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The Role of Policy and Governance



The role of trade policy on Ethiopia's leather industry: effect of export tax on competitiveness

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The role of trade policy on Ethiopia's leather industry: effect of export tax on competitiveness

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The government of Ethiopia implemented a 150 percent export tax on raw hides and skin and semi-finished leather products and crust leather in 2008 and 2012 respectively, in order to encourage leather manufacturing industry. The objective of this paper is to analyse the effect of export tax on Ethiopia's leather industry export competitiveness. Constant Market Share (CMS) model has been used to evaluate Ethiopian's performance in leather product trade. Export value data in 2007 was used as a base year, whereas data in 2013 was considered as a year after export tax. The results indicated that, implementation of export tax shifted the export of hides and skins and unfinished leather product to finished leather product. Besides the shift in export products from raw materials to finished leather product, implementation of export tax has also resulted in positive export growth (2.55. this indicate that, the country's leather product export growth was higher than world demand after implementation of export tax; which is most likely achieved by an increase in export competitiveness of the leather industry (2.25).

Keywords: raw hide and skin, leather, export tax, competitiveness, CMS

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1. Introduction

Increased participation in international trade and investment can serve as the engine for economic growth and development. Joined to international trade is the principle of comparative advantage that generally provides that states should trade with one another because they are better off by maximising their production potential for some products and, through trade, can obtain products they do not have or that they produce with less efficiency. International trade has increased dramatically in recent decades. The flow of goods and services is crucial for achieving sustained growth in developing countries (Goldberg & Pavcnik, 2007).

Developed and developing countries use trade as the main component of viable development. Owing to this, most countries have implemented export-oriented development strategies with the objectives of reinstating their economic stability, both internally and externally, and improving resource allocation efficiency. Trade liberalisation plays a role in securing economies of scale, accessing markets, and expansion of trade through its effect on industrialisation and modernisation. In developing nations like Ethiopia, international trade can play an important role in economic growth. Trade helps a developing country move from inefficient resource utilisation to efficient utilisation. It serves as a channel for agricultural commodities and a raw material produced by a particular country, and thereby links the country to international markets. This in turn stimulates domestic producers to strive for global competition and hence meet world standards in their products.

Export tax, which has been an integral part of trade policies for centuries, has not been given adequate attention by the World Trade Organization (WTO) or in economic literature (Solleder, 2013). The focus of most export taxes is on raw products (hides, cocoa, and seed cotton), processed oilseeds, semi-processed aluminium, and iron, minerals, timber products, etc. (Piermartini, 2004). In the case of large export countries, restricting exports of a particular commodity can lead to an increase in the world price of the restricted commodity. This often leads to an improvement in the country's terms of trade. According to Bickerdike (1906), the arguments on export tax measures and those on optimum tariffs are similar. Export taxes on primary commodities (unprocessed raw materials) serve as indirect subsidies to manufacturing and processing industries by lowering the domestic price of inputs, as

compared to their world non-distorted price. Export tax can have a positive effect on government revenue and it may also affect income redistribution. Conversely, export taxes can impose serious negative impacts on the producers of raw materials and negative externalities for trade partners.

The 2008/2009 economic crises have led to the special examination of policies affecting trade. As a consequence, export taxes and other export restrictions have ranked as ninth and fifth top measures against foreign commercial interests in 2009 and 2012 respectively after bailouts, trade remedies, tariffs, and non-tariff barriers (Evenett, 2009). Except in some cases, Article XI of the General Agreement on Tariffs and Trade (GATT) (Kock, 1969) indicate that quantitative restrictions should not be imposed on exports. So far there is no specification made by GATT that obliges the maximum level of export taxes. Most member countries of the WTO have imposed certain types of export taxes at some stage. Among 155 WTO member countries, the number of countries that have applied export tax has increased from 39 in 2004 to 93 in 2013, which has affected 178 importing countries (Solleder, 2013).

Ethiopian export earnings, particularly those derived from dominant agricultural exports such as coffee, have been subject to large fluctuations due to the unstable nature of international prices (Brautigam, 2011). The economic growth of the country has been too weak to absorb the effect of these exogenous shocks; it is less flexible in dealing with both internal and external disturbances. Therefore, the instabilities and decline in earnings are found to affect the economic growth adversely and there is a need for a large foreign exchange reserve in the short-run, while trade and exchange rate policies reforms would be the long-run instruments needed to reduce the instabilities in export earnings (Amin, 2002). To this effect, policy makers in Ethiopia developed different plans to encourage different potential export industries and thereby diversify export commodities. The leather industry is one of the most important prioritised industries for the diversification of export and foreign exchange earnings (FDRE, 2010). The prioritised industries link to agriculture and are highly labour-intensive demanding a large labour force.

The next figure shows that the Ethiopian export of coffee has a declining trend in export performance. On the other hand, the export performance of oilseed, pulses, leather and leather products, and chat shows an increasing trend (Figure 1).

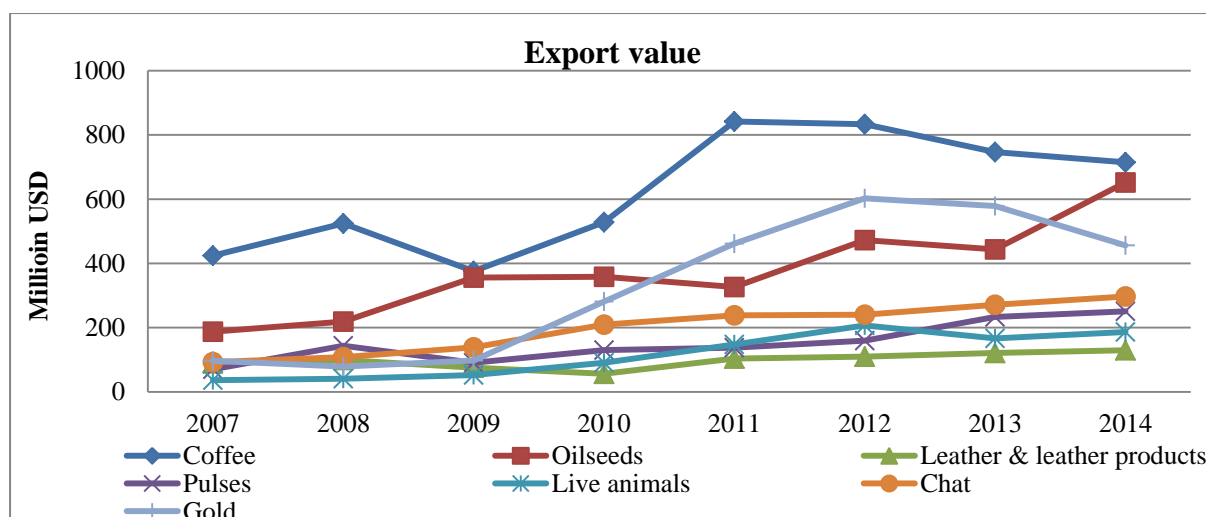


Figure 1: Export trends of main Ethiopian export items

Source: Ethiopian Revenue and Custom Authority, 2007–2014

To this effect, the Ethiopian Ministry of Finance and Economic Development Authority developed a different export policy to encourage and diversify exports. The export tax on hides and skins and leather products is one of the export policy measures to encourage and improve the domestic value chain in the leather industry and to increase the supply of raw materials to the local industry. In 2008, the government imposed a 150% export tax on the export of raw hides and skins and semi-finished leather products. In 2012, the government also levied a 150% export tax on the export of crusted leather on the leather industry. These high export taxes affected both international buyers and some domestic tanneries (Abebe & Schaefer, 2013).

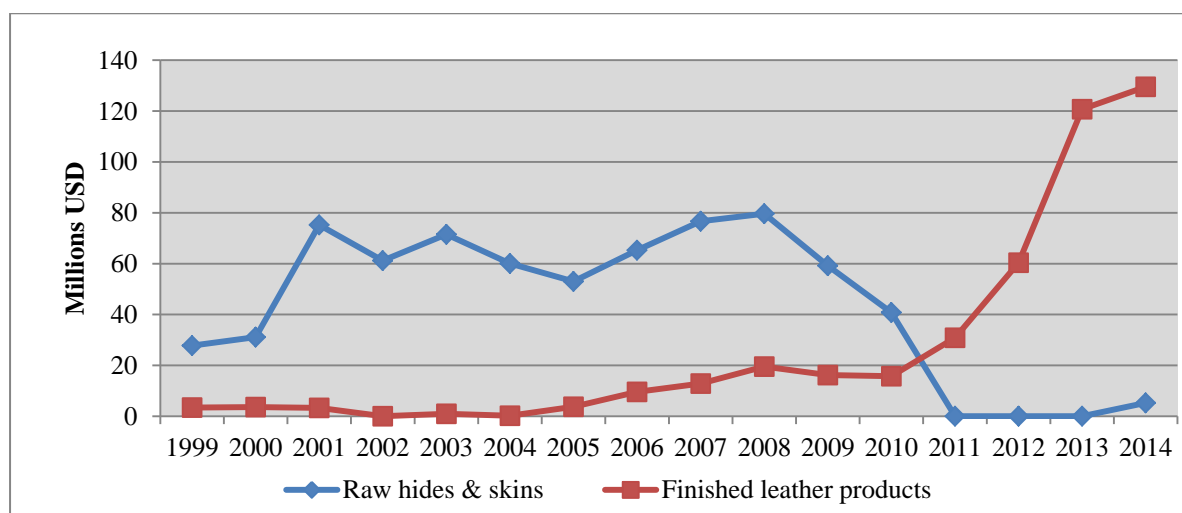


Figure 2: Trends of hides and skins and leather products export in Ethiopia

Source: Author's own computation based on data obtained from ERCA and UNCOMTRADE, 1999-2014

The export of raw hides and skins and semi-processed leather products was highly affected by the export tax. On the other hand, the export of finished leather products vastly increased after the imposition of export tax in 2008 (Figure 2).

This paper consists of the following sections. Section two describes Ethiopia livestock populations and leather industry policies. Section three explains overview of export restriction. Section four describes conceptual framework and analytical method of CMS. Section five presents empirical results and discussions. Finally, the paper closes with concluding remarks in section six.

2. Ethiopia livestock populations and leather industry policies

Ethiopia is highly endowed with livestock resources; ranking first in Africa and is among the top ten countries in the world. It has more than 55.03 million heads of cattle, 27.35 million sheep, and 28.16 million goats (CSA, 2013). Livestock is an integral part of the agricultural GDP and serves the Ethiopian economy as sources of food traction, manure, raw materials, investment, cash income, security, foreign exchange earnings, and social and cultural identity. Consequently, an increasing trend of livestock populations shows the country has substantial resource potential to attract investment and consequently foster the development of the leather industry (USAID, 2013).

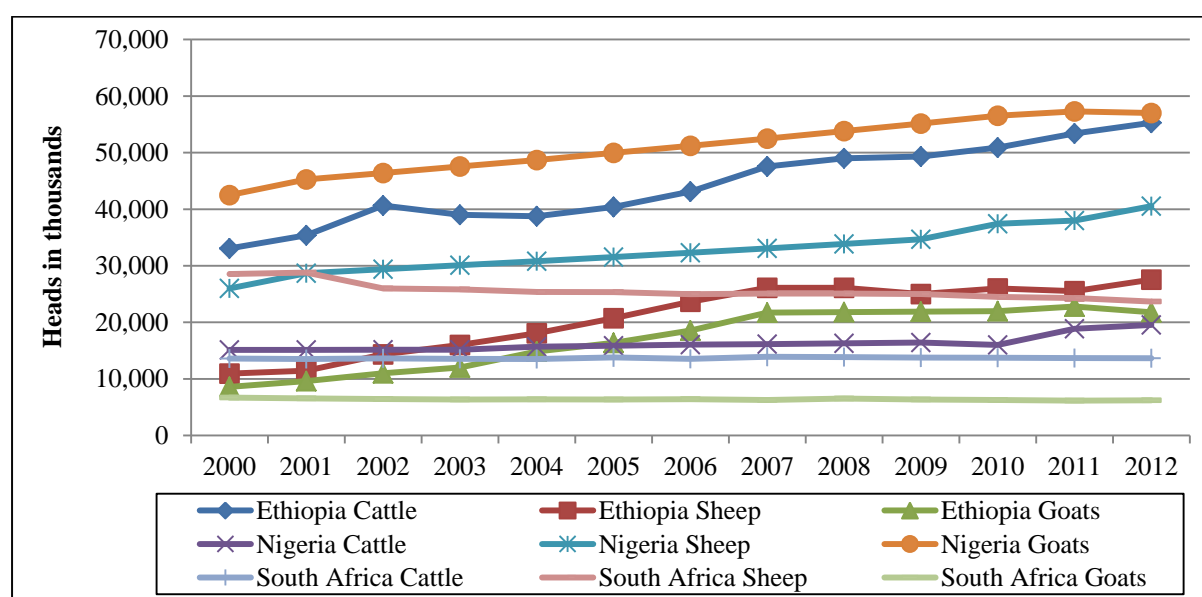


Figure 3: Trends of livestock populations

Source: FAO, 2013

As mentioned above, Ethiopia has high livestock populations; however, there was a gap between the livestock resource base of the country and the growth of its leather industries. The next table shows that, South Africa was the leading African exporter of raw hides and skins and leather products (US\$351 827 000) in 2014, followed by Nigeria (US\$286 621 000). Ethiopia was the fifth largest exporting country and its export value was US\$89 504 000 in 2014 (Table 1). Recently, Ethiopian exports mainly depended on finished leather products and footwear.

Table 1: Top ten African RHS and leather products exporting countries

Rank	Country	Export value (USD)
1	South Africa	351 827 000
2	Nigeria	286 621 000
3	Egypt	195 392 000
4	Kenya	136 364 000
5	Ethiopia	89 504 000
6	Uganda	73 758 000
7	Zambia	55 405 000
8	Zimbabwe	37 928 000
9	Tunisia	35 903 000
10	Namibia	25 898 000

Source: Author's calculation based on UNCOMTRADE data, 2014

Tunisia was the largest African exporter of footwear in 2014, with US\$669 385 000 export value, followed by South Africa (US\$198 385 000). Ethiopia was the third largest footwear exporter; its export value was US\$30 971 000 in 2014. Ethiopia's footwear exports increased after the imposition of the export tax on raw hides and skins and crust leather products; however, it was much smaller than Tunisia and South Africa (Table 2).

Table 2: Top five African footwear exporting countries

Rank	Country	Export value (USD)
1	Tunisia	669 385 000
2	South Africa	198 551 000
3	Ethiopia	30 971 000
4	Lesotho	18 054 000
5	Kenya	15 034 000

Source: Author's calculation based on UNCOMTRADE data, 2014

The foregoing tables indicate that Ethiopia was the first African country in livestock populations; however, it was ranked fifth and third on raw hides and skins and leather

products and footwear exports respectively. Even if livestock production was high, there was a critical shortage of raw hides and skins in Ethiopia due to insufficient supply to meet even the most minimal market demand, and poor-quality (e.g. scarred, diseased, improperly flayed) hides and skins, which directly limited the market potential of the finished leather products (USAID, 2013).

In 2008, the Minister of Finance and Economic Development of Ethiopia imposed a 150% export tax on raw hides and skins and semi-leather products. In addition to this, the government again imposed a 150% export tax on cluster leather products in 2012 (FNG, 2008: 2012). These export tax systems could serve as instruments to encourage industries engaged in the production and export of hides and skins and/or semi-processed leather to finished leather products. However, these export taxes affected incompetent tannery industries and diverted export destinations from European countries to Asian countries (Workneh, 2014). Before the export tax, the main importers were Italy and the United Kingdom; after the export tax, exports diverted to China, Hong Kong, and India (Figure 4).

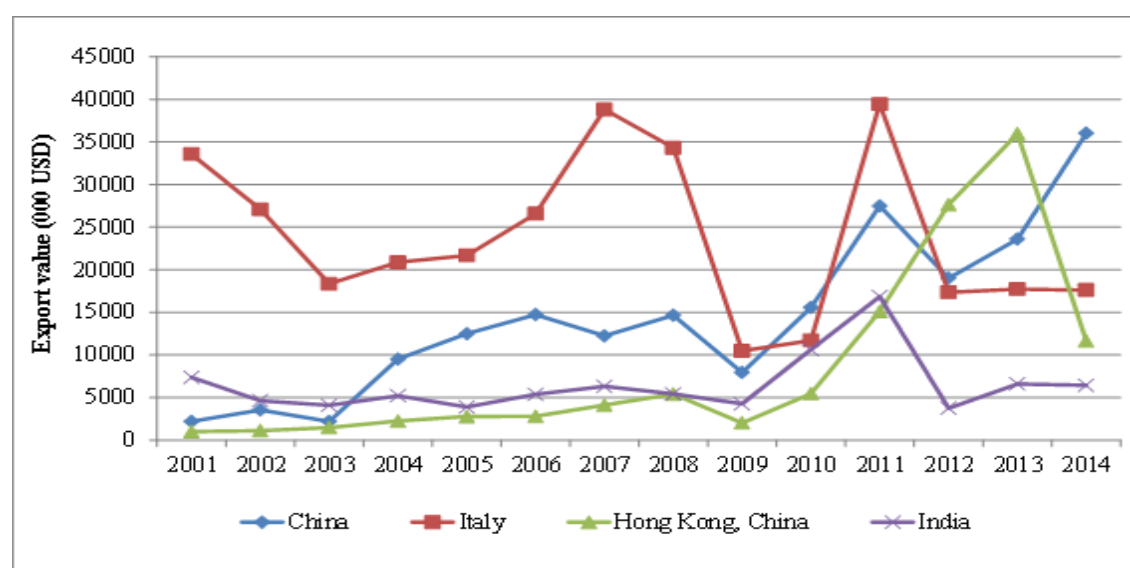


Figure 4: The major countries importing RHS and leather products from Ethiopia

Source: Author's calculation based on UNCOMTRADE data, 2001-2014

The policy intervention, which levied a heavy export tax on the export of raw hides and skins and crust leather products to encourage the production and export of finished leather products, shifted to value addition in the leather industry. Raw hides and skins and semi-processed leather products export was increased and fluctuated more before 2008; after the export tax on raw hides and skins in 2008, the export of raw hides and skins and semi-

processed leather products dropped radically. Meanwhile, the export of finished leather products and footwear shows an upward trend after the government imposed the export tax, specifically after the 2012 export tax on crust leather products (Figure 5). Encouraged by this progress, world-known footwear companies from China, Italy, and the UK have shifted their facilities to Ethiopia. China's Huajian Group and Hong Kong's New Wing are examples of recently established shoe companies in Ethiopia (Workneh, 2014).

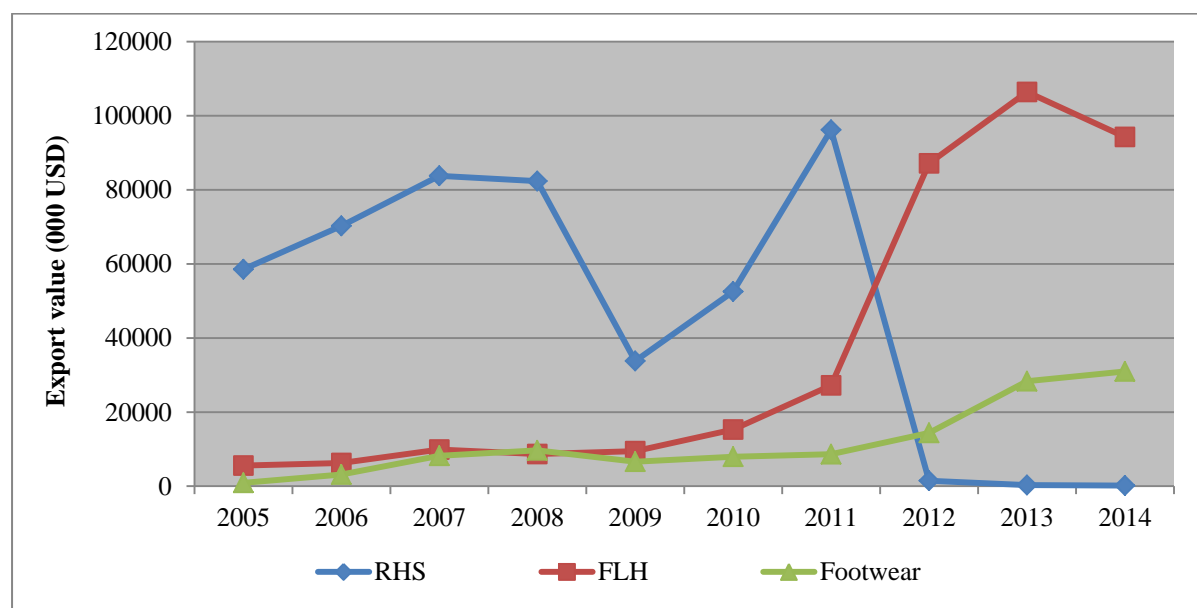


Figure 5: Ethiopian RHS, FLH, and footwear exports

Source: Author's calculation based on ITC data, 2005-2014

According to Abebe and Schaefer (2013), the Ethiopian government's policies targeted at fostering value-added local processing have met with some success at the expense of Ethiopian tanneries. Some small local tanneries stopped exporting or greatly reduced their exports due to the new policy. Such tanneries then started selling semi-processed leather to other tanneries in order to survive. Abebe and Schaefer (2013) also found some evidence of technology upgrading in the leather sector, which created jobs and increased exports.

However, Ethiopia is still importing large numbers of shoes, leather and plastic products from across the world and spending millions of hard currency annually. In addition, as most shoe-making and leather products' accessories such as synthetic sewing thread, plastic linen, shoelaces, zippers, buckles, and the like are being imported, the country is a long way from fully substituting imported shoes with other leather products (UNIDO, 2012). Ethiopia's

imports of leather products, especially shoes, indicate an increasing trend during 2005 to 2013 (Figure 6).

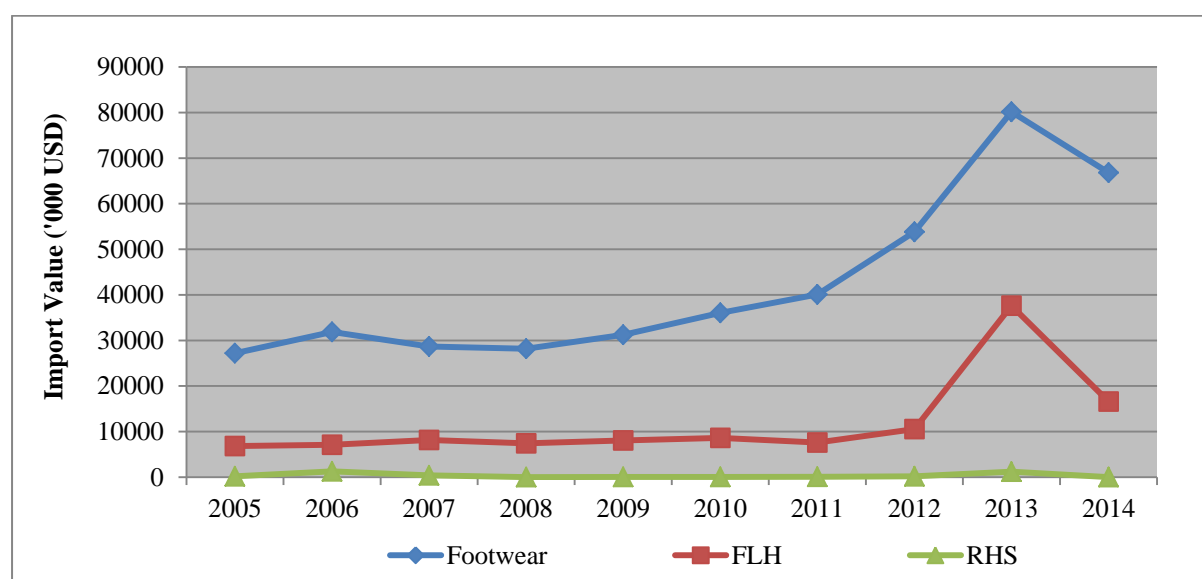


Figure 6: Ethiopian RHS, FLH, and footwear import

Source: Author's calculation based on ITC data, 2005-2014

The leather industry policies in Ethiopia did not make a significant impact on the import of leather products. This is due to three new foreign firms from Germany, China, and Italy producing export-quality shoes; only domestic firms produced for the domestic markets and the price of imported shoes from China was lower than the domestic price (Jing, 2014). For instance, the Chinese shoe-manufacturing company Huajian, which has its own Shoe City in China, is currently producing 2 000 pairs of shoes every day in Ethiopia.

In addition, the number of employees in both the tanning and dressing of leather and footwear manufacturing industries increased significantly from 950 007 people to 1 902 194 in 2000 to 2013 respectively; there was a data gap in 2012. This significant change in the number of employees in the leather industry, as well as other manufacturing industries, is due to the government policy that gave priority to producing more value-added products (Figure 7). On the other hand, employment in micro and small enterprises engaged in the leather industry also increased; there were more than 12 000 individuals working in shoe-making businesses in 2011 (Abebe & Schaefer, 2013).

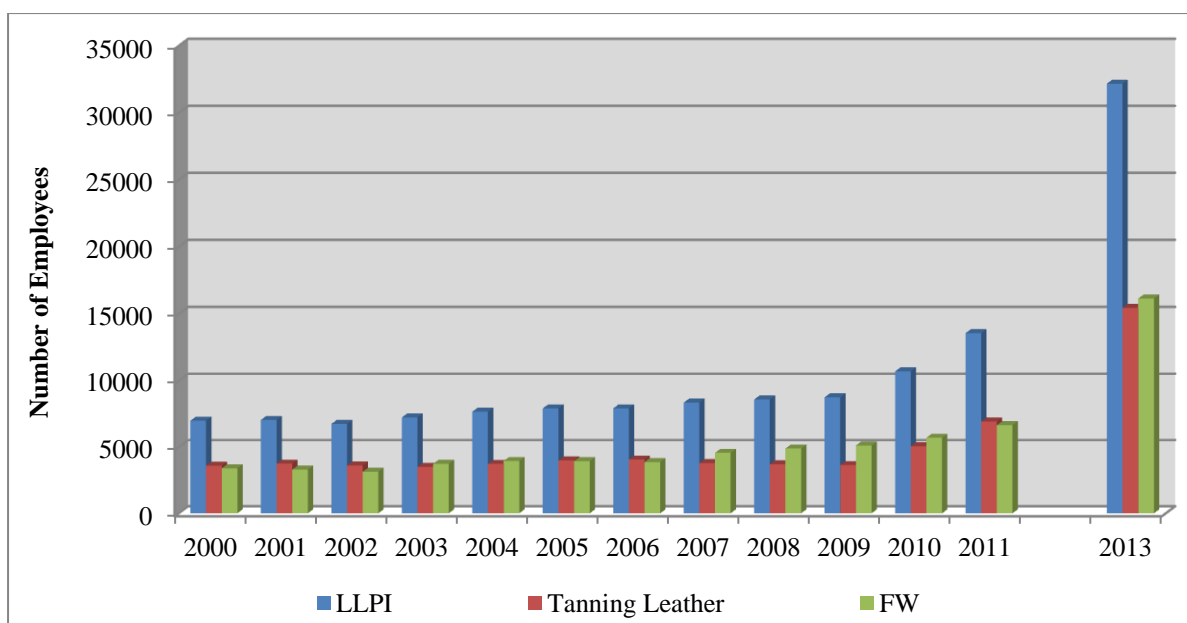


Figure 7: Ethiopia's leather industry employment trend

Source: CSA Large and Medium Manufacturing Survey, 2000-2013

In the meantime, Ethiopia has seen a significant increase in foreign investment in leather processing and manufacturing since 2004. By relaxing control measures, the government suspended the ban on new foreign investment in tanneries for several years, because local tanneries were not advanced enough to process up to the crust level. For instance, FDI from China to Ethiopia increased from US\$0.43 million in 2004 to US\$58.53 million in 2010 in the leather sector (Brautigam, 2011). However, these inflows of FDI in the leather industry hurt local tanneries; instead of being sources of technology transfer, foreign tanneries overall are regarded as unwelcome and unfair competition (Workneh, 2014).

Hides and skins change hands several times before they reach the tanneries, since traders collect them in small quantities over a large geographic area. The leather tanneries in Ethiopia obtain most of the hides and skins from collectors and traders. Larger tanneries equipped with machines and the required facilities buy semi-processed products from other tanneries and this leads to improvements in the leather value chain. The leather industries buy raw materials from the tanneries and produce various types of finished leather products; both for domestic use and export purposes (i.e. shoes, gloves, garments, and other articles of leather) (USAID, 2013).

In 2012, there were 27 tanneries which produced crust leather for the export market and finished leather mainly for the domestic market. These tanneries have an average daily

soaking capacity of 107 850 pieces of sheep skin, 51 550 pieces of goat skin, and 9 800 hides (USAID, 2013). However, they produce below their capacity because of the shortage of raw hides and skins; this leads to tanneries being price takers, as the shortage of hides and skins force them to bid aggressively against other tanneries (Urgessa, 2013). Particularly, foreign tanneries overall present unfair competition rather than being sources of technology transfer (Abebe & Schaefer, 2013).

The Ethiopian shoe industry is one of the leather goods producing industries and consists of two distinct groups: smaller manufacturers that produce for the local market, mostly covered by most of the domestic producers; and medium- and large-scale manufacturers that produce for the export market (foreign producers). The glove industry, which currently strictly focuses on export markets, is in its infancy and is expected to grow rapidly in the years to come as more investors discover that Ethiopian hair sheep skin is one of the best materials in the world for making fashion and sports gloves because of its softness and strength. The garment industry in Ethiopia is small and they produce for the local market, and therefore has negligible penetration in the international market (USAID, 2013).

Ethiopia has a number of livestock value chain market opportunities like meat and live animals, hides, and skin and dairy products. The most common leather industry value chain is illustrated in Figure 8.

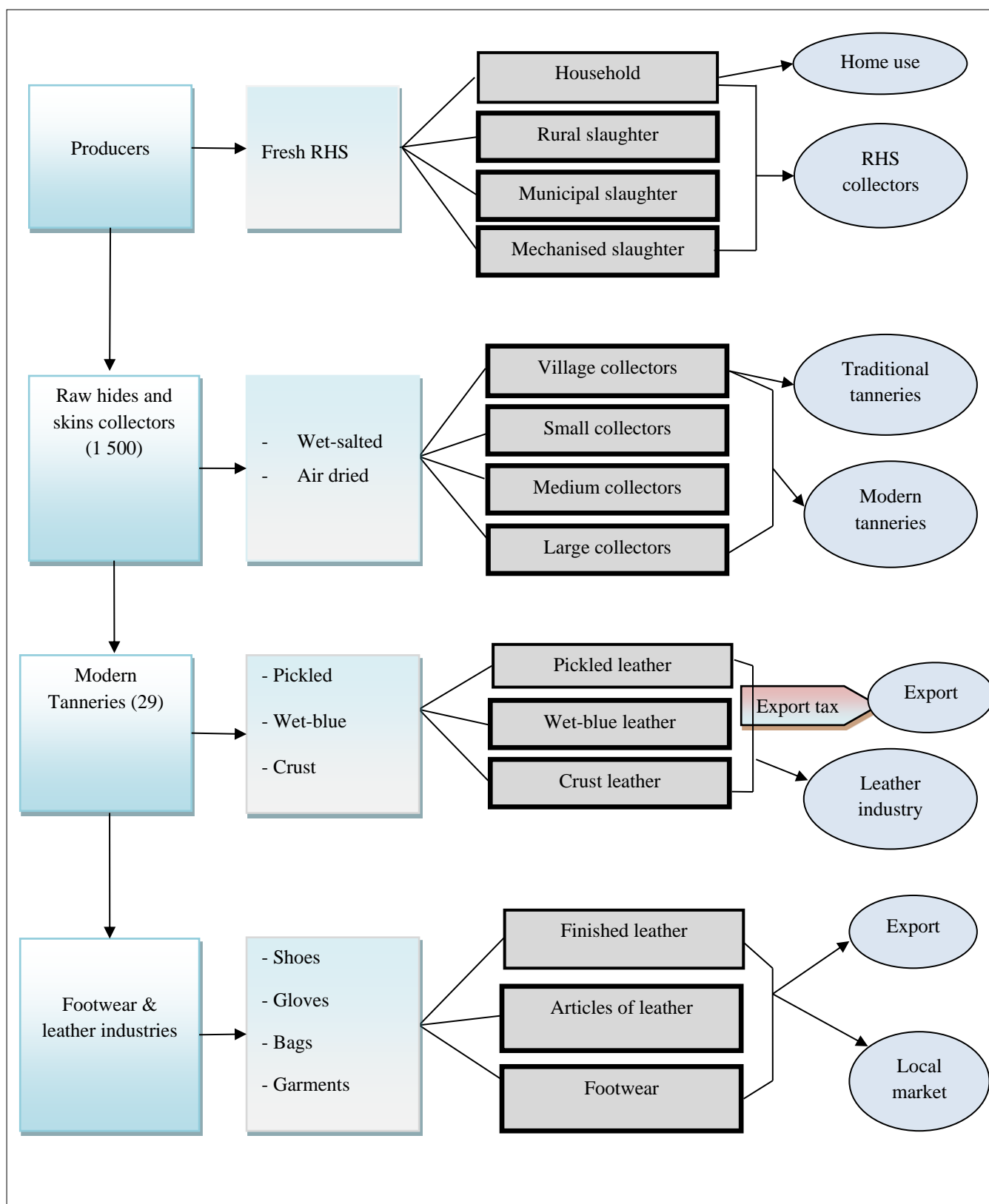


Figure 8: Leather industry value chain

Source: Modified from USAID, 2013

3. Overview of export restriction

Export restriction designed to meet different goal, it may be for environmental protection or to increase government revenue or encourage the domestic processing sector. Export restrictions on raw materials affect global competition and supply chain by creating difference between domestic price and world price. This price difference providing advantage for the domestic consumer and attract investment in the processing sector. However, it affects importing countries by increasing international price. In this section of the paper explain about export restriction and WTO agreement, types of export restriction and overall effect of export tax.

3.1 *Export restriction and World Trade Organization (WTO) agreement*

The WTO does not specifically prohibit export taxes (Piermartini, 2004). Export restriction is mainly mentioned in WTO Article XI (General Elimination of Quantitative Restrictions) of GATT 1994, and export restriction is also concerned in the agriculture agreement in Article 12 (Disciplines on Export Prohibitions and Restrictions) of the 1994 AoA. Article XI of GATT stated that import and export restriction policy instruments like quotas and export license are prohibited (XI: 1); only taxes and other duties are allowed. Temporary quantitative export restrictions or prohibitions are applied to prevent critical shortages of food or other products that are important for exporting countries (XI: 2a).

According to Solleder (2013), export restrictions did not receive as much attention as import protection in the Uruguay Round and in the Doha Round, because when the Uruguay Round was launched in 1986, high supply and low prices of many commodities were recorded. Instead, developed countries were mostly using export subsidies as a way to encourage the export of products. Current less attention to export restrictions by the WTO resulted in that they persisted outside the core elements of the 1994 AoA. They do not have good reason to restrict their exports. The policy responses made by some of the core food exporters towards the recent food crises and the consequences of their decisions on food insecurity of several food-importing developing countries and the negative effects of all these crises on the status of international markets demanded a different framework than the Uruguay Round negotiation.

Several countries which agreed to the WTO after the conclusion of the Uruguay Round, including China, Mongolia, Russia, Saudi Arabia, the Ukraine, and Vietnam, had to accept obligations which go beyond different extents of the existing WTO rules (Karapinar, 2011). These obligations refer to the elimination from certain products of existing export restrictions, different from export taxes, such as minimum export prices, but also to the elimination of existing export taxes from certain products or the introduction of binding levels.

3.2. *Types of export restrictions policies*

Export tax, export bans, quotas and licensing are some form of export restrictions. Export tax is a duty collected on exported commodities. There are different forms of export tax that reducing the volume of exports such as: ad valorem tax (percentage tax of the value of the product), specific tax (fixed amount to pay per unit of a product), progressive tax (i.e. it depends on the price of the product). Export ban is another type of export restriction which cut exports completely. Export bans are mostly applied on hides and skins, live fishery products, wildlife, and others to prevent exports of dangerous materials and to improve domestic value addition. The two core problems of using this policy are the lack of long-term credibility of such a policy and it mostly leads to smuggling (Marks *et al.*, 1998). Export quota and licensing are also export restriction policy; quota restricts the maximum amount of export while licensing is making sure that commodities can be exported only by allowed exporters.

3.3. *Overall effects of export tax*

Export tax is different effect when imposing by large country and small country (Laborde, *et al.*, 2013). When export tax is imposed by large country, it will affect both exporting country as well as importing country. Large exporting country is market power that affect world price. This leads to term-of-trade gain for exporting country; however, importing country term-of-trade is worsening. Producer in exporting discourage because of low domestic price and consumer consume more. Meanwhile, consumption of importing country reduces because of high world price.

Export tax is imposed by small country the effect is different because small country is small share in the world market it does not affect the world price. In small country case unlike large

country export tax results not gain on term- of- trade (welfare lose), because of implementing cost is greater than revenue. In general, the national welfare effect of export tax that imposed by small country is negative). However, the national welfare effect in large country can be positive or negative it depending on the ability of the country to increase the world price. Over all world welfare effects of export tax also negative, this is due to both production and consumption efficiency loss in exporting and importing country (Anania, 2013).

In addition, export tax policy results income distribution effect from producer to consumer in the same sector as well as from other sectors. If export tax is imposed on raw commodity results low domestic price of raw commodity in the domestic market, this subsidize the domestic processor industry that used this raw commodity, this shows income transfer from raw commodity producing sector to the processing industry. Export tax policy encourage the processing industry because the industry gain competitiveness in the international market however, it harm the raw commodity producing sectors (Piermartini, 2004).

4. Conceptual framework and analytical methods of CMS

The CMS model was first proposed by Tyszynski (1951) to analyse export growth. According to Fleming and Tsang (1956), a change in export share not only depends on a change in competitiveness, but also depends on the conditions of world demand. Fleming and Tsang (1956) analysed the variation in export through the difference between export revenues and constant export share revenues by applying CMS methods.

Leamer and Stern (1970) faced an inconsistency problem after conducting further research on the correlation between export and changes in the structure of world trade. Richardson (1971) showed that commodity composition and market distribution affect the calculation result when the market distribution effect is included in the analysis. He suggested three solutions to solve the problem; namely use different base weights to calculate multiple CMS values, select appropriate and effective competitors to represent the whole world with regard to a given exporter.

The CMS model has been widely used to evaluate trade policy and its implications (Amzul, 2010). The analysis basically decomposes export growth into four components; namely the market size effect, the market composition effect, the commodity composition effect, and the

competitiveness effect (Richardson, 1971). The market size effect shows that the country's export growth is caused by an increase in market destination imports. Market composition effect indicates that the country can concentrate on a relatively growing market compared to the world market. Commodity composition effect shows whether a country is concentrated on a commodity whose market is expanding rapidly. Lastly, the competitiveness effect is the residual of the CMS, which is not explained by the other three effects. It is also assumed that the role of domestic factors of the exporting countries is dominant.

The formula for the constant market share is as follows (Tyers, *et.al*, 1985)

$$\frac{X_t - X_0}{X_0} = g + \frac{\sum_i (g_i - g) X_{0i}}{X_0} + \frac{\sum_i \sum_j (g_{ij} - g_i) X_{0ij}}{X_0} + \frac{\sum_i \sum_j (X_{tij} - X_{0ij} - g_{ij} X_{0ij})}{X_0}$$

Where :

$g = \frac{W_{(t)} - W_{(0)}}{W_{(0)}}$	growth rate of world leather product export
$g_i = \frac{W_{(t)i} - W_{(0)i}}{W_{(0)i}}$	growth rate of world export for leather product i
$g_{ij} = \frac{W_{(t)ij} - W_{(0)ij}}{W_{(0)ij}}$	growth rate of country j import of leather product i
$\frac{X_t - X_0}{X_0}$	Ethiopia leather export growth
$\frac{\sum_i (g_i - g) X_{0i}}{X_0}$	commodity composition effect
$\frac{\sum_i \sum_j (g_{ij} - g_i) X_{0ij}}{X_0}$	market composition effect
$\frac{\sum_i \sum_j (X_{tij} - X_{0ij} - g_{ij} X_{0ij})}{X_0}$	competitiveness effect

X_t = Ethiopia's total leather product export value at year t

X_0 = Ethiopia's total leather product export value at base year

$X_{(t)i}$ = Ethiopia's leather product export value at year t for leather product i

$X_{(t)j}$ = Ethiopia's total leather product export value at year t to country j

$X_{(t)ij}$ = Ethiopia's leather product export value at year t for leather product i to country j

$W_{(t)}$ = world's total export value for all leather product at year t

$W_{(t)i}$ = world's total export value at year t for leather product i

$W_{(t)j}$ = world's total export value at year t to country j

$W_{(t)ij}$ = world's total export value at year t for leather product I to country j

Where:

t = current year (2013)

0 = base year (2007)

i = specific product (4101, 4102, 4103, 4104, 4105, 4106, 4107, 4112, 4113, and 64)

j = importing destinations (Italy, China, Hong Kong, and the USA)

This study utilized secondary data from the year in 2000-2014 from both national and international data sources. Constant Market Share (CMS) model was used to analyse the export competitiveness of Ethiopia's leather industry, appropriate and effective competitor exporting countries (South Africa and Nigeria) were selected and 2007 was used as base year and 2013 was considered after export tax. Four main importing countries (Italy, China, Hong Kong and USA) were selected to analyse Ethiopia's raw hides and skins, unfinished and finished leather products market position in the world. The HS code for the leather products covered in the analysis are indicated in the next table (Table 3).

Table 3: Raw hides and skin and leather product according to HS code 2 & 4 digit

No.	"HS" code	Specification	Product categories
1	4101	Raw hides & skins of bovine/equine animals	Whole hides and skins of bovine animals (fresh or wet-salted or dry-salted)
2	4102	Raw skins of sheep or lambs	Raw skin of sheep or lamb with wool or without wool, fresh, salted, dried, pickled
3	4103	Raw hides and skins nes	Raw hides and skins of goats or kids (fresh or preserved)
4	4104	Leather of bovine/equine animals	Bovine leather pre-tanned or tanned or full grains or wet-blue
5	4105	Sheep/lamb skin leather	Sheep or lamb skin leather (without wool or pre-tanned)
6	4106	Goat/kid skin leather	Goat or kid skin leather (without hair or pre-tanned)
7	42	Articles of leather, harnesses and travel goods	Articles of apparel and clothing accessories of leather or composition leather, handbags
8	64	Footwear, gaiters, and the like parts	Footwear with uppers of leather or composition of leather
9	4107, 4112 & 4113	Leather further prepared after tanning or crust and leather of other animals	Leather further prepared after tanning or crusting, including parchment-dressed leather, of other animals, without wool or hair on, whether or not split

Source: ITC

5. Results and Discussions

The total export value of Ethiopia raw hides and skins and leather products were US\$105 433 000 and US\$135 052 000 in 2007 and 2013 respectively. This is a 28% export value increase in 6 year time. Meanwhile, the world demand for raw hides and leather products in the same period increased from US\$ 15 7662 088 to US\$235 267 554 (i.e. a 49% increase). This is an indication for increase in the world demand of leather products during this period. In Ethiopia raw hides and skins and semi-processed leather products contributed 82.84% of the total leather export value in 2007. Conversely, in 2013, raw hides and skins and semi-processed leather products exports decreased significantly to 0.22%. Surprisingly, finished leather products including footwear exports increased significantly from 17.16% in 2007 to 99.78% in 2013 (see Table 4). This clearly demonstrates how implementation of an export taxes likely results in a shift from exporting raw hides and skins and semi-processed leather products to finished leather products and footwear exports.

Table 4: Ethiopia's RHS and leather products export share

Product	2007				2013			
	Ethiopia		World		Ethiopia		World	
	Value (000) USD)	%	Value (000) USD)	%	Value (000)	%	Value (000) USD)	%
RHS	87 340	82.83	14 541 736	9.22	301	0.22	16 975 131	7.22
FLH	18 093	17.17	142 866 958	90.78	134751	99.78	218 292 423	92.78
Total	105 433	100.00	15 7662 088	100.00	135 052	100.00	235 267 554	100.00

Source: Author's calculation based on ITC data, 2006, 2007, 2013 & 2014

The next table demonstrate Ethiopia export share in global market. In terms of market share, Ethiopia held 0.057% export share of raw hides and skins and leather products in 2013, which had decreased from by 0.01% compared to 0.067% export share in 2007 (Table 5). The decrease in Ethiopia's market share is due to a decrease in raw hides and skins and semi-processed leather products exports. This was reflected by a significant increase in export of Ethiopia's finished leather products in the world market, particularly for product ("HS" 4107, "HS" 4112 and "HS" 4113).

Table 5: Ethiopia's RHS and leather products export in world market share

Product code	Market Share (%)			
	2006	2007	2013	2014

4101	0.184	0.101	0.000	0.000
4102	2.544	2.368	0.000	0.000
4103	0.572	0.726	0.000	0.000
4104	0.038	0.079	0.000	0.000
4105	4.341	5.477	0.053	0.021
4106	3.059	3.154	0.004	0.016
42	0.000	0.000	0.004	0.006
64	0.004	0.018	0.022	0.022
FLH	0.043	0.062	0.599	0.516
Total	0.057	0.067	0.057	0.049

Source: Author's calculation based on ITC data, 2006, 2007, 2013 & 2014

Regarding export destinations, Italy was the largest market destination for both Ethiopia's raw hides and skins and finished leather products in 2007. The value reached US\$37 816 000 (43.30%) and US\$8 783 000 (48.54 %), respectively of Ethiopia's total raw hides and skins and finished leather products export (see Table 6). However, in 2013 the value of raw hides and skins imported by Italy declined significantly to zero. Meanwhile, the value of finished leather products import increased from US\$8 783 000 in 2007 to US\$17 998 000 in 2013. However, the share of Italy's imported finished leather products from Ethiopia's total export value of finished leather products declined from 48.54% in 2007 to 13.36% in 2013 and was replaced by the Chinese and USA markets (Table 6).

Table 6: RHS and finished leather products importing countries from Ethiopia

Importer	Total RHS imported value (000USD)				Importer	Total finished leather products imported value (000 USD)			
	2007	Share (%)	2013	Share (%)		2007	Share (%)	2013	Share (%)
World	87 340	100.00	301	100.00	World	18 093	100.00	134 751	100.00
China	11 612	13.30	0	0.00	China	635	3.51	23 861	17.71
Italy	37 816	43.30	0	0.00	Italy	8 783	48.54	17 998	13.36
Hong K	3 492	4.00	59	19.60	USA	634	3.50	22 403	16.63

Source: Author's calculation based on ITC data, 2007 & 2013

China was the second largest market destination for Ethiopia's raw hides and skins and finished leather products in 2007, which contributed 13.30% and 3.51%, respectively of Ethiopia's total export value of raw hides and skins and leather products (Table 6). In 2013, the share of raw hides and skins decreased to 0.00% likely due to the export tax. However, the share of Ethiopia's finished leather products in Chinese import increased from 3.51% in 2007 to 17.71% in 2013, indicating the replacement of Italians market to Chinese market, and China become the top destination. USA was the second export destination next to China for Ethiopia's finished leather products in 2013, with a market share of 16.63% of Ethiopia's

total finished leather products export value. Hong Kong was the third export destination for Ethiopia's raw hides and skins export in 2013, with a market share of 19.60% of the total raw hides and skins export value of Ethiopia (see Table 6).

Constant Market Share (CMS) Results

Ethiopia's raw hides and skins and leather products' market share in selected markets using a constant market share approach is presented in Table 7. In this study, the competitiveness value indicates the change in percentage points; the greater the positive the value, the better the competitiveness. The competitiveness of Ethiopia's raw hides and skins and semi-processed leather products ("HS" 4101 to "HS"4106) were very low in all selected countries, namely Italy, China, and Hong Kong. However, Ethiopia's finished leather product (FLH) was positive value, indicates that high competitiveness in all selected markets except in USA (see Table 7).

Table 7: Competitiveness of Ethiopian RHS and FLH (change in percentage points)

Market	Specific product imported								
	4101	4102	4103	4104	4105	4106	42	64	FLH
Italy	-0.036	-0.098	-0.014	-0.015	-0.117	-0.141	-0.010	-0.387	0.872
China	-0.008	-0.104	0.000	-0.023	-0.029	-0.045	0.000	0.015	1.273
Hong Kong	-0.006	0.000	0.000	-0.012	-0.014	-0.056	0.002	0.000	1.950
USA	0.000	0.000	0.000	0.000	0.000	0.000	0.120	1.112	-0.027

Source: Author's calculation based on ITC (2015) data

Hong Kong is the main importer of Ethiopia's leather further prepared after tanning or crust and leather of other animals, with a change in percentage points 1.950; followed by China (1.273). The positive and high competitiveness of Ethiopia's finished leather products shows that Ethiopia's exports of finished leather products increased in fast-growing markets; namely China, Hong Kong, and Italy. Hong Kong was also the main importer of Ethiopian articles of leather, as indicated by its positive coefficient of 0.002. The USA was a major importer of Ethiopia footwear (more than other leather products) and its competitiveness value was 1.112 (see Table 7).

The CMS model was used to evaluate data for 2007 and 2013 and decomposed export growth into four components. The positive value of Ethiopia's leather products' export growth (2.55) comes from four components; namely market size (0.695), the commodity composition effect (-0.132), the market composition effect (-0.262), and the competitiveness effect (2.25). The negative commodity composition effect (-0.132) and the market composition effect (-0.262) show that the imposition of the 150% export tax on raw hides and skins in 2008 and 150% export tax on crust leather in 2012 likely affected market destinations and commodities exports. The export tax led to the expulsion of all raw hides and skins and most unfinished leather products out of the market (those countries importing such products decreased) and not growing faster than the world market (see Table 8).

On the other hand are the positive competitiveness effect (2.25) and the market size effect (0.695). The positive value of the competitiveness effect shows that the implementation of the export tax on raw hides and skins and crust leather products led to an increase in the competitiveness of Ethiopia's leather industry. The positive market size effect (0.695) indicates that the world demand for leather products had a positive trend during the period of 2007 and 2013 (see Table 8).

Table 8: Ethiopia's total leather products export growth, 2007 and 2013

Component	Value
Export growth	2.551
Commodity composition effect	-0.132
Market composition effect	-0.262
Competitiveness effect	2.250
Market size effect	0.695

Source: Author's calculation based on ITC (2015) data,

Even though Ethiopia has negative RHS export growth (-0.53) due to the export tax, the overall Ethiopia's leather products export growth was positive (2.55) and greater than Nigeria; but still less than South Africa. The export tax on RHS and semi-finished leather products led to higher export growth in finished leather products (3.08). This value is greater than both South Africa's and Nigeria's finished leather products export growth (2.09 and 2.39, respectively). South Africa has a higher RHS export growth compared to Ethiopia and Nigeria (see Table 9).

The commodity composition effects of finished leather products in all three countries are negative, indicating that the finished leather products exported by these countries are growing slower than the world growth. However, the commodity composition effect of RHS is positive in Ethiopia and South Africa, meaning the RHS products exported by the two countries are more demanded than others. The market composition effect for both RHS and FHL products are negative for the countries except a positive FLH for Nigeria. The negative value indicates that the market destinations for these specific products, which were exported by those countries, are growing slower than the rest of the world. All countries' competitive effects are positive; except Ethiopia's RHS. The competitiveness effect of Ethiopia's FLH products is higher than South Africa's and Nigeria's, which ultimately led to positive total export growth of Ethiopia's leather products. The positive competitive value indicates that the country's export growth of total leather products is due to the competitiveness effect, rather than commodity and market effects (see Table 9).

Table 9: Leather products export growth of Ethiopia, South Africa, and Nigeria's

Components	Exporting Countries					
	Ethiopia		South Africa		Nigeria	
	RHS	FLH	RHS	FLH	RHS	FLH
Export growth	-0.529	3.080	0.969	2.090	0.095	2.390
Commodity composition effect	0.093	-0.224	0.173	-0.232	-0.011	-0.289
Market composition effect	-0.072	-0.190	-0.122	-0.016	-0.306	0.062
Competitive effect	-0.717	2.697	0.745	1.81	0.242	2.090
Market size	0.167	0.528	0.167	0.528	0.167	0.528

Source: Author's calculation based on ITC (2015) data

The overall leather products export growth of Ethiopia, South Africa, and Nigeria were 2.551, 3.059, and 2.485, respectively (see Table 10). These positive values of export growth are the result of competitiveness effect as all three countries scored negative on the commodity composition effect and the market composition effect.

Table 10: Total leather products' export growth of Ethiopia, South Africa, and Nigeria's

Components	Exporting Countries		
	Ethiopia	South Africa	Nigeria
Export growth	2.551	3.059	2.485
Commodity composition effect	-0.132	-0.138	-0.243

Market composition effect	-0.262	-0.059	-0.300
Competitive effect	2.250	2.560	2.333

Source: Author's calculation based on ITC (2015) data

The results indicate that Ethiopia had positive finished leather products' export growth and negative raw hides and skins and semi-processed leather products' export growth; however, the overall export growth was positive, which means that the increase in finished leather products' export is greater than the decline in raw hides and skins export.

6. Conclusions

The aim of this paper is to examine the effect of export tax on the competitiveness of Ethiopia leather industry. The model result shows that, competitiveness of Ethiopia's raw hides and skins and semi-processed leather were very low in all selected countries, which are Italy, China and Hong Kong. However, Ethiopia's leather further prepared after tanning or crust leather of other animals was high competitive in all selected markets. Ethiopia's footwear was also gain high competitiveness in USA market. For more than 50 years, Italy was the main destination (imports more than 60 percent) of Ethiopia's raw hides and skins and semi-finished leather products. However, after export tax market destination shift to Asian markets (i.e China, Hong Kong and India). This indicate that, in the past few years the industry has been made to focus on valued added products mainly due to policy measure taken by the government which has put the sector on the right path as can be understood from the above descriptions and indicators. As a result, currently finished leather products, shoes and leather gloves export products have ensure tangible technology transfer. In addition to this, these policy measures leads to an increased foreign direct investment as well as highly contributed for creating job opportunities for the citizens in the leather industry sectors. However, government policy has favoured foreigners who have access to capital and better technology (Mcmillan, 2012).

References

- Abebe, G. & Schaefer, F. 2013. *High Hopes and Limited Successes: Experimenting with Industrial Policies in the Leather Industry in Ethiopia*. Working Paper 011. Addis Ababa, Ethiopia: Ethiopian Development Research Institute (EDRI).
- Amin, A. 2002. Spatialities of Globalisation. *Environment and Planning A*, 34: 385-400.
- Amzul, R. 2010. Export Competitiveness of Indonesia's Palm Oil Product. *Trends in Agricultural Economics* 3: 1-18.
- Anania, G. 2013. *Agricultural Export Restrictions and the WTO: What Options Do Policy-Makers Have for Promoting Food Security?* Geneva, Switzerland: International Centre for Trade and Sustainable Development (ICTSD).
- Bayou, K. 2005. *Country Paper – Ethiopia*. Common Fund for Commodities (Technical Paper No. 47). Pre-slaughter Defects of Hides/Skins and Intervention Options in East Africa: Harnessing the Leather Industry to Benefit the Poor. Proceedings of a Regional Workshop. Addis Ababa, Ethiopia. 18 – 20 April 2005.
- Berg, M.A. & Krueger, A.O. 2003. *Trade, Growth, and Poverty: A Selective Survey*. Washington, D.C., USA: International Monetary Fund (IMF).
- Bickerdike, C.F. 1906. The Theory of Incipient Taxes. *The Economic Journal* 16: 529-535.
- Bowen, H.P. & Pelzman, J. 1984. US Export Competitiveness: 1962 – 77. *Applied Economics* 16: 461-473.
- Brautigam, T.M. 2011. *Flying Geese in Ethiopian Leather Industry? Understanding Asian/Chinese Impact on the Leather Value Chain*. [Online]. Retrieved from <http://www.theigc.org/wp-content/uploads/2014/08/Margaret-McMillan-Firm-capabilities-GW2012.pdf>
- Central Statistical Agency (CSA) of Ethiopia. 2013. *Report on Livestock and Livestock Characteristics (Private Peasant Holdings). Agricultural Sample Survey 2012/13 [2005e.C.] Volume II*. Statistical Bulletin 570, II (April). Addis Ababa, Ethiopia: CSA.
- Centre for Economic Policy Research (CEPR).
- Fagerberg, J. & Sollie, G. 1987. The Method of Constant Market Shares Analysis Reconsidered. *Applied Economics* 19: 1571-1583.
- Food and Agriculture Organization (FAO). 2013. *World Statistical Compendium for Raw Hides and Skins, Leather and Leather Footwear: 1993 – 2012*. Rome, Italy: Trade and Markets Division Food and Agriculture Organization of the United Nations.
- Federal Democratic Republic of Ethiopia (FDRE). 2010. *Report on Small Scale Manufacturing Industries Survey*. Addis Ababa, Ethiopia.

- Fleming, J.M. & Tsiang, S.-C. 1956. Changes in Competitive Strength and Export Shares of Major Industrial Countries. *Staff Papers: International Monetary Fund* 5: 218-248.
- Goldberg, P.K. & Pavcnik, N. 2007. Distributional Effects of Globalization in Developing Countries. *Journal of Economic Literature* 45(1): 39-82.
- Jing, Z. 2014. *The Effect of Export Taxes on Ethiopia's Leather Industry*. [Online]. Retrieved from: http://Gateway.Proquest.Com/Openurl?Url_Ver=Z39.88-2004&Res_Dat=Xri:Pqdiss&Rft_Val_Fmt=Info:Ofi/Fmt:Kev:Mtx:Dissertation&Rft_Dat=Xri:Pqdiss:1558600.
- Karapinar, B. 2011. *Export Restrictions on Natural Resources: Policy Options and Opportunities for Africa*. Switzerland: World Trade Institute, University of Bern.
- Kock, K. 1969. *International Trade Policy and the GATT: 1947 – 1967*. Stockholm Economic Studies, New Series. Stockholm. Almqvist and Wiksell.
- Laborde, D., Estrades, C. & Bouët, A. 2013. A Global Assessment of the Economic Effects of Export Taxes. *The World Economy* 36: 1333-1354.
- Leamer, E. E. & Stern, R.M. 1970. *Quantitative International Economics*. Boston: Allyn and Bacon.
- Marks, S.V., Larson, D.F. & Pomeroy, J. 1998. Economic Effects of Taxes on Exports of Palm Oil Products. *Bulletin of Indonesian Economic Studies* 34: 37-58.
- Piermartini, R. 2004. *The Role of Export Taxes in the Field of Primary Commodities*. World Trade Organization (WTO) Discussion Paper. Geneva, Switzerland: WTO.
- Richardson, J.D. 1971. Some Sensitivity Tests for a "Constant-Market-Shares" Analysis of Export Growth. *The Review of Economics and Statistics* 53: 300-304.
- Solleder, O. 2013. *Trade Effects of Export Taxes*. Graduate Institute of International and Development Studies Working Paper No. 08/2013. Geneva, Switzerland: The Graduate Institute.
- Tyres, R., Phillips, P. & Findlay, F. 1987. ASEAN and China Exports of Labour-Intensive Manufactures: Performance and Prospects. *ASEAN Economic Bulletin* 3(3): 12-17.
- Tyszynski, H. 1951. World Trade in Manufactured Commodities: 1899-1950. *The Manchester School*, 19: 272-304.
- United Nations Conference on Trade and Development (UNCTAD). 2004. *Commodity Yearbook, Trade and Development Report*. Geneva, Switzerland: UNCTAD.
- United Nations Industrial Development Organization (UNIDO). 2012. *Technical Assistance Project for the Upgrading of the Ethiopian Leather and Leather Products Industry*:

Independent Evaluation Report. UNIDO Project Number: Te/Eth/08/008. Vienna, Austria: UNIDO.

United States Agency for International Development (USAID). 2013. *Agricultural Growth Program: Livestock Market Development End-Market Analysis for Meat/Live Animals, Leather and Leather Products, Dairy Products Value Chains*. [Online].Retrieved from:
<https://www.USAID.gov/Sites/Default/Files/Documents/1860/AgpLmd%20end%20market%20analysis.pdf>.

Urgessa, B.G. 2013. Defect Assessment of Ethiopian Hide and Skin: The Case of Tanneries in Addis Ababa and Modjo, Ethiopia. *Global Veterinaria* 11(4): 395-398.