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Does Ethiopia have a comparative advantage in the leather industry?

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Introduction

Ethiopia is the 8th largest livestock in the world, and the second largest in Africa. Thus Ethiopia has naturally developed its leather industry in the past decades, mostly through large exports of raw skins. In 2008, the government implemented a 150 percent export tax on semi-processed wet blue in order to encourage the development of its leather industry, and capture a larger part of the added value of the sector. This was the first step of an integrated leather industry largely based on the livestock annuity. The transformation industry grew, providing jobs and rising the margin of the country on the leather.

Our research questions the commonly admitted fact that Ethiopia has a natural comparative advantage in the leather sector. Throughout a two-week journey in Ethiopia, we had the opportunity to analyze the Ethiopian leather industry, from the livestock farming to the tanneries and the transformation into finished leather products. We had the opportunity to visit a cow market, a slaughter house, a trader warehouse, local and foreign tanneries, and final products factories that we will refer to throughout the report. We could thus question the supervisors of those steps and collect quantitative data. We also met the French Agency of Development to discuss the perspectives of investments for Ethiopia. This research project has been made with the help of our guide, Tesfaye Legesse, member of the Ethiopian Development Research Institute.

This field study was completed with an extensive documentary work that mostly helped us study the Ethiopian case with references to the global leather market. This research included collecting international data and building models permitting us to evaluate the competitiveness of Ethiopia in the highly global business of leather.

This report will separately focus on the three components of the integrated leather industry: the livestock farming, the tanneries, and the transformation industry.

The first comparative advantage commonly considered for Ethiopia is the size of its livestock, being the second largest population in Africa. However, in the Ethiopian agriculture, skins and hides are only considered as a by-products from meat consumption. This research paper will point out the complications it induces on the quality of the leather and the barriers it imposes to a thriving leather industry. We had the opportunity to visit a cow market and question small and medium traders to enlighten those issues. We also visited a slaughter house is Addis Ababa showing the separation process between the meat and the skin that then goes to tanneries.

The second and crucial segment in the industry is the tanneries. They are key actors as they process the transformation of the raw material into finished leather that will then be transform into commercial goods. The business model of tanneries was highly transformed after the 150 percent export tax on semi-transformed leather. Previous to 2008, tanneries exported large quantity of wet blue and semi-processed skins. Since then, tanneries have strengthened their

links with the transformation sector, offering a better supply to local factories. In their business model, tanneries have to deal with expensive variable costs, among which chemicals that have to be imported in quantity and are expensive. A quantitative analysis of the micro economics of tanneries is presented in the report. Figures were given by the Ethiopian Development Research Institute that was a partner in our research project. Tanneries also have to make sure of the quality of the skin they are treating, so as not to waste variable costs in useless skins. Tanneries are thus starting to implement price incentives to traders so as to assure a good quality percentage, grading skins from 1 to 6. During our field experience, we visited three tanneries, one being foreign owned (Pittards tannery), the other one being Ethiopian. We could thus understand the treatment process, and understand the machineries and issues at stake for tanners. Tanneries being the platform between the agricultural side and the final products, they are a key in the success of Ethiopia in the leather industry.

In the industrial process of the leather industry, the transformation industry captures most of the added value. This industry mostly consists in transforming processed leather into shoes, gloves or garments. The 150% tax on exports was thus made to capture that added value and keep it in Ethiopia. The tax thus helped factories to have a better supply in both quantity and quality. We were able to visit two factories during our field project: the Pittards factory, that is a privileged partner of the Pittards tannery, and a shoe factory in Addis Ababa. The transformation market is divided in two classes: small factories that produce for the local market, and bigger factories that aim to export the final product and have to make economies of scale so as to compete on the international market. Local oriented factories mostly work on second class leathers (categories 4-5-6 in terms of quality), while exported oriented factories only accept first quality of leather (categories 1-2-3) so as to meet with the European standards. The transformation industry in Ethiopia faces two main constraints: a lack of training despite a cheap work force, and the location that is far from the market. However, this segment is attractive for FDI[1]s and Chinese companies have implanted large production factories.

In the meantime, the Ethiopian production is highly linked to the international leather market. The main exporters of high end leather are Argentina, France, Australia and the USA. Those countries have undeniably a higher quality of finished leather and are closer to the consumption market, thus more anchored in the fashion segment. This report will give some track to understand the challenges Ethiopia will have to face to fully take advantage of the supposed livestock annuity.

[1] Foreign Direct Investment

Executive Summary

The Agricultural sector

- The Ethiopian government's interest in the leather industry is mainly due to the high potential the Ethiopian livestock's size grants to the supply in hides and skins. This motivated the country's ambition to increase the value addition locally, by imposing a 150% tax on the export of unfinished leather.

- However, the supply in hides and skins, a by-product of meat, is much lower than its full potential, mainly due to a weak meat industry (low off-take rates, low meat consumption and low meat exports).

- The quality of this supply is limited by structural problems related to the skins' complex marketing channels and to the non-transmission of price signals from the tannery level to the farmers.

- Overcoming these difficulties requires substantial changes in the current traditional husbandry practices, their sanitary conditions and the handling practices of the skins entering tanneries, in the face of social inertia to change, Ethiopia's land ownership rules, animals' health system and lack of expertise and infrastructures.

The tanning industry

- After the 2008 policy changes on export taxation, tanneries were forced to vertically integrate the entire tanning process, thus causing discrepancies in the processing capacity between raw, wet-blue and finished leather. In addition, the sector suffers from disinvestment because the tanneries are rarely their owner's core business. As a result the sector is slowed down and is less competitive than it could be.

- Ethiopia's business climate features including resources, infrastructure, institutional constrains, import dependence and international market position, directly affect the economic model of the tanneries. In the light of the latter's sensitivity analysis, most of these features come out as comparative disadvantages on the global market.

-Information on raw hides and skins quality is asymmetric, asynchronous and blurry. Moreover, the non-transmission of a clear price signal from upstream to downstream hinders the quality auto-selection effect of market mechanisms. Institutions or contractual framework could solve the two former issues and facilitate business relations between tanneries and traders.

Leather transformation industry

- The Ethiopian leather industry suffers from a low penetration on the international market, because of a lack of competitiveness in terms of selling price. This can be explained by a high dependence on the upstream industries.

- The whole leather transformation process appears to be a byproduct industry. It is specialized in mid-range products because of the lack of design skills and quality problems. The shoe industry faces different problems. The production is not self-sufficient and the import costs of several shoe components compensate the comparative advantage due low salaries and government incentives. As for the other products, they suffer from distance to the markets.

- Ethiopia has comparative advantages but also faces many obstacles such as the quality issue, low managerial skills, a lack of training, important transportation costs and times, poor infrastructure and a lack of productivity

This report aimed to question the assumption that the large Ethiopian livestock gave Ethiopia a natural comparative advantage in the leather sector. However, our study of the vertical disintegration of the leather industry in Ethiopia shed light on various factors that prevent Ethiopia from being a competitive actor in the international leather business. Most importantly, the lack of institutional entity able and willing to modernize the agricultural organization has a noxious impact on the Ethiopian leather quality. The location of Ethiopia also highly prevents the country from being a competitor on the international market due to high transport time and costs. Last, the relatively weak institutional situation of the country adds high transaction costs, thus enabling Ethiopia to be a competitor in terms of prices. Ethiopia's future leather industry therefore highly depends on deeper transformations in the country, including a modernized agriculture.

I. Overview of the international leather market

Leather is one of the most widely traded commodities in the world. Leather products play a prominent role in the world's economy, with an estimated global trade value of approximately US$100 billion per year. The view of the Ethiopian leather industry must be completed with reference to the global leather market, as all players are engaged in a truly global business.

Leather: a versatile by-product

Leather is considered as a renewable resource based on a by-product of the meat, wool and dairy industries. Leather is a highly versatile material used is various range of products including shoes, gloves, luxury bags, jackets, car and aircraft seats as shown in figure 1.1.

The leather industry market in terms of overall turnover for all types of leather is dominated by China, Italy, India, and Brazil. Despite being a large business in itself, the leather industry functions entirely as a dependent of the global agriculture industry from which hides and skins are obtained as a by-product, over 95% from the world's meat and dairy industry.

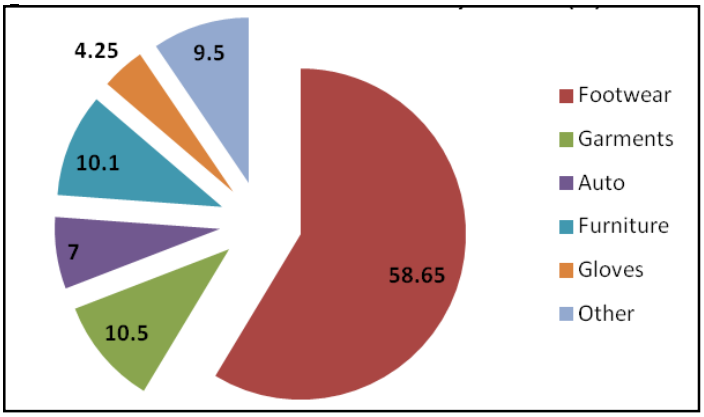


Figure 1.1: Global share of leather by end use (%) – 2012[2]

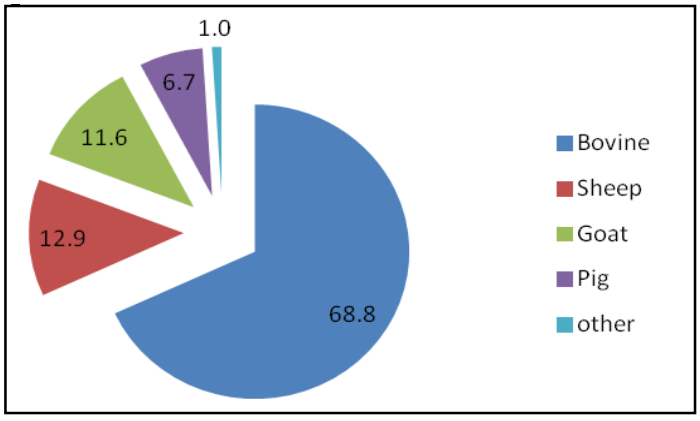


Figure 1.2: Global share of the leather by animal type (%) - 2012[3]

[2] 2013. *World Statistical Compendium for raw hides and skins, leather and leather footwear 1993-2012.* Trade and Markets Division Food and Agriculture Organization of the United Nations.

[3] 2012. *The UK Leather Industry: an overview and future strategy.* The University of Northampton.

The supply-demand balance

Long term projections of human and farm animals' population suggest that international demand for leather will grow faster than the availability of hides and skins to the year 2020. This reinforces the premium nature of leather for the next decade and beyond and forces rapid growth of raw material supply. This rapid growth has brought some quality deterioration of the quality of the raw material available to tanners. Indeed most of this leather surplus came from developing countries, whose skins quality are altered by husbandry issues.

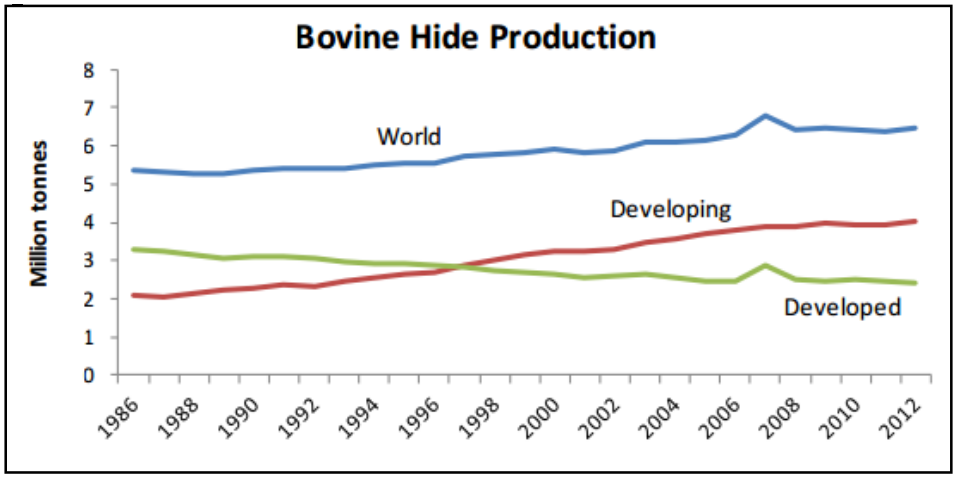


Figure 1.3: Bovine hide production[4]

The leather supply also highly depends on meat consumption and the type of meat being consumed. Indeed bovine hides consistently represent about two thirds of the raw material used by the world leather industry, which makes them by far the most important raw material. The cattle commercial off-take rate is an indicator that gives the portion of a countries cattle to be slaughtered for commercial purposes. A high off-take refers to a meat and dairy oriented production while low off-take rate will signifies a high death rate or a workforce purpose. Strikingly, the overall cattle off-take rate in Ethiopia is estimated at approximately 12%, compared to 40% in the USA, and 35% in Australia.

Being considered as a premium product, leather is highly dependent of the economic environment, and purchasing power. The largest markets for high quality leather goods remain Europe and the United States. Local markets in developing countries are supplied with second or third quality leather. In 2008, the financial crisis provoked a serious weakening in prices (figure 1.5). Both volumes and prices recovered in 2010 and 2011, in a higher general earnings context.

[4] 2012. *The UK Leather Industry: an overview and future strategy.* The University of Northampton.

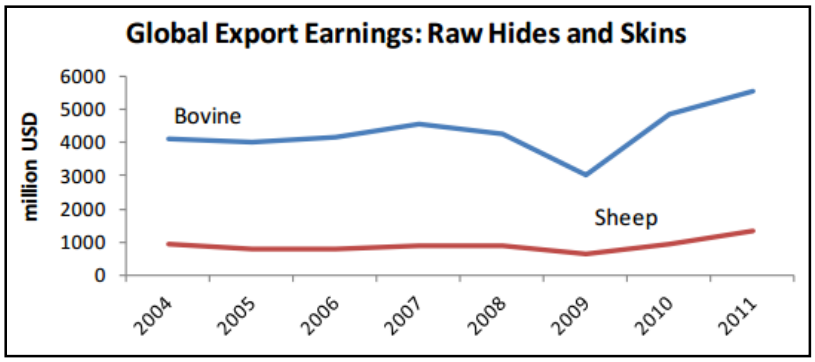


Figure 1.4: Global Export Earnings: raw Hides and Skins[5]

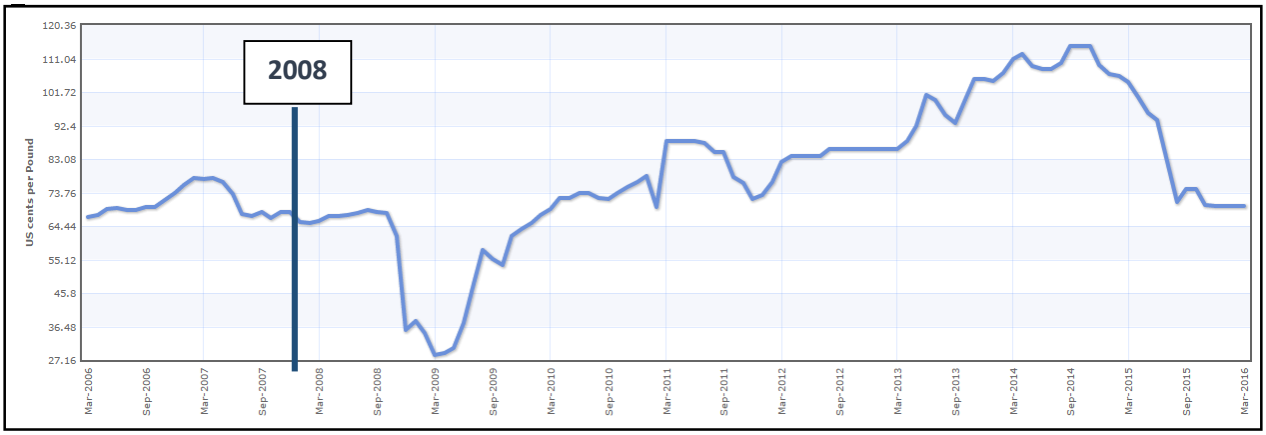


Figure 1.5: Hides monthly price – US cents per pounds – Chicago

[5] *2012. The UK Leather Industry: an overview and future strategy. The University of Northampton.*

II. The Agricultural sector

Compared to other countries in the world, Ethiopia's main comparative advantage lies in the size of its livestock which, at first glance, seems to grant the leather industry with a big potential in the size of the supply. However, the Ethiopian agriculture only perceives hides and skins as a by-products from meat consumption. This perception is favorable to the appearance of many structural problems preventing the leather industry from thriving throughout its value chain and inducing major complications and barriers on the quality of the leather.

1. Ethiopia's resource in cattle, sheep and goats

Ethiopia has Africa's second largest livestock and the world's eighth largest livestock. The Ethiopian Central Statistics Agency recorded, for the year 2012, 52,129,000 cattle including 10.5 million dairy cattle; 24,221,000 sheep; and 22,613,000 goats[6]. The country ranks sixth in the world for cattle population, seventh for goats and tenth for sheep which collectively put Ethiopia among the top ten producers of these animals altogether globally. In Africa Nigeria and Ethiopia possess the two largest livestock of the continent by far.

Rank	Country	Cattle	Sheep	Goat	Total	Global Share %
1	India	320,800	66,440	127,394	514,634	14.42
2	China	104,947	132,746	157,448	395,141	11.07
3	Brazil	219,457	17,135	9,341	245,933	6.89
4	Pakistan	66,000	28,168	59,843	154,011	4.31
5	Sudan	41,850	52,194	43,806	137,850	3.86
6	Australia	27,500	77,888	3,426	108,814	3.05
7	Nigeria	16,600	35,344	56,190	108,134	3.03
8	**Ethiopia**	**52,000**	**27,096**	**22,904**	**102,000**	**2.86**
9	USA	92,582	5,541	2,959	101,082	2.83
10	Bangladesh	24,000	1,870	65,487	91,357	2.56
	World	1,591,500	1,096,500	881,600	3,569,600	100.00

Table 2.1: Ranking Livestock population in the world[7].

These large numbers of Ethiopian animals grant the country and its leather industry with a big potential in hides and skins which can position Ethiopia among the world's leading countries in leather production and export.

[6] Sintayehu GebreMariam, Samuel Amare, Derek Baker, Ayele Solomon and Ryan Davies Sintayehu GebreMariam, Samuel Amare, Derek Baker, Ayele Solomon and Ryan Davies. 2013. *Study of the Ethiopian live cattle and beef value chain. ILRI discussion paper. International Livestock Research Institute.*

[7] *2013. Agricultural Growth Project - Livestock Market Development. Value Chain analysis for Ethiopia. USAID.*

2. Structural upstream problems facing the leather industry

However, this resource is not valued as a raw material for the leather industry and is perceived more as by-product of meat or simply as waste, mainly due to structural problems occurring throughout the value chain of leather products related to the market structure, to the supply in hides and skins and their marketing.

Nearly 80% of raw hides and skins transacted in the formal market are derived from rural areas, and only 20% are collected from abattoirs and slaughter houses in large cities and towns. In rural areas, even the meat itself is not the main purpose of animals husbandry because the farmer needs his animal(s) as productive assets, e.g. as draught power and milk provision, more than the income he could earn if he sold them into the market. Thus, large numbers of animals are held for five to seven years or more to meet these purposes and animals this old do not produce the best meat and their hides are usually so worn that they have limited value to the leather industry. These collected skins would then need to travel along complex and imbricated marketing channels as follows.

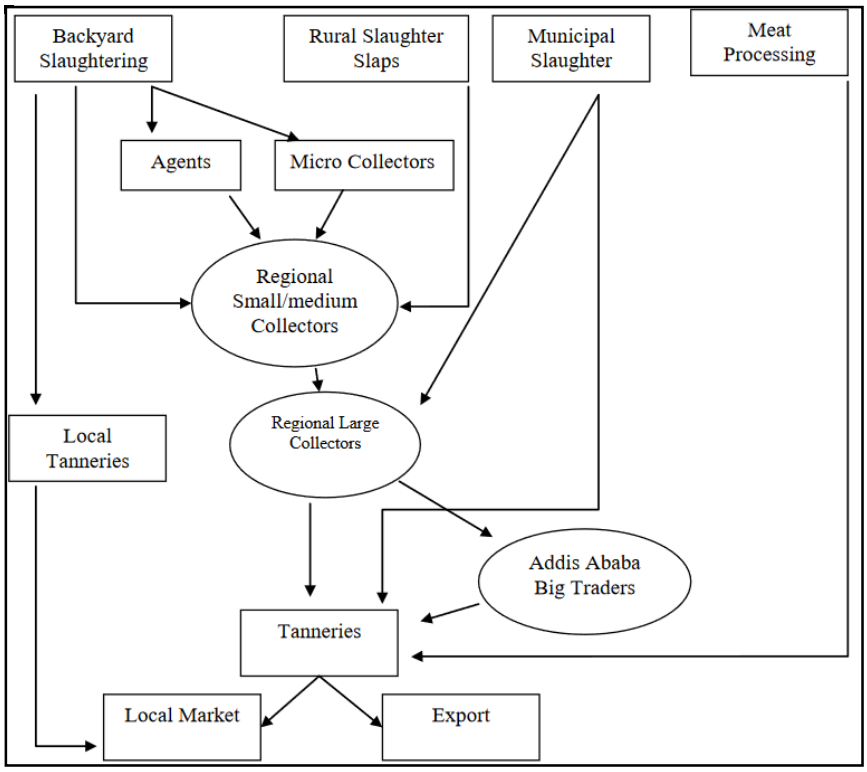


Figure 2.1. Outline of marketing channels for hides and skins trade[8].

Price signals on end products meant to be exported to international markets are clear enough to force the difference in price between high quality and low quality leather entering factories.

[8] Girum Abebe and Florian Schaefer. 2013. *High Hopes and Limited Successes: Experimenting with Industrial Polices in the Leather Industry in Ethiopia*. EDRI Working Paper 011. Ethiopian Development Research Institute.

These price signals are transmitted to the tannery level, on the finished leather they sell to factories. Although, as the quality of the hides and skins can only be appreciated after shaving the hides and skins and treating them with chemicals, tanneries cannot impose clear price differentiations between levels of quality of the skins that they receive. All that tanneries can do for quality selection is to reject around 20% of the skins they receive from traders. In the 80% remaining skins, grades 1-2-3 account for 10% all together, grade 4 accounts for 30%, grade 5 accounts for 30% and grade 6 accounts for 10%; quality and prices being negotiated on eyeball to eyeball basis. Price signals seem to disappear completely at the traders' level because the quality checks traders do are focused on the size of the skins and only detect possible knife cuts, major bleedings or visible skin diseases on the internal side of hides and skins. This prevents collectors and farmers from having any financial incentives to improve their husbandry methods and provide a better quality of hides and skins nor to perceive hides skins as value products.

To grow the hides/skins value chain; i.e. to increase investment in it and receive greater income, employment and exports from it, one must first increase the number of animals slaughtered for meat. Although these numbers remain very limited due to Ethiopia's low off-take rates (7% for cattle, 33% for sheep and 37% for goat), which are bellow East African averages. One can identify three main reasons to these low off-take rates. First, given current husbandry practices, Ethiopian livestock owners incur major livestock losses (alongside the indirect opportunity losses of lost meat, meat by-products and skins/hides to sell) due to a surprisingly high death rate, which is double the African average. The following data illustrates this fact.

Livestock	Total Population	Annual Deaths	Death Rate
Cattle	52,129,017	5,049,944	9.69%
Sheep	24,221,384	4,593,976	18.97%
Goats	22,613,105	4,582,057	20.26%
Total	98,963,506	14,225,977	14.37%

Table 2.2. Death Rate among Ethiopian Animals is Double the African Average[9].

Second, meat consumption in Ethiopia is one of the lowest in Africa due to the low per capita incomes, high domestic meat prices and the fasting days by the Orthodox Christians, which means that 43% of the population does not consume meat products for over 200 days per year. This reduces aggregate demand by 20-35%. Third, Ethiopian exports in meat have access to very limited markets, in the Middle East only, because it does not meet the sanitary requirements set by international buyers. In addition to that, over the years, Ethiopia has been exporting lowland meat similar to the meat exported by neighboring countries, so gaining more market share in this market is very hard, especially that Ethiopian meat prices are significantly higher. Ethiopia could take advantage of the competitive advantage its highland meat has but a problem of meat darkening (color change) is usually associated with sheep and goats from highland areas, presumably due to the small fat cover of the carcasses of yearling sheep and poor handling and

[9] *2013. Agricultural Growth Project - Livestock Market Development. Value Chain analysis for Ethiopia. USAID.*

inadequate cold chain in the highlands as well as improper conditioning of the animals just prior to slaughter.

3. Viable solutions to enhance the quality of raw hides and skins

So far, the hides and skins value chain appears to be very similar to that of the waste recycling industry. Following this analogy, hides and skins would be the waste of the meat industry that needs a selection to identify those which can serve other purposes; the leather industry. Therefore a natural way of developing the leather industry could be to focus on:

Improving traditional animal husbandry practices

Animals are often left to graze in brush areas, leaving scratches and scars on the skin surface, and limiting its use for production of quality products. In addition to that, when animals make it to markets, their skin gets even more damaged by the branding technics to identify them from other animals, or to mark them as treated from certain diseases. These common practices (figure bellow) reduce the quality of hides and skins, which results in lower prices. Investors in the leather industry who require top quality leather set the ideal amount of space to allocate to one head to 1 hectare in order to avoid scratches with the range's borders and to reduce the interaction between animals that results in scares. Although, this solution faces a major institutional problem related to the ownership of the land.

Indeed, in Ethiopia, the ownership of urban and rural land goes exclusively to the state and restricts the different land rights of use, rent, lease, donation an inheritance for different reasons. Government would then distribute the land to the citizens, depending on the use they intend to make of it. The land ownership being very fragmented, it is almost impossible for investors to consider owning large animal ranches and thus enhancing the quality of hides and skins. Additionally, these ownership rules prevent animal owners from having raising large numbers of animals to be reared towards commercial purposes, either for the meat industry or for the hides and skins industry, which could be of a great added value to the leather industry.

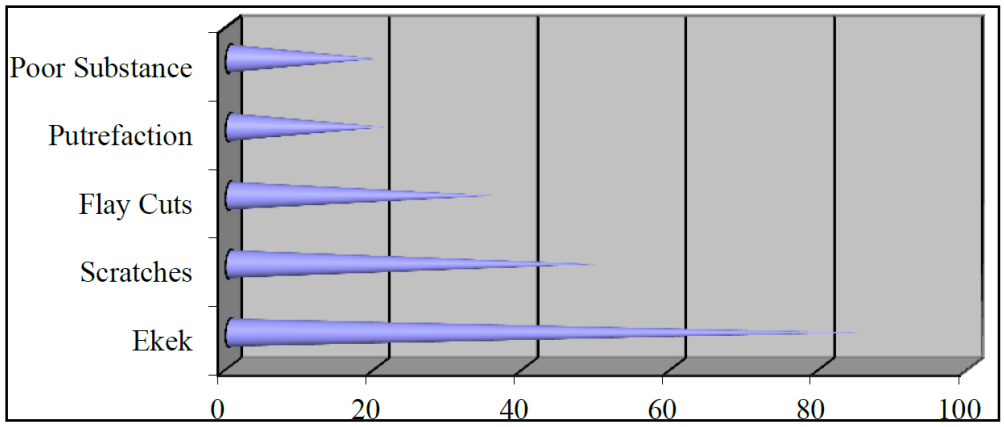


Figure 2.2: Defects on Pickled Sheep Skin[10].

Improving sanitary conditions

It is a key step to reduce Ethiopia's high death rates and the hides and skins' quality degradation due to failing to treat diseases. Diseases like Sheep Ekek, which greatly affect the industry, require persistent treatment. The adult animals should be treated thoroughly every three months so that their off springs would not be infected by the parasites. The treatment of the off-springs should also continue till they are slaughtered. However, such treatment is limited by the many factors that constrain animal health services in rural areas and so is the case for many other diseases. In general, vaccination rates and treatment of diseases remains very low, just 27% of cattle are vaccinated and less than 10% of sick animals receive treatment. Additionally, veterinary personnel totaled 6,776 nationally in 2010, which indicates about one veterinarian for every 30,000 Tropical Livestock Units, one assistant veterinarian for every 15,000 and one animal health technician for about 22,000[11].

Educating hides and skins handlers to avoiding quality deterioration

Peri-slaughter (ripping and flaying damage) and post-slaughter (abrasion, damage by pests and molds, and inappropriate curing methods) damages result in large quality deteriorations of the skins before entering tanneries. Skins flaying is done very quickly in abattoirs and uses very rudimental tools, which brings the peri-slaughter damage to account for 20% of the defects in hides and skins. Also, only very few producers are aware of wet salting method of curing hides and skins, which reduces the skin's moisture content and prevents bacterial putrefaction, all of which accounts for 40% of hides and skins' defects. Additionally, salting allows producers to stockpile hides and skins until price increases.

[10] *2013. Agricultural Growth Project - Livestock Market Development. Value Chain analysis for Ethiopia. USAID.*
[11] Sintayehu GebreMariam, Samuel Amare, Derek Baker, Ayele Solomon and Ryan Davies Sintayehu GebreMariam, Samuel Amare, Derek Baker, Ayele Solomon and Ryan Davies. 2013. *Study of the Ethiopian live cattle and beef value chain. ILRI discussion paper. International Livestock Research Institute.*

III. The Tanning Industry

Tanneries are industrial plants that, like the majority of them use large-scale infrastructure and machines in order to transform raw materials into processed goods by large quantities (raw hides and skins into wet-blue or finished leather). As a consequence, they require a significant initial investment and therefore the cost structure is characterized by outstanding fixed costs, which then require large production volumes to be amortized. Indeed, the average price for selling a piece of finished leather is 90 Birr, while the whole process involves machineries and working capital of a total value of 84 million Birr on average. The economy of the tanning industry therefore follows an economy of scale scheme, at least while the initial investment is not yet amortized.

1. Global economic specificities of Ethiopian tanneries

The Ethiopian tanning industry is made of both tanneries that have amortized their initial investment a long time ago and tanneries that are still in their early years (Appendix A Figure 4). The first category benefits from large production capacity allowing them to run the plant with flexibility and quickly answer to surges in finished leather demand for instance, or buy large quantities of raw hides and skins when their price is at its lowest and process them quickly. While the second have to produce continuously at high rate in order to repay their initial debt and could be unable to answer to rising demand in finished leather. This sheds light on the fact that managing stocks efficiently could become crucial for the less flexible tanneries if the raw hides and skins' prices are too volatile.

One of the most shocking observations is that the majority of the tanneries suffer from lack of investment once they amortize their initial investment. The two main reasons are the under-capacity utilization rate of the sector, and the fact tanneries are not their owner's main business. As a consequence, the leather industry is not a very dynamic industrial activity, even though there is hope for improvement in the tannery organization.

Indeed, the production process can be mainly divided into two parts, tanning and finishing, which both require specific machineries and infrastructure. Production capacity for the tanneries is therefore also divided between tanning capacity and finishing capacity. Data shows that Ethiopian tanneries of the first category run on average at approximately 60% of their finishing capacity but only at 40% of their tanning capacity. Beyond the raw hides and skins supply problem that certainly explains such a low utilization rate, and that was treated in the first part of this paper, our journey to Ethiopia lead us to think that improvements could also be made at the other end of the tanning process: the tanneries' selling opportunities.

Firstly, the tannery value chain could be split up between different plants instead of trying to integrate the whole tanning process. Some tanneries could specialize in wet-blue and crust, while others specialize in finished leather. The first would then sell on the local market the tanned raw hides and skins to the second which would process them into finished leather. We met the owner of a small tannery that embodies such a scheme actually happening: he stopped producing wet-blue or crust, and bought it instead to larger tanneries, while focusing on producing high quality finished leather. In 2008, a new tannery (Habesha Tannery) was built in Amhara region which specialized only in finished leather production and ought to buy its inputs as wet-blue from all the existing tanneries in the region. Driving the tannery industry sector using this scheme could work out as a good solution in optimizing the already existing tanneries. Secondly, we ought to question the efficiency of the 150% tax on wet-blue exports. The tax certainly forces the tanners to focus on finished leather, but refrains them from using the 80% remaining tanning capacity, which could increase their revenues.

2. Ethiopian comparative advantages and their impact on the tanneries' economic viability

Our observations in Ethiopia shed light on some specificities of the Ethiopian Leather Industry that could bring about comparative advantages or disadvantages. We tried to assess their influence on the tanning business' health by using a cost structure model and its sensitivity to some specific parameters, in order to illustrate our arguments. The description of the cost structure model can be found in the annex of this paper, we will only present the results of the simulations.

Seasonality in raw hides and skins supply

One major specificity of the Ethiopian tanneries is that their raw hides and skins supply can be very irregular, due to punctual holidays periods during which raw hides and skins are available in large quantities hence lowering their price, and long periods of shortage where prices skyrocket.

This has two main consequences: the necessity for the tanneries to buy and possess large stocks of raw hides and skins (during holidays periods), and the emergence of competition between tanneries for the best quality of raw hides and skins at the lowest price (during shortage periods). The first one can be illustrated by the impact of holding costs on the tanneries' profitability (Appendix B Figure 4) as well as by a significant share of the working capital in the fixed costs (Appendix A Figure 1). Evidence for the second can be found when assessing the impact of the raw hides and skins' price variation on the tanneries' profitability (Appendix B Figure 3). Moreover, this competition effect is emphasized by the fact barriers to entry on the tanning market are low, meaning a large number of tanneries have to split small market shares between themselves, leading to volatile raw hide and skin prices. By contrast China, Europe and the Far East continuously import raw hides and skins from the U.S, hence making tanneries benefit from rather stable input of raw hides and skins, thus reducing their holding costs.

Dependency on costly imported chemicals

Due to a poor chemical industry sector, Ethiopian tanneries have to import their chemicals from foreign countries, which are very often non-African, leading to two main issues. The first is that tanneries are highly sensitive to the chemicals' price variations on the international market. Secondly, the logistics of acquiring chemical inputs is more complex and requires more working capital. Indeed, the cost of importing chemicals has drastically increased over the last years, particularly after the oil price hike of 2008, which led to considerable operating costs increases all over Ethiopia. These huge operating costs have made the business model very sensitive to the variation of the chemical prices, and have weakened the economy of the Ethiopian tanneries (Appendix B Figure 2). In comparison, Brazil produces its own chemicals thus reducing its tanneries' operating costs and sensitivity to chemical costs.

A labor intensive industry

The tanning industry is a labor intensive one: even though progress has been made towards automation, the machines used require a rather high level of labor per machinery (on average 3 workers per machine). In a labor intensive industry, the labor productivity plays a central role. Ethiopian leather industry follows the Chinese model by taking advantage from cheap labor, used in large tanning plants which in a work chain model combine both unskilled and semiskilled labor, thus increasing productivity. The tanneries' economic model is moderately sensitive to labor cost (Appendix B Figure 5), but illustrates the fact that cheap Ethiopian labor cost is a true comparative advantage for Ethiopia compared with other competing countries in the tanning industry (Appendix B Figure 6).

The quality issue and its link to the export share in output

Raw hides and skins' quality is one of the main issue in the leather industry, as it was constantly put forward by the several managers we interviewed during our journey. High quality skins can be exported or used for exportable finished goods, while low quality skins serve the local market only. It therefore made sense to look at the share of export/import in the output of the tanneries, and assess their cost structure sensitivity to it. The results are that the more tanneries export the better they perform (Appendix B Figure 1).

A competitive international market

When selling the finished leather, whether directly abroad or to Ethiopian manufacturing plants which then export the finished leather goods, tanneries have to cope with stiff international competition. As a consequence tanneries, which either sell abroad or to manufacturers, are only price takers. Indeed, the other market participants (i.e. the other leather or leather goods exporting countries) being in large number and owning large market share determine the selling

price for both finished leather or finished leather goods. Since, the tanneries profitability is largely based on the share of export (or finished leather manufactured into exportable goods) in their output, the tanneries' economic model is highly sensitive to the selling price of finished leather.

Other logistics and trade facilitation issues

Another factor that might explain the Ethiopian tanneries difficulties to deal with international competition is the Ethiopian poor infrastructure which makes the logistics complicated, time-consuming and costly for them when exporting their output. World Bank studies point out that the logistics and trade facilitation constrains have become more significant in the last few years. For instance, customs and trade facilitation is the major problem encountered by Chinese FDI in Ethiopia. External trade is much more costly in Ethiopia than in many countries and it takes much longer to import and export, thus diminishing the leather industry's international competitiveness, especially compared to Asian manufacturers. Many efforts have been made by the government to improve logistics. These include establishment of dry ports, a multi-modal transport system in 2011, industrial zones and economic operators authorized by the customs authority. However, not all these efforts have been effective and logistic obstacles remain.

The working capital: a major impediment to growth

Other major obstacles are trade regulation, tax administration, access to finance, tax rates, macroeconomic instability, labor regulation, and electricity. All these elements are supplementary burdens to the tanneries' finances as they tend to increase an already significant working capital. Indeed, as shown in figure 1 of appendix A, the working capital represents 76% of the total fixed costs of tanneries on average. Any kind of new investment in the Ethiopian tanning sector therefore requires large working capital, compared to over more developed countries such as China or Brazil.

Conclusion

Despite the government's initiative to help the Leather Industry, Ethiopian tanneries still have strong difficulties producing finished leather which meets quality standards and that would allow either tanneries directly or Ethiopian leather manufacturers to enter on the highly competitive international market. The problem is even more serious as the tanneries' profitability depends heavily on the share of output directly or indirectly exported, share that they have trouble increasing at levels that would make them financially stable. Tanneries are so poorly competitive because their business model has to evolve in a hazardous environment characterized by seasonality in raw hides and skins supply, which in addition to logistic issues causes raw hides and skins shortages, hence raw hides and skins substantial price variations, and quality issues. Furthermore, the tanning process involves a heavy chemical process which ties up tanneries to imported chemicals that increase costs and can cripple their operations in case of logistic or market issues. Nonetheless, Ethiopian tanneries benefit from cheap labor for a process that is labor intensive, thus managing to remain economically viable. This conclusive analysis is

illustrated in the table below, where we have compared the variation of the annual profit as a function of the variation of a specific parameter, for the parameters previously assessed.

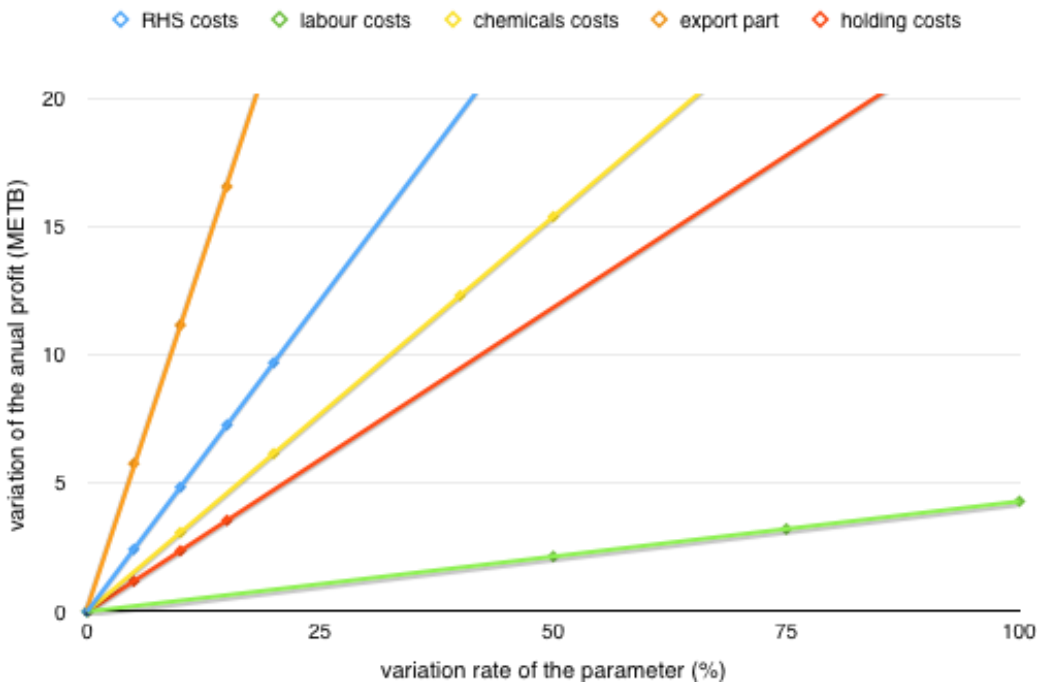


Figure 3.1: Sensitivity analysis

3. Issues related to quality information and the role of traders

Tanneries in Ethiopia, unlike in more developed countries, are transformation plants which have to process raw materials of highly hazardous quality, into products that must meet international quality standards in order to be exported. The ones who bear the greatest responsibility in delivering high quality raw hides and skins to the tanneries are the traders, thus playing a key role in the tanneries' economic viability. However traders' and tanneries' economic interests can often diverge since the former are independent economic actors who, driven by self-interest, try to maximize their profit. In order to do so, traders aim at selling the largest quantity of raw hides and skins they can, independently of their quality. They collect the skins available without paying any particular attention to their quality, and then sell them as bundles to the tanneries, thus managing to exhaust their stock.

From the tanneries point of view, the information on quality is blurry because ex-post. Indeed, scratches and knife cuts can be discovered only when the skins reach the wet-blue state, meaning the tanneries dedicated labor and chemicals even to low quality skins that might have not worthed it. The traders partially possess the quality information, but have little interest in disclosing it, so as to sell their entire stock made of both low and high quality skins. There is therefore a situation of information asymmetry between tanneries and traders, which following a market for lemons scheme can lead to something close to anti-selection on quality. In every

instance, this mechanism stops high quality skins from being automatically sorted out by market selection. Moreover, the seasonal supply of raw hides and skins causes shortage periods which bolster competition between tanneries, thus increasing the traders' negotiating power. As a consequence, low quality skins are easily sold while there are no incentives for increasing quality upstream.

To encourage such incentives, the price signal clearly existing downstream (when selling the finished leather after the tanning process), should be transferred upstream at the input level. This transfer is even more important as our sensitivity analysis highlighted the significance of the quality as a criterion for profit in the tanneries' economic model. In addition to the previous issues, such a transfer is hindered by the market's structure: there is no one central raw hides and skins market, but many niche markets, which complicates the creation of a clear correlation between price and quality. During our interviews some solutions were mentioned such as gathering these niche markets into a single one and implementing long term contracts between traders and tanneries. These strategies could allow the latter to improve their input quality.

IV. The leather transformation industry

Through its 150% taxation on semi-processed leather exports, the Ethiopian government has clearly decided to encourage the development of the local leather transformation industry. This industry mostly consists of transforming leather into shoes, gloves or garments. The repartition of the final products in Ethiopia is similar to elsewhere in the World.

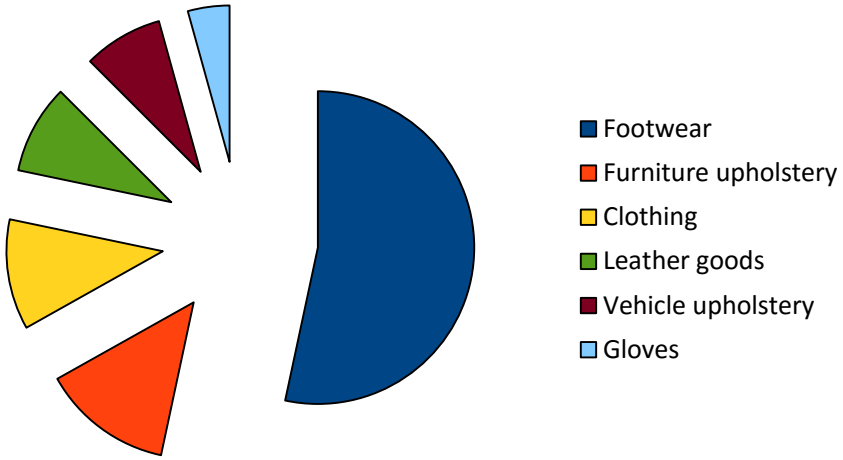


Figure 4.1: Repartition of Ethiopian finished leather goods in 2010[12]

Yet, in 2007, the Ethiopian industry represented a mere 0.1% of the leather shoe production, when China produced more than 63% of the total production. How can this be explained? First, by the cost structure of the Ethiopian leather transformation factories, but also by Ethiopia's position in the global leather product industry.

1. The cost structure of Ethiopia's leather transformation industries

To understand the difficulties these industries face, we need to figure out the specificities of this industry. As seen in the next table, the raw material and material purchase is the main cost such factories have to face: it represents more than 90% of the operating costs. Therefore, there is a strong dependence on the tanneries and on the quality and quantity of the skin they can produce. And, as the tanning industry has, as seen in the previous chapters of this report, variable costs, this variability influences the leather transformation industry.

[12] Future Trends in the World Leather and Leather Products Industry and Trade – United Nations Industrial Development Organization - Vienna, 2010

Items	%
Raw Material and Inputs	92,78
Utilities	0,03
Maintenance and repair	0,18
Labor direct	1,47
Labor overheads	0,29
Administration Costs	0,44
Cost of marketing and distribution	0,87
Total Operating Costs	**96,05**
Depreciation	1,52
Cost of Finance	2,43
Total Production Cost	**100**

Table 4.1: Estimated annual production cost of an Ethiopian leather shoe transformation[13]

This dependence is the chore of many issues. First, the transformation industries get very different skins: the quality and quantity is very variable. As seen in previous parts, as there is no incentive for the farmers or the traders to take good care of the animals, the skins come in different conditions. Sometimes, it is hard for the transformation factories to get sufficient skins. As there is, at the moment, no contract between traders and factories, the quantity of inputs can also be highly variable.

Therefore, the lack of contracts or incentives for good skins create an input problem. Nevertheless, the Ethiopian industries have other benefits that can prove attractive for potential investors. Firstly, the labor cost is low - and represents, as seen in the previous table, a very low percentage of the total production costs. But then again, the workforce is generally under qualified and needs a training that generally lasts 6 months.

Problems do not only concern inputs, they also exist to sell the products. Factories use their best products for exports and the low quality for the local market. But there is fierce competition on both markets. For high-end products, Ethiopia struggles to penetrate the market for various reasons. The first one is that the country and its factories are far from the market, which is mostly in Europe and America. Transportation times and costs do not allow Ethiopian factories to be competitive. Most products have to go through Djibouti to then be shipped to their final destination, and this process, according to local factory owners, takes at least 3 weeks. Other products are sent by plane, but the costs are much higher. The country's location and still

[13] Profile of the production of leather shoe

developing infrastructures seem to lessen its competitiveness. As for the local market, it is mostly composed of Chinese products. Indeed, all in all, because of the quality, quantity, variability of inputs, low training of the workforce and difficulties to export, the country seems to lose its comparative advantage.

To support such businesses and to attract FDIs, the Ethiopian government has put in place different advantages: a 4 or 5-year tax holiday for companies who invest in the country to export finished leather products or a duty-free import of machinery for these companies. But all these incentives do not seem to attract enough foreign investments to allow Ethiopia to penetrate the international market.

2. Ethiopia's position in the global leather product industry

Overview of the international market

Global leather shoes production has increased continuously between 2000 and 2008 from 4,4 to 4,7 billions of pairs. This growth was stopped with the financial crisis of 2009 during which the production decreased by 4% because of the demand's decrease.

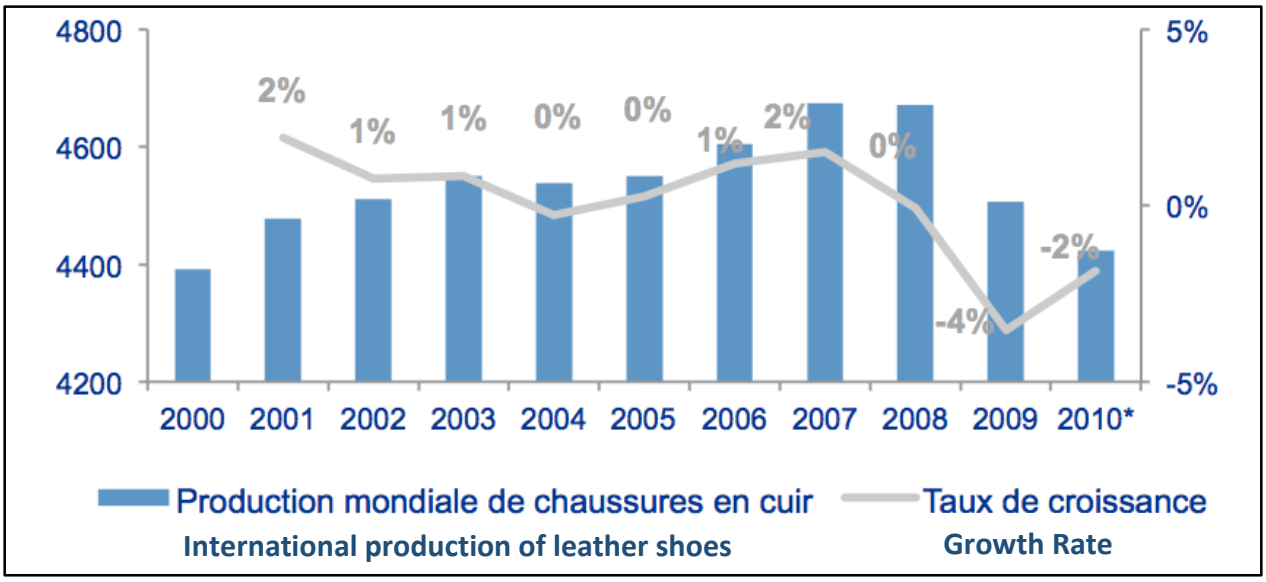


Figure 4.2: International production of leather shoes (millions of pairs)[14]

[14] Etude sectorielle : industrie de la chaussure en cuir – CNCE - Décembre 2013

The dynamic of the leather shoe sector is mainly due to the growth of developing countries, especially in Asia. They have generated more than 80% of the global production between 2000 and 2010, thanks to the high level of investments made in these countries to develop the industry. Nevertheless, when talking about developing countries, the figures show that the countries from the South and the East of Asia are the only ones that have a significant role.

The expansion of the leather shoe industry was particularly noticeable in South Asia, in South America and in the Middle East. On the contrary, the production in developed countries has decreased because of relocations and the massive use of production subcontracting.

The price of leather shoes on the international market has increased between 2001 and 2011, with an average growth rate of 7.6%. Chinese leather shoes, which are the most exchanged at the international level, have taken 10% of price each year. Europe, which is the second-ranking market of the sector, has seen its prices grow 18.4%. In the meantime, Ethiopian prices have always remained higher than the average price.

Competition is high in the leather shoe industry, especially because of an ever-growing production from countries with low production costs. Leather products are quite similar and often led by the international fashion trends. Industries respond to production costs which include variable energetic costs, technological innovation and production processes.

Footwear industry structure

The Ethiopian shoe industry is composed of two types of producers: smaller manufacturers that produce for the local market, and medium and large scale manufacturers that produce for the export market. In 2012, there were 13 main mechanized shoe companies in Ethiopia which dedicated an important amount of their production to exportations. The structure of the Ethiopian shoe production industry in 2012 can be seen in Appendix C.

Here we can see the evolution of the production, imports and exports of shoes pairs in Ethiopia between 2001 and 2011. The quantities given correspond to thousands of pairs of shoes. The evolution of the Ethiopian production seems quite independent from the international one, as Ethiopia seems to be quite excluded from the international competition.

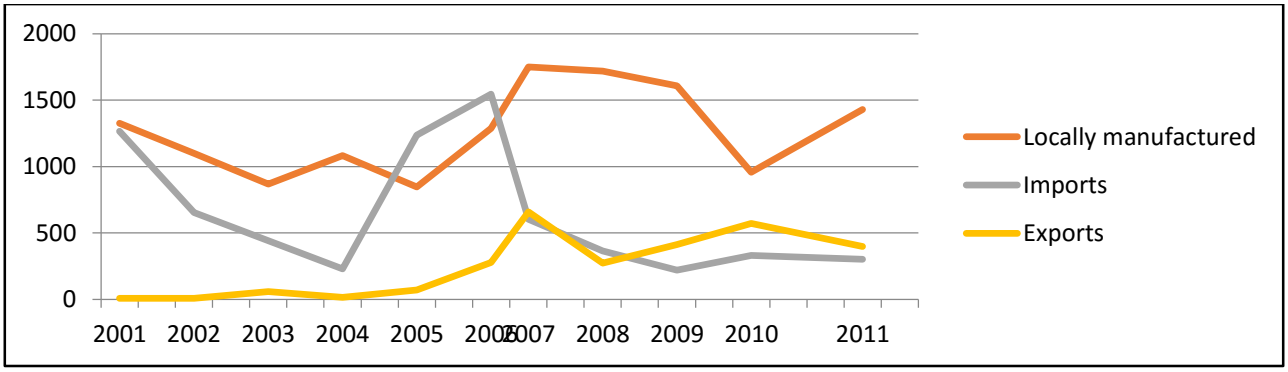


Figure 4.2: Number of pairs of leather shoes (x1000) produced per year and their market

According to the available data, Ethiopia had a total installed capacity of about 29,750 pairs per day in 2007, quite close to the one in 2012 estimated to be around 29,400 pairs of shoes per day, which could be translated into an annual installed capacity of 8.8 million pairs of shoes per year, considering 300 working days per year. Nevertheless, according to the data, the annual production of Ethiopia is close to 2.5 million pairs of shoes per year, which means a large part of the installed capacity does not lead to an effective production. This very low productivity can be explained by different factors. We have already identified the problem of the strong dependence of the leather transformation industry to the variation of skin prices, to the level of quality, and to the availability of the finished leather produced by tanneries. The Ethiopian industry also has to cope with the rather low managerial and technical skills of its workers.

Position in the international market

The Ethiopian shoe industry is still far behind other producers, both in terms of production and of exports, as shown by the following graphs.

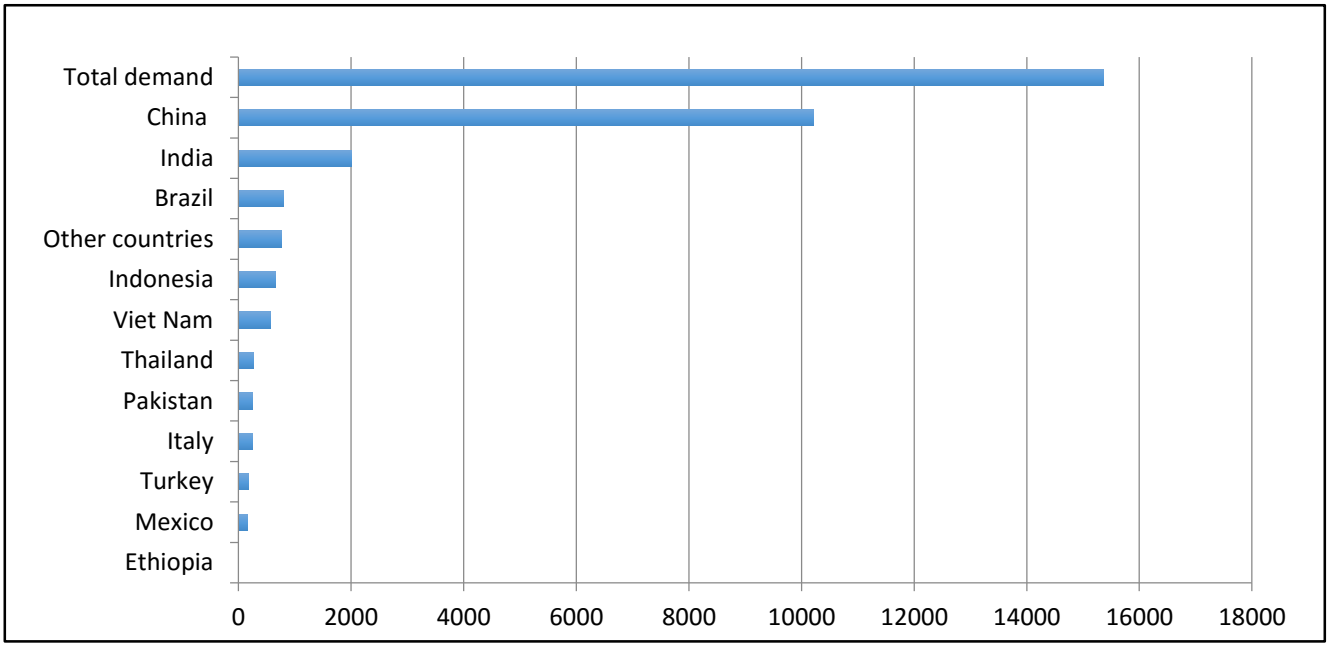


Figure 4.3: Global shoes production (millions of pairs) in 2007[15]

[15] Future Trends in the World Leather and Leather Products Industry and Trade – United Nations Industrial Development Organization - Vienna, 2010

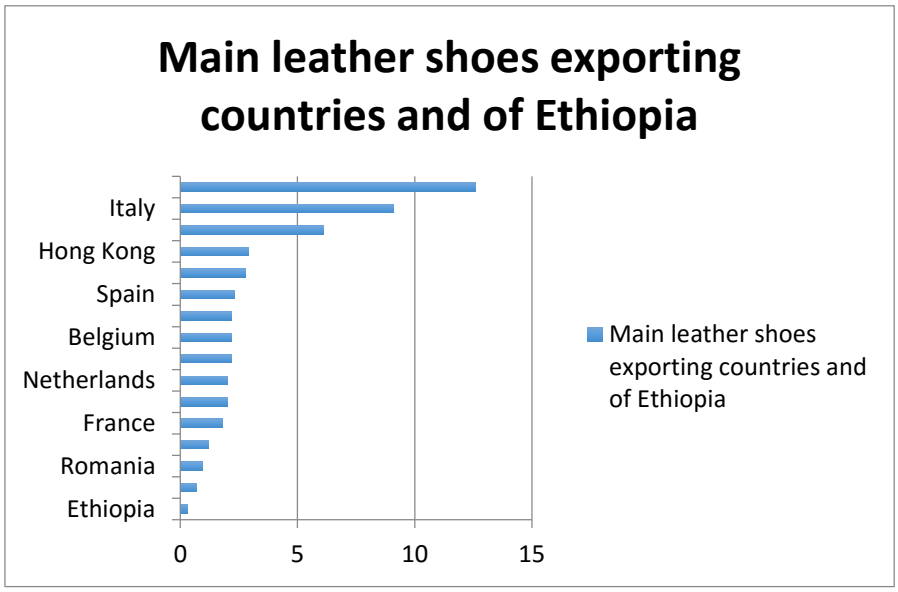


Figure 4.4: Global shoe exports (billions of dollars) in 2014[16]

In addition to their lack of production, the exporting factories are limited to a small variety of products, most of them are army or safety shoes for the industry. The design is still basic and the production still limited to mid-range products. Therefore, the development potential of the Ethiopian industry seems rather important, both in terms of quality and quantity.

The lack of competitiveness in terms of selling costs:

Ethiopia, because of the different problems mentioned, struggles to be competitive in the international market. The prices its industry can offer remain high compared with other producers, especially in Asia.

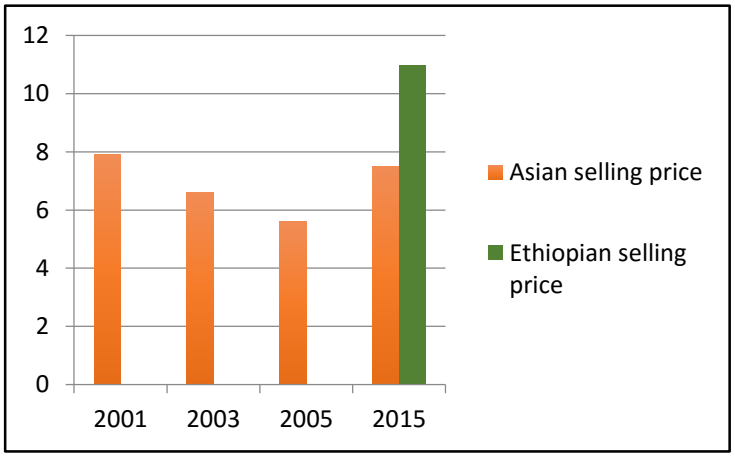


Figure 4.5: Different prices (in USD) for European imports from Asia or Ethiopia[17]

[16] http://www.worldstopexports.com/leather-shoes-exports-country/

[17] Future Trends in the World Leather and Leather Products Industry and Trade – United Nations Industrial Development Organization - Vienna, 2010

Other leather goods industry structure and competitiveness

Leather goods industry corresponds to various types of products, techniques and production volumes. The leather produced by tanneries is used to produce a wide range of items such as leather garments, stitched upholstery, backpacks, handbags, luggage, travel goods, purses and gloves. In Ethiopia, there are currently 15 garments and other leather goods producing factories and about 400 micro and small enterprises producing leather products with small capital ranging in different regions of the country. A major part of the leather goods is thus manufactured in small craft shops, as the leather goods industry has traditionally been an activity involving a great deal of manual work. According to the quality of their leather, the leather goods products can be either sold to the domestic market or exported, mainly to Europe, Japan and North America.

As for the gloves, two different types can be produced: either luxury gloves or industrial gloves. Both categories are mainly exported to Europe, Japan and the United States. Although Ethiopia begins to become famous worldwide for the quality of its leather, it still remains very far from international markets and fashion standards. The use of luxury gloves is very much influenced by fashion and culture, and varies from one country to another. Ethiopia also copes with a problem of image and visibility in international markets, as it has long been associated with the export of raw materials and semi-processed leather goods, and as it is now very difficult for companies based in Ethiopia to develop worldwide their own brand and to set up the marketing campaigns required. Their access and capacity of adaptation to international markets remain thus quite limited. That's why big companies producing finished leather goods in Ethiopia, like Pittards, have to restrict their production to mid-range products as industrial gloves.

One of the largest gloves manufactory of the country, owned by Pittards and located in Addis-Ababa, which employs 950 workers, enjoys a competitive advantage thanks to medium and low-end products, rather focused on robustness than on aesthetic appearance of the leather, and whose production is operated by a very cheap labor force, whereas the production of luxury gloves remains very limited.

The biggest factories producing finished leather goods may have an interest in specializing their production and focusing their business on the production of low-end and mid-range products, as it is the case for the shoe industry.

The future of the leather transformation industry

Ethiopia seems not to be well integrated in the international market. But the government incentives to attract FDIs have had different results. We have calculated, with the data given from LIDI for January 2016, the percentage of local and foreign companies in Ethiopia, in terms of installed capacity. As for the shoe industry, most factories are owned by locals when the origins are more diversified for other leather products. This can be explained by the important investments, and thus installed capacity of companies like the British glove producer Pittards.

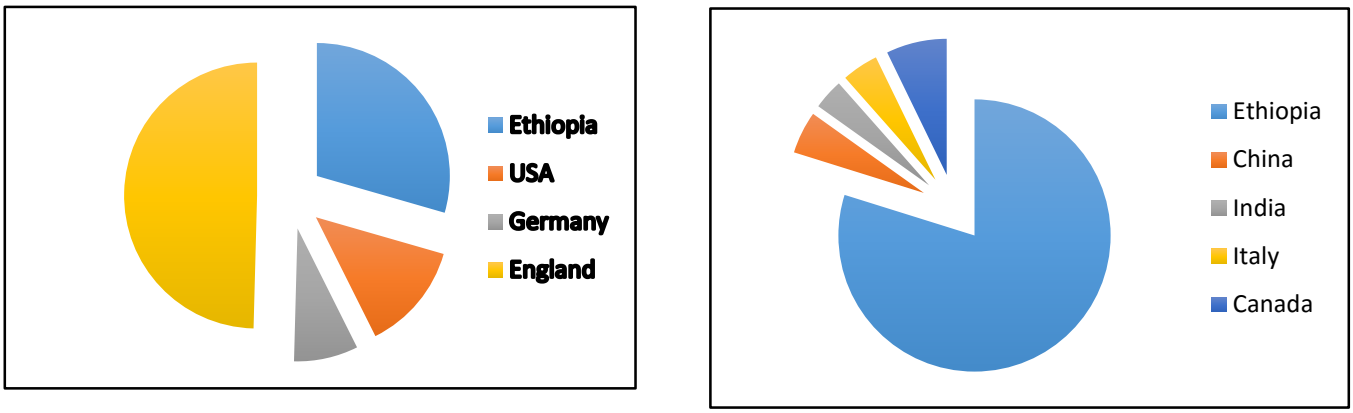


Figure 4.6: Origins of the factories for the shoe industry (left) and for other products (right)

Although investments have been and still are made, the infrastructures are still not sufficient to compete with other producers. The government incentives do exist, as mentioned before, but they seem to be insufficient.

To tackle the quality problem, some improvements are being to be noted. A Pittards study on the influence of animal treatment on the quality of the skin has proven that progress can be made and have an important influence on the whole leather chain. The ministry of Agriculture also started a program to inform farmers across the country of the importance of a better treatment of animals.

As for the industry itself, it is evolving. For example, the production of leather products from poor and medium quality skins has started. Although it seems to be a micro-niche market, since the volumes produced and the visibility on the international market remain very low, it could be a way to reduce wastage and to offer different products. Nevertheless, for the time being, the design part of the process is still under development. In this spirit of creating added value, some Ethiopian entrepreneurs also try to create their own brand and to promote their products and designs abroad as well as in Ethiopia. Although the added value is greater than for other products and industries, it remains a micro-niche market.

In a way, the finished leather goods industry in Ethiopia may be described as an industry based rather on recycling than on the exploitation of the natural resources of the country. The comparative advantage itself can be discussed. This shows that the presence of a natural resource does not necessarily imply the existence of a competitive advantage. Here, the downstream business of leather transformation has to adapt itself to the poor quality of the major part of the skins due the upstream processing. The development of a leather transformation industry with a real penetration on international market would thus need a deep transformation of the whole chain.

IV. Annexes

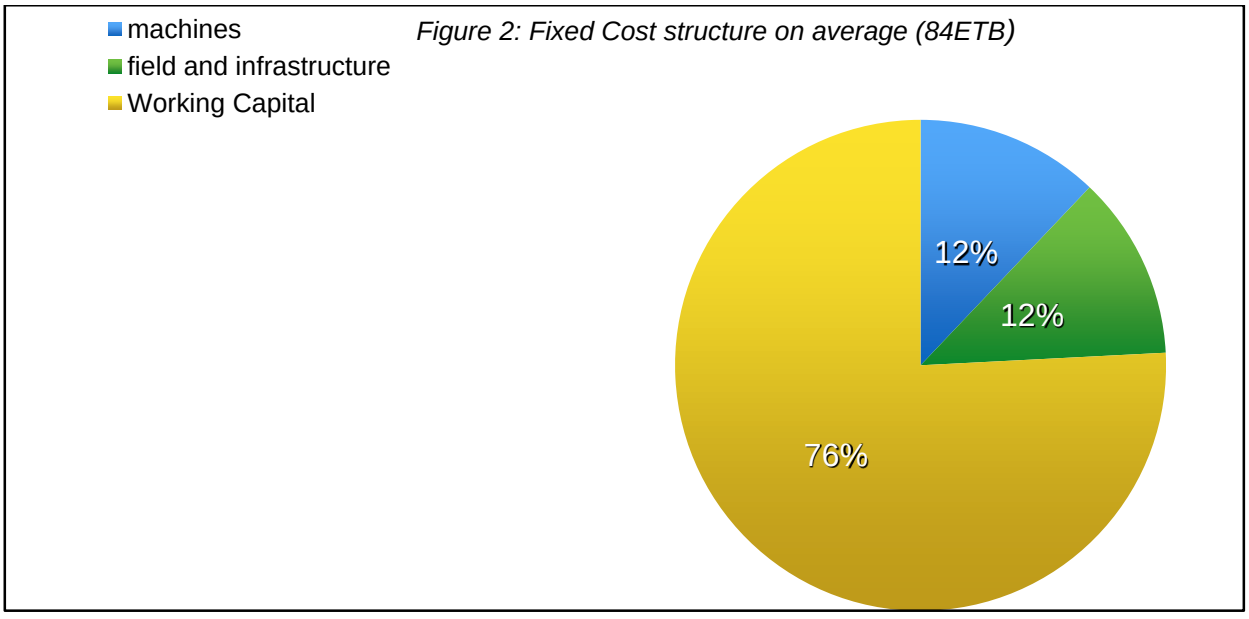
Appendix A: The micro-economic model

A Micro-economic analysis allowed us to put forward a cost structure that would highlight factors to which the profitability of the tanneries is sensitive.
The data used for the study comes from three different sources: on-field observations, USAID report (Agricultural Growth Project - Livestock Market Development, 2012) and other available reports (Agoa.info) as well as UNComtrade database.

Figure1: The cost structure of the tanneries

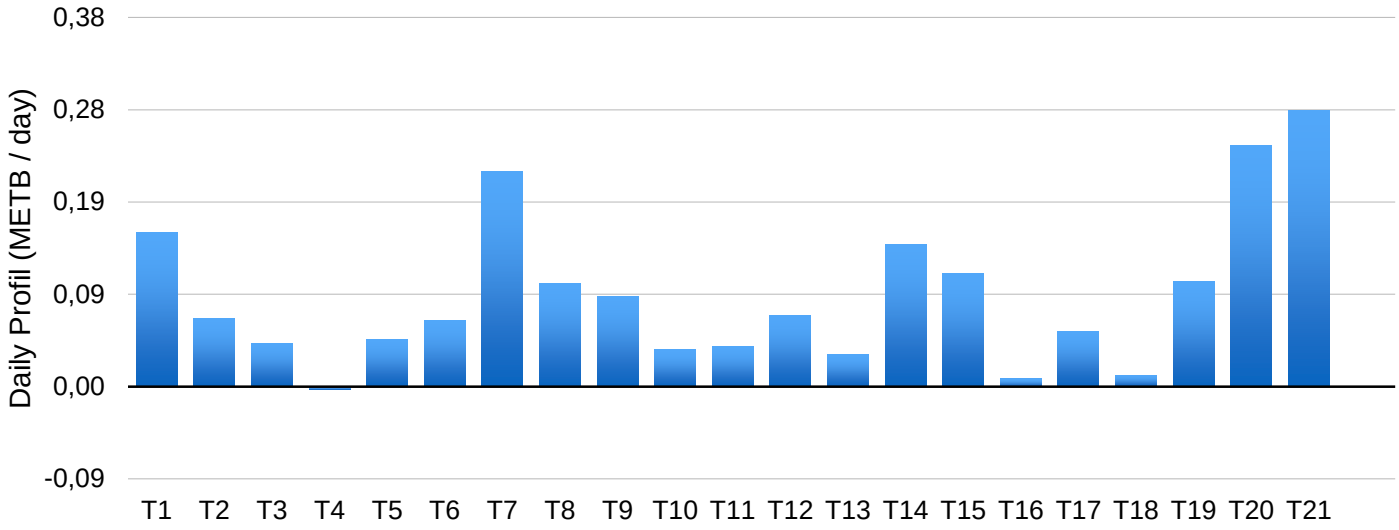
Fixed Costs	Variable Costs
Machinery	Chemical
Land & Facilities	Labour
Working capital	Energy consomption
	RHS supply
	Machinery upkeep
	Holding and logistic costs

Figure 2: Fixed Cost structure on average (84ETB)



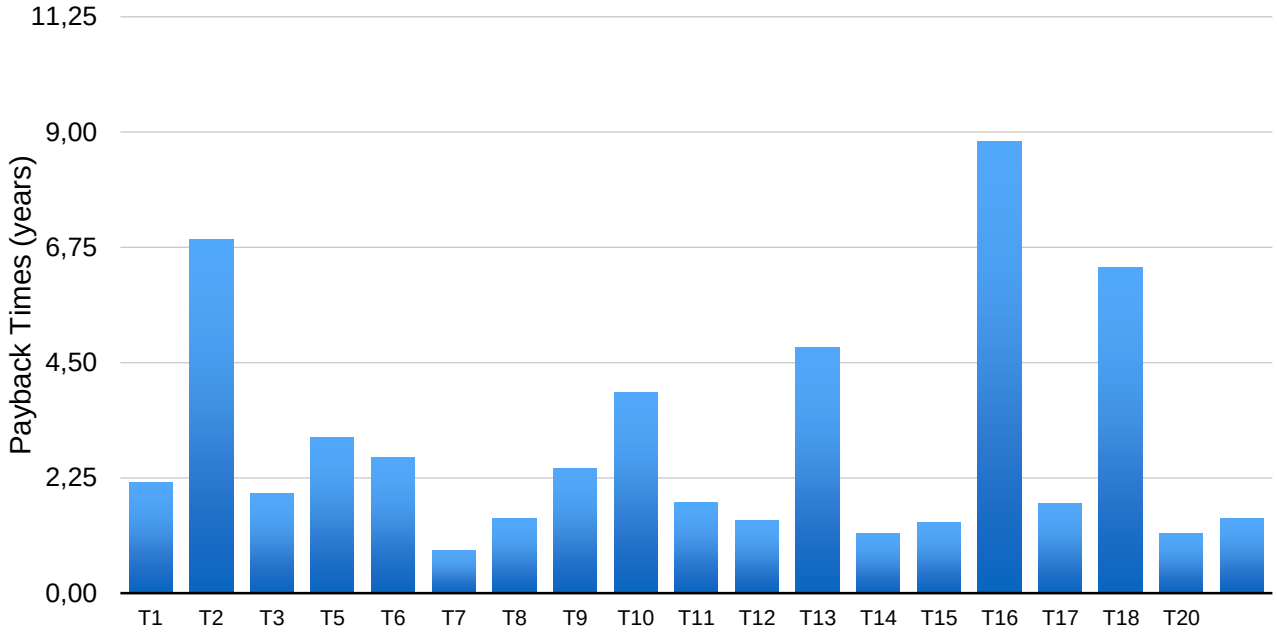
We assessed the daily variable cost, and the daily revenues for each tannery. The difference between the two allowed us to calculate the average annual benefice, and then the payback time to cover the initial investments.

Figure 3: Estimation of the daily profit for each tannery



Even if the fixed costs are substantial, most of the tanneries have already amortized them. Below are the payback times for each tannery.

Figure 4: Estimation of the payback times for each tannery



Appendix B: The sensitivity study

Thanks to this previous business model, we proceeded to a sensitivity study. After pointing out different competitive factors which are particular in Ethiopia, we studied the tanneries' profitability sensitiveness to them.

Firstly, Raw Hides and Skins quality in Ethiopia is very fluctuating and directly influence the export part of the finished leather.

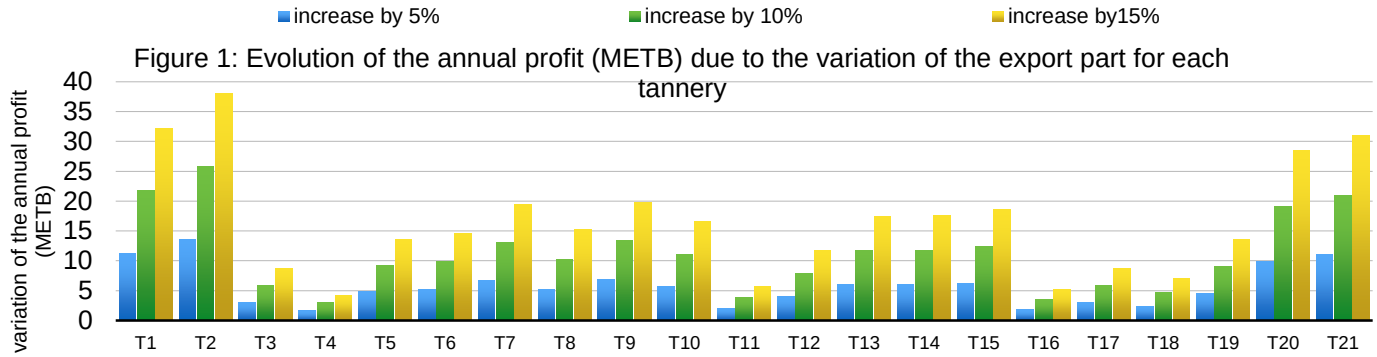


Figure 1: Evolution of the annual profit (METB) due to the variation of the export part for each tannery

Secondly, the chemical prices about to a significant part of the costs structure because Ethiopian tanneries should import them from abroad.

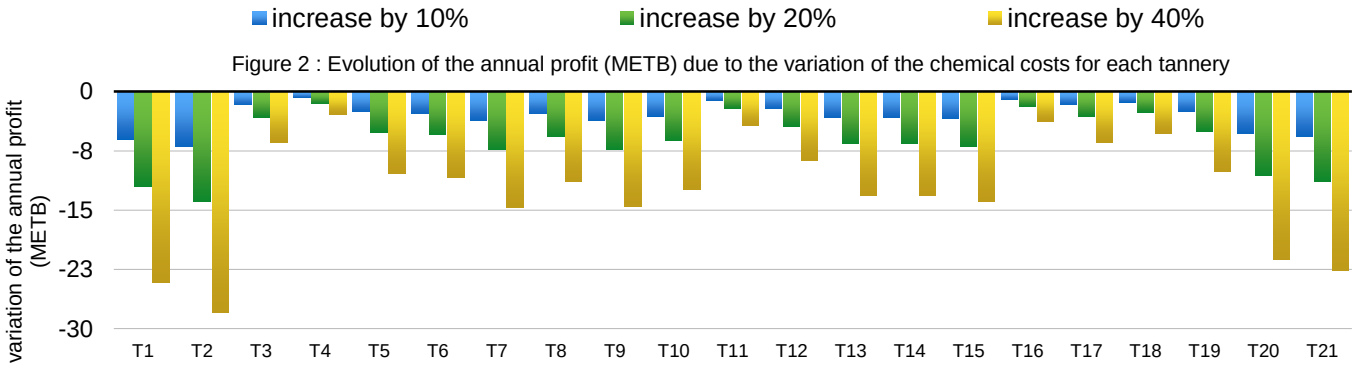


Figure 2 : Evolution of the annual profit (METB) due to the variation of the chemical costs for each tannery

Thirdly, because of the seasonality of the supply in Raw Hide and Skin in Ethiopia due to cultural factors, the prices of the raw materials can fluctuate a lot during the year.

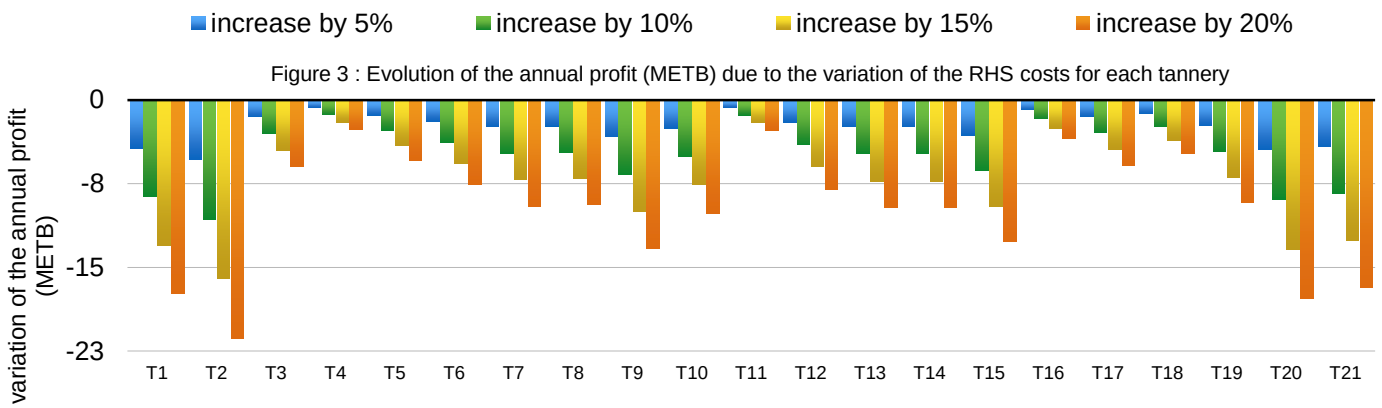


Figure 3 : Evolution of the annual profit (METB) due to the variation of the RHS costs for each tannery

The seasonality of the supply and importations delays also involve huge holding costs.

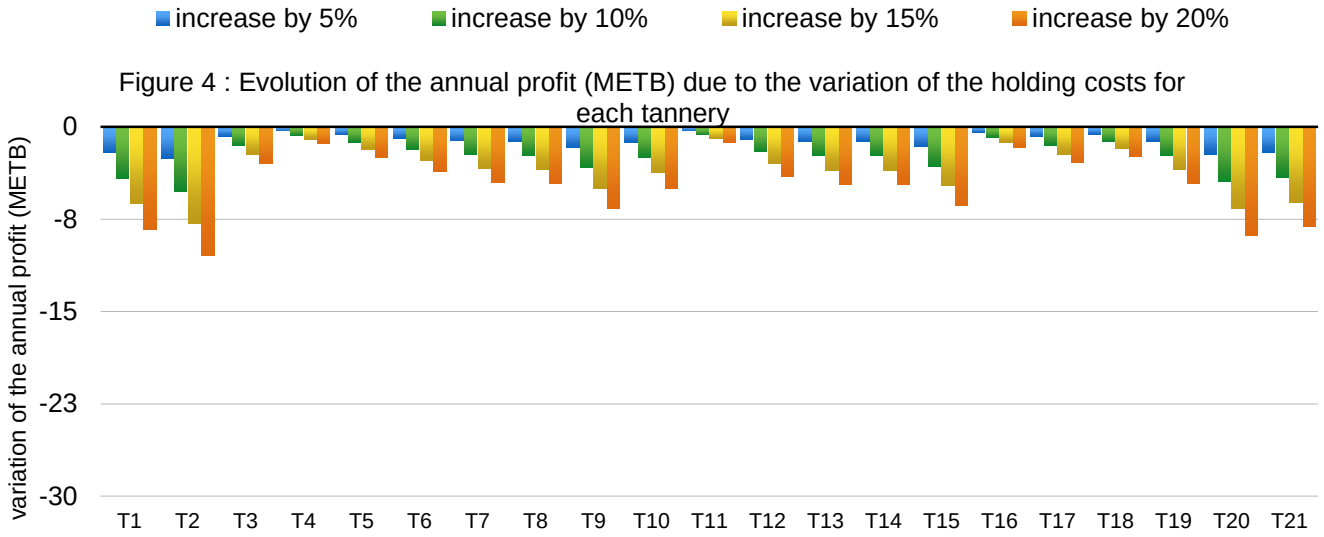


Figure 4 : Evolution of the annual profit (METB) due to the variation of the holding costs for each tannery

Finally, salaries in Ethiopian are very low compared to the rest of the world.

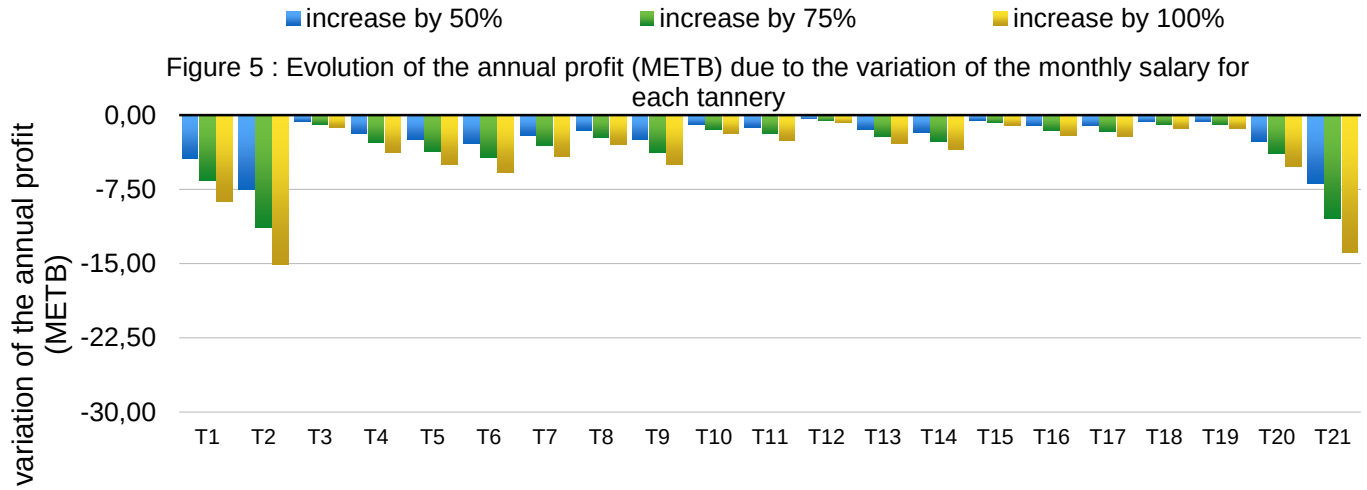


Figure 5 : Evolution of the annual profit (METB) due to the variation of the monthly salary for each tannery

In order to assess the comparative advantage in term of salary, we used in the economic model of the average monthly salaries from different countries.

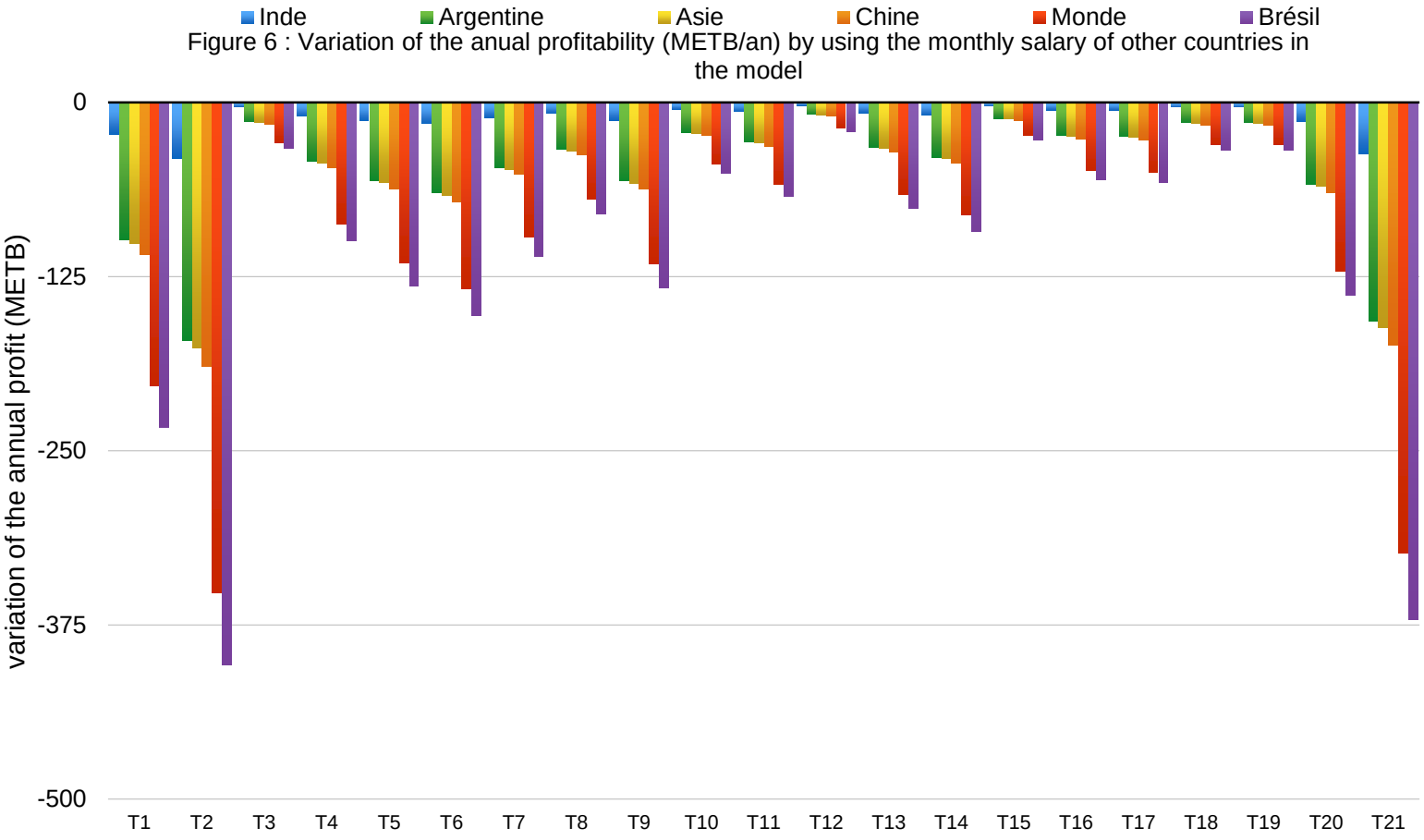


Figure 6 : Variation of the anual profitability (METB/an) by using the monthly salary of other countries in the model

Referencing of tanneries on graphs in the quantitative analysis

Ethiopian Tannery	T1
ELICO	T2
Blue Nile Tannery	T3
Addis Ababa Tannery	T4
Batu Tannery	T5
Dire Tannery	T6
Wallia Tannery	T7
HAFDE	T8
Modjo Tannery	T9
Mersa Tannery	T10
Baihir Dar Tannery	T11
DebrebrehanTannery	T12
Sheba Tannery	T13
Colba Tannery	T14
Kombolcha Tannery	T15
Hora Tannery	T16
Habesha Tannery	T17
Crystal tannery	T18
East African Tannery	T19
China Africa Tannery	T20
Friendship Tannery	T21

Appendix C: Overview of the main shoes/gloves manufacturers

N°	Company	Region	Origin	Country	Installed capacity (pairs per day)
1	Tikur Abbay	Addis Ababa	Local		4000
2	Anbesa	Addis Ababa	Local		3500
3	Kangaroo	Addis Ababa	Local		1200
4	Peacock	Addis Ababa	Local		2500
5	Ras Dashen	Addis Ababa	Local		1000
6	Ok Jamaica	Addis Ababa	Local		1000
7	Wallia	Addis Ababa	Local		1000
8	Ramsey	Addis Ababa	Local		2000
9	Sheba Shoe	Tigray	Local		1000
10	Bostex	Addis Ababa	Local		200
11	ARA shoe	Addis Ababa	Foreign	Germany	2000
12	Hwanjan Shoe	Oromia	Foreign	China	3000
13	New Wing Addis	Addis Ababa	Foreign	Italy/ China	2000

Main shoe manufacturers in Ethiopia in 2012

N°	Company	Region	Origin	Country	Installed capacity (pairs per day)
1	Otto Keseller Gloves	Amhara	Foreign	Germany	2000
2	Pittards Global Sourcing	Addis Ababa	Foreign	UK	3500
3	Davinmplx Glove Factory	Amhara	Local and Foreign	Ethiopia/ Sweden	2000
	Total installed daily capacity				8500

Ethiopian gloving companies and their capacity in 2012

Conclusion

The Agricultural sector

- The Ethiopian government's interest in the leather industry is mainly due to the high potential the Ethiopian livestock's size grants to the supply in hides and skins. This motivated the country's ambition to increase the value addition locally, by imposing a 150% tax on the export of unfinished leather.

- However, the supply in hides and skins, a by-product of meat, is much lower than its full potential, mainly due to a weak meat industry (low off-take rates, low meat consumption and low meat exports).

- The quality of this supply is limited by structural problems related to the skins' complex marketing channels and to the non-transmission of price signals from the tannery level to the farmers.

- Overcoming these difficulties requires substantial changes in the current traditional husbandry practices, their sanitary conditions and the handling practices of the skins entering tanneries, in the face of social inertia to change, Ethiopia's land ownership rules, animals' health system and lack of expertise and infrastructures.

The tanning industry

- After the 2008 policy changes on export taxation, tanneries were forced to vertically integrate the entire tanning process, thus causing discrepancies in the processing capacity between raw, wet-blue and finished leather. In addition, the sector suffers from disinvestment because the tanneries are rarely their owner's core business. As a result the sector is slowed down and is less competitive than it could be.

- Ethiopia's business climate features including resources, infrastructure, institutional constrains, import dependence and international market position, directly affect the economic model of the tanneries. In the light of the latter's sensitivity analysis, most of these features come out as comparative disadvantages on the global market.

-Information on raw hides and skins quality is asymmetric, asynchronous and blurry. Moreover, the non-transmission of a clear price signal from upstream to downstream hinders the quality auto-selection effect of market mechanisms. Institutions or contractual framework could solve the two former issues and facilitate business relations between tanneries and traders.

Leather transformation industry

- The Ethiopian leather industry suffers from a low penetration on the international market, because of a lack of competitiveness in terms of selling price. This can be explained by a high dependence on the upstream industries.

- The whole leather transformation process appears to be a byproduct industry. It is specialized in mid-range products because of the lack of design skills and quality problems. The shoe industry faces different problems. The production is not self-sufficient and the import costs of several shoe components compensate the comparative advantage due low salaries and government incentives. As for the other products, they suffer from distance to the markets.

- Ethiopia has comparative advantages but also faces many obstacles such as the quality issue, low managerial skills, a lack of training, important transportation costs and times, poor infrastructure and a lack of productivity

This report aimed to question the assumption that the large Ethiopian livestock gave Ethiopia a natural comparative advantage in the leather sector. However, our study of the vertical disintegration of the leather industry in Ethiopia shed light on various factors that prevent Ethiopia from being a competitive actor in the international leather business. Most importantly, the lack of institutional entity able and willing to modernize the agricultural organization has an noxious impact on the Ethiopian leather quality. The location of Ethiopia also highly prevents the country from being a competitor on the international market due to high transport time and costs. Last, the relatively weak institutional situation of the country adds high transaction costs, thus enabling Ethiopia to be a competitor in terms of prices. Ethiopia's future leather industry therefore highly depends on deeper transformations in the country, including a modernized agriculture.

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