from tariffs which increases their price. In this case, incentives aiming to encourage exports actively deterred the growth of a local supply chain.

As discussed in the previous section, all shoe and glove manufacturers must import their leather from abroad because leather quality and processing capability in Ethiopia cannot meet their production needs. Originally, all the manufacturers viewed Ethiopia's abundance of skins and hides as an advantage; however, they soon discovered that timely delivery was a serious issue. Local tanneries have little control over quality since they often cannot get the imported chemicals in time due to foreign exchange regulations or logistics delays. Although LIDI's lab has tried to produce

certain kinds of special leathers to replace the imports, Chinese manufacturers deemed the specially produced leathers to also be low quality.

To overcome foreign exchange constraints, LIDI had greater expectations of glove manufacturers, in part because glove production requires fewer accessories than shoe production.³⁴ However, LIDI did not allow the export of semi-finished gloves, which created another dilemma. Since glove manufacturers could only export a finished product, LYU and other glove factories had to import all accessories from China and other countries and subsequent import delays meant that delivery times could not be guaranteed. Later, LIDI agreed to change the policy, but this change is still awaiting approval by the MOI, the Ethiopia Commercial Bank, and the National Bank. The long process means a further loss of business for the factories. While Ethiopian authorities urged investors to export more value-added products, they did not sufficiently understand market logistics to see that such a requirement also came with a price. Although as a state-owned institute LIDI actively boosts technical progress and promotes localized production, anecdotes like these show it does not know enough about the real business needs and practices of the industry.³⁵

SUPPORT FOR LOCAL SHOE FACTORIES & DEMONSTRATION EFFECTS

CHINESE INVESTORS HAVE ALSO CREATED POSITIVE IMPACTS for indigenous downstream manufacturers by offering better supplies. Although Huajian produces high-quality shoes for export only, it also has a workshop to manufacture shoe materials in Ethiopia. While the workshop mainly serves its own shoe factory, it used to sell some shoe materials to local shoe factories when its capacity surpassed the demands of its own factory. Its clients were mainly small and medium-sized Ethiopian shoemakers selling on the domestic market. Hundreds of small shoemakers came together to form the Ethiopian International Footwear Cluster Cooperative Society (EIFCOS). EIFCOS' commercial manager, Mr. Muluaem, commented, "the impact of Huajian (for small shoemakers) is very positive". Previously, there had only been two or three shoe lasting machines in Mekato, the region home to many small shoemakers, making lasting an expensive and time-consuming process. When Huajian came on the scene, they could quickly produce not only lasters, but also molds. "Whatever type you want, they can make it. The price is good. They have a large capacity, and they can deliver within two to three days. They only look at your ability to pay. As long as you can pay, they will work for you...Huajian also supplies buckles and zippers. You call and they come without charging for transportation."³⁶ Several medium-sized local shoe factories also outsourced some work like lasting and cutting to Huajian.

However, after 2017 Ethiopian customs officials ordered Huajian to stop supplying shoe materials to local shoemakers as Huajian enjoyed duty exemptions and tax holidays to export 100 percent of its products, not to sell locally. Huajian easily complied with the order since profits from the sale of shoe materials counted for a very small part of their business, but local shoemakers suffered. Local shoemakers banded together with LIDI and lobbied the MOI and customs officials for permission to

continue purchasing supplies from Huajian, but as of August 2018, the policy remained in place and unchanged. Stakeholders in the leather sectors criticized government officials for not understanding the shoemaking business, since imposing constraints like these on foreign investors ultimately resulted in limiting the growth of indigenous manufacturers.³⁷

Some local shoe factories still get accessories from Chinese factories, but through various detours. For instance, a local shoe factory purchased logo materials from George Shoe's branch in China instead of its Ethiopian branch, since the Ethiopian branch was prohibited from selling to them. In general, local shoe factories have good relationships with Chinese factories. Commonly facing shipping delay issues, local shoemakers often share shoe materials and accessories with New Wing and George Shoes and then return the materials later when their shipments have arrived. A few managers from local factories frequently visited Huajian to buy supplies, when it was allowed, or just to learn about how management of immense production lines worked there. "We help each other like teamwork, but different companies do not discuss about marketing," an Ethiopian shoe factory general manager commented.³⁸

Local businesses were impressed by the immense scale of Chinese factories, particularly Huajian's mass production workshop outfitted by thousands of workers. Ethiopian firms used to export shoes and garments only seasonally and in small quantities. An Ethiopian factory manager talked about his impression, "When I visited Huajian, I saw their massive operation, I was shocked. It was an army of people. Everybody was chikchikking (sewing and working), that's crazy! It was the first time that we saw this."³⁹ Since the arrival of Huajian, at least two local shoe factories have invested to upgrade their production lines, hired foreign experts to train workers, and set goals to become major shoe exporters.

ETHIOPIAN MANUFACTURERS

HOWEVER, LOCAL MANUFACTURERS' EFFORTS TO BOOST EXPORTS have not yet proven fruitful. One shoemaker said that his firm did not get any export orders except for at the beginning, with a small test order from a US customer. The key problem they encountered in filling the test order was, again, the supply of accessories. Since there are no qualified manufacturers of shoe accessories in Ethiopia, the US buyer connected the Ethiopian firm with its certified accessory suppliers in China. However, the Chinese suppliers required a down-payment before shipment. As the Ethiopian firm had already borrowed money to buy equipment, it had limited working capital and was forced to import accessories in several batches and shipment delays caused production disruptions. When the US buyer sent experts to inspect, the factory was temporarily closed due to the shortage of accessories and the buyer never returned. Another factory was still searching for international buyers. They discovered that the price for exported shoes was only half of those sold in the domestic market. Nevertheless, the firm persevered, attempting to make its contribution to the country's exports. When a potential customer asked them to complete a test order of 2,000 pairs

of 15 different models, the firm tried to explain to the buyer that costs would increase with such small quantities and instead asked the buyer to modify the order for larger quantities with fewer models. The firm and the customer did not reach a deal.

Ethiopian shoe factories sell more in the domestic market and African regional markets, as market demands have increased in recent years along with a growing middle class. Thanks to tariff protections against imported shoes in Ethiopia, the margin in the local market is almost double as compared to exporting to European, Asian, and US markets. The manufacturers in Ethiopia also have a relatively good capacity in comparison to other African countries. As such, exports to African countries have seen a growing trend since 2012 (see Figure 2). To be sure, the African market is much smaller than other major international markets, but Ethiopian producers do not currently have the capital, customer relationships, or supply support to follow Chinese manufacturers into these highly competitive and demanding markets.

CONCLUSION

SCHOLARS HAVE VARIOUS VIEWPOINTS ABOUT THE IMPACTS of foreign investment on local development. One principal concern is that foreign competition may pose serious challenges to inefficient local producers, squeezing them out of both international and domestic markets.⁴⁰ However, foreign firms may also become catalysts stimulating, upgrading, and transforming local manufacturing sectors. Some Nigerian traders learned how easy manufacturing could be from site visits to Asian factories, while other Mauritians formed joint ventures with firms from Hong Kong and then set up their own firms.⁴¹ The Ethiopian leather product sector also had a successful recovery from the sharp rise of cheap imported footwear from China in the early 2000s. While many small Ethiopian producers were crushed, some emerged stronger and invigorated the sector with newly acquired capacity.⁴²

A majority of scholars conclude that investments by multinational corporations have positive impacts on knowledge transfer between countries.⁴³ The skills transfer is achieved in diverse ways, from training and demonstration to collaboration and technical service.⁴⁴ Yet, Aitken and Harrison find that the effects of various forms of knowledge spillover differ.⁴⁵ For example, in some cases vertical supply relationships may help local companies better acquire advanced skills, but in other cases horizontal competition and demonstration are more effective in promoting productivity.⁴⁶ Compared to investors from other countries, Chinese enterprises demonstrate unique patterns in overseas operations, for example, they are inclined to form sectoral clusters and they tend to rely on family management.⁴⁷ As such, the actual effects of Chinese investors on the development and productivity in Ethiopia's leather sector requires this closer study.

Investigating Ethiopia's leather and leather product sectors' development trajectory clearly demonstrates that Chinese investments have indeed contributed a great deal to both exports and employment in these related sectors. However, closer

Ethiopian factories are not lagging behind in terms of machinery or production techniques. They can easily purchase the equipment or hire training experts from abroad. However, their understanding and knowledge of the international market is very limited. Both the Ethiopian managers and the authorities appear to be interested in the technical skills of the Chinese firms without recognizing the market logic behind successful Chinese business practices.

examination of the interaction between Chinese and Ethiopian stakeholders puts sustainable growth and effective knowledge transfer into question. Through comparison, we can see that all of the Chinese tanneries and manufacturers attach great importance to market mechanisms. They develop their expertise and capabilities according to client demands. Many of the Chinese managers and technicians do not have a grounding in higher education and their techniques are not sophisticated; instead their expertise is based on real business practices, communication with clients, and experience. They put an emphasis on timely delivery, good quality customer service, and can mobilize resources in Ethiopia, China, and other countries to meet market needs.

Ethiopian factories are not lagging behind in terms of machinery or production techniques. They can easily purchase the equipment or hire training experts from abroad. However, their understanding and knowledge of the international market is very limited. Both the Ethiopian managers and the authorities appear to be interested in the technical skills of the Chinese firms without recognizing the market logic behind successful Chinese business practices. Their takeaways from Chinese factories have been largely constrained to production management and technical imitation. Yet, technical improvements without markets and customers to sell to are useless and unsustainable. Fortunately, the arrival of foreign investors inherently builds up certain upstream and downstream supply connections between Chinese and Ethiopian enterprises. The demands of Chinese factories on local suppliers and their service to the downstream customers may help Ethiopians better learn the importance of market mechanisms, although based on interviews this seems unlikely.

The Ethiopian government has a pro-active attitude towards sectoral development and sets supportive industrial policies. Some policies, like the incentives for foreign direct investment, have worked. However, the lack of insight into international business realities has also caused numerous mistakes. For example, the Ethiopian government arbitrarily demanded all tanneries export finished leather and set a minimum price for such exports. This led to a loss of traditional markets and further weakened the local tanneries' competitiveness. The lack of coordination between various government agencies, like with foreign exchange controls or customs regulations, is also counterproductive. The leather and leather product sectors case study indicates that the Ethiopian government's policy making lacks a comprehensive understanding of industrial development and overemphasizes exports and employment. A careful analysis of market mechanisms needs to be added as an integral component to industrial policy, otherwise the country will not see sustainable growth in productivity; these gaps will also, ultimately, affect the growth of exports and employment. ★

ENDNOTES

1. Ministry of Finance and Economic Development, The Federal Democratic Republic of Ethiopia, Growth and Transformation Plan (GTP), 2010, National Planning Commission, Growth and Transformation Plan II (GTP II), 2016.
2. National Planning Commission, Growth and Transformation Plan II, p. 141.
3. Deborah Brautigam, Margaret McMillan, and Xiaoyang Tang, "The Role of Foreign Investment in Ethiopia's Leather Value Chain," PEDL Research Note - ERG project 106: Flying Geese in Ethiopia's Leather Cluster?
4. Wet Blue refers to moist chrome-tanned leather. In this phase, the leather is tanned, but neither dried, dyed nor finished. Crust leather is dried after tanning but has not yet been dyed. The finished leather is dyed and treated with coloring, waterproofing, wax dressings as well as ironing or embossing.
5. Interview 20150126-a, Zhang Jianxin, owner of the Zhang Jianxin tannery, Modjo, Ethiopia.
6. Interview 20180818-d, Jiang Lele, Deputy General Manager of Pelle Leather, Modjo, Ethiopia.
7. Interview 20160624-c, Zhang Naizhi, owner of East Africa tannery, Modjo, Ethiopia.
8. Interview 20180830-a, Kebede Amede, Production manager of Colba tannery, Shanghai, China.
9. Interview 20150126-c, Yohannes, directing manager of the Gellan tannery, Modjo, Ethiopia.
10. Shoe agents are the international buyers of shoes. They place orders directly with the factories to produce and supply brands like Nike, Adidas, Gucci etc.
11. Proclamation No. 8J4/2013, "A Proclamation to Provide for Raw Hides and Skins Marketing.
12. Interview, 20150130-c, Xu, Manager of China-Africa Overseas Tannery, Saluta, Ethiopia.
13. Interview, 20180723, Wondu Legesse, LIDI Director General, Addis Ababa, Ethiopia.
14. Girum Abebe and Florian Schaefer, "High Hopes and Limited Successes: Experimenting with Industrial Policies in the Leather Industry in Ethiopia," EDRI Working Paper 011, December 2013, p. 23.
15. Abebe and Schaefer, "High Hopes and Limited Successes," p. 23.
16. Interview, 20180818-a, Zhang Donghai, Director of Zhang JianXin tannery, Modjo, Ethiopia.
17. Interview, 20120628-a, He Mingliang, owner of China-Africa Overseas Tannery, Saluta, Ethiopia.
18. Interview, 20170821-a, Wei Jianguo, owner of DX tannery, Modjo, Ethiopia.
19. Interview, 20150126-d, Morago, technical manager of Colba tannery, Modjo, Ethiopia.
20. Interview, 20170821-b, Zhang Laoer, deputy general manager of Zhang Jianxing tannery, Modjo, Ethiopia.
21. Interview 20180829-b, Badada Chali, Owner of Dire Tannery, Modjo tannery and Peacock shoes, Shanghai, China.
22. Interview, 20180720, Wang Guanjun, Financial Director of Friendship Tannery, Addis Ababa, Ethiopia.
23. Interviews 20120706a, Brook Debebe, General Manager of ELICO, Addis Ababa, Ethiopia; 20150121a, Tatek, owner of Batu tannery, Addis Ababa, Ethiopia; 20180830a, Kebede Amede, Production manager of Colba tannery, Shanghai, China.
24. Interviews 20180830c, Zhang Jianxing, owner of Zhang Jianxin tannery, Shanghai, China.
25. Interview 20180830a, Kebede Amede, Production manager of Colba tannery, Shanghai, China.
26. John Sutton, Nebil Kellow, and Tegegne Gebre-Egziabher, "An Enterprise Map of Ethiopia," 2009.

27. Interview, 20180725c, Jiang Xiangyang, general manager of George Shoes in Ethiopia, Addis Ababa, Ethiopia; Monthly salary for a generic Ethiopian worker in the same shoe factory was US\$ 70 (1800 Birr), for a Chinese equivalent US\$ 560 and for a Vietnamese US\$ 200 according to the interviewed manager.
28. Interview, 20170727, Fazhan, mid-level manager at Huajian, Addis Ababa, Ethiopia.
29. Interview, 20150121, Tatek, Batu, owner of Batu tannery; 20160623c, Song Xinping, Deputy General manager of Huajian, Addis Ababa, Ethiopia.
30. Interview, 20180721, Mr. Zhou, Supervisor of a lasting line at Huajian. Addis Ababa, Ethiopia.
31. Interview, 20180731, Mr. Bamlaku, General Manager of Anbessa Shoes; 20120704a, Solomon, general manager of Anbessa Shoes, Addis Ababa, Ethiopia.
32. Interview, 20170809, Kaul, general manager of George Shoes, Addis Ababa, Ethiopia.
33. Interview 20180817c, Zhang, technician at Pittards, Addis Ababa, Ethiopia.
34. Interview, 20180723, Wondu Legesse, LIDI Director General, Addis Ababa, Ethiopia.
35. Interview, 20180726b, Li Zhiwen, General Manager of LYU glove factory, Addis Ababa, Ethiopia.
36. Interview 20150204b, Mulualem Commercial manager of EIFCOS, Addis Ababa, Ethiopia.
37. Interview, 20180731, Mr. Bamlaku, General Manager of Anbessa Shoes, Addis Ababa, Ethiopia.
38. Interview, 20180731, Mr. Bamlaku, General Manager of Anbessa Shoes, Addis Ababa, Ethiopia.
39. Interview, 20150204, Girma Ayalew, Deputy Manager Fontanina, Addis Ababa, Ethiopia.
40. Mekonnen Bekele and Gezahegn Ayele, "The Leather Sector: Growth Strategies through Integrated Value Chain," Ethiopian Development Research Institute (EDRI) Research Report X, June, 2008; "Light Manufacturing in Africa: Focused Policies to Enhance Private Investment and Create Millions of Productive Jobs, With a Case Study of Ethiopia," World Bank, 2011.
41. Deborah Brautigam, "'Flying Geese' or 'Hidden Dragon'?: Chinese Business and African Industrial Development," *African Affairs*, 2003.
42. Tegegne Gebre-Egziabher, "The Developmental Impact of Asian Drivers on Ethiopia with Emphasis on Small-scale Footwear Producers," *The World Economy* 32, (November, 2009): 1613–1637; Tetsushi Sonobe, John E. Akoten, and Keiji Otsuka, "An Exploration into the Successful Development of the Leather-Shoe Industry in Ethiopia," *Review of Development Economics* 13, no. 4, (2009).
43. Edward M. Graham, "Foreign Direct Investment in the World Economy," IMF World Economic and Financial Survey, (1995): 120–135; Ann Harrison, "The role of multinationals in economic development: The benefits of FDI," *The Columbia Journal of World Business* 29, no.4 (1994): 6-11; Sylvia Ostry and Michael Gestrin, "Foreign direct investment, technology transfer and the innovation-network model," *Journal of Transnational Corporations* 2, no. 3, (1993): 7–30.
44. Magnus Blomstrom and Ari Kokko, "How foreign direct investment affects host countries," World Bank working paper WPS-1745, March 31, 1997; "World Investment Report: Transnational Corporations and the Infrastructure Challenge," United Nations Conference on Trade and Development, 2008: p. 14.
45. Brian J. Aitken and Ann E. Harrison, "Do domestic firms benefit from foreign investment? Evidence from Venezuela," *American Economic Review* 89, no. 3, (June, 1999): 605-618.
46. Kazuyuki Motohashi and Yuan Yuan, "Productivity impact of technology spillover from multinationals to local firms: comparing China's automobile and electronics industries," *Research Policy* 39, no. 6 (2010): 790-798; Beata Smarzynska Javorcik, "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages," *The American Economic Review* 94, no. 3 (Jun, 2004): 605-627.
47. Tang Xiaoyang, "8 Geese flying to Ghana? A case study of the impact of Chinese Investments on Africa's Manufacturing Sector," *Journal of Contemporary China* 27, no. 114 (2018): 924-941.

AUTHOR BIO

TANG XIAOYANG:

Tang Xiaoyang is an Associate Professor at the Department of International Relations at the Tsinghua University in Beijing, China. His research interests include political philosophy, China's engagement in Africa, and the modernization process of developing countries. He is the author of *China-Africa Economic Diplomacy* (2014) and has published extensively on Asia-Africa relations.

ALSO FROM SAIS-CARI

POLICY BRIEFS:

Wealth from Waste? Chinese Investments and Technology Transfer in the Tanzanian Plastic Recycling Industry

Policy Brief 35/2019, Ying Xia

The Blind Spot: International Mining in Angoche and Larde, Mozambique

Policy Brief 36/2019, Sergio Chichava, Shubo Li, and Michael G. Sambo

Disasters while Digging: Rates of Violence Against Mine Workers in Democratic Republic of Congo, South Africa, and Zambia

Policy Brief 37/2019, Christian Freymeyer

WORKING PAPERS:

Comparing the Determinants of Western and Chinese Commercial Ties with Africa

Working Paper 29/2019, David G. Landry

Chinese Agricultural and Manufacturing Investment in Kenya: A Scoping Study

Working Paper 30/2019, Ying Xia

Chinese Manufacturing and Agricultural Investment in Tanzania: A Scoping Study

Working Paper 31/2019, Ying Xia

View the complete list of SAIS-CARI publications: www.sais-cari.org/publications



ABOUT THE SAIS CHINA-AFRICA RESEARCH INITIATIVE

Launched in 2014, the SAIS China-Africa Research Initiative (SAIS-CARI) is based at the Johns Hopkins University School of Advanced International Studies in Washington D.C. SAIS-CARI was set up to promote evidence-based understanding of the relations between China and African countries through high quality data collection, field research, conferences, and collaboration. Our mission is to promote research, conduct evidence-based analysis, foster collaboration, and train future leaders to better understand the economic and political dimensions of China- Africa relations and their implications for human security and global development. Please visit the [SAIS-CARI website](http://www.sais-cari.org) for more information on our work.

SAIS China-Africa Research Initiative
1717 Massachusetts Avenue NW, Suite 733
Washington, DC 20036
www.sais-cari.org
Email: sais-cari@jhu.edu



This research was funded by research grant ES/M004074/1 from the UK's Department for International Development and the Economic and Social Research Council (DFID/ESRC), which supports research to provide evidence-based analysis of technology transfer, linkages, learning, and spillovers associated with Chinese investment in African manufacturing, agribusiness, and construction industries.



JOHNS HOPKINS
SCHOOL of ADVANCED
INTERNATIONAL STUDIES

© 2019 SAIS-CARI. All rights reserved. Opinions expressed are the responsibility of the individual authors and not of the China-Africa Research Initiative at the School of Advanced International Studies, Johns Hopkins University.