



SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY!



Addis Ababa University
College of Business and Economics
International Business Program

**International Competitiveness of Ethiopia's Leather and leather
products industry to the EU-28 market**

**A Thesis Submitted in partial fulfilment of the requirements for
the Degree of Master of Art in Business**

By: - Ibrahim Mussa

ID No. – GSR/4517/12

Advisor: Dr. Lakew Alemu

September, 2022

Addis Ababa, Ethiopia

Statement of Declaration

I, Ibrahim Mussa hereby declare that this Master thesis “International Competitiveness of Ethiopia's Leather and leather products industry to the EU-28 market “is my original work. I have carried out the present study independently with the guidance and support of the research advisor Dr. Lakew Alemu. Any other research or academic sources used here in this study have been duly acknowledged.

I further confirm that this study has not been submitted for the award of any degree or diploma program in this or any other institution.

Ibrahim Mussa

Name of Author

Signature

Date

Statement of Certificate

This is to certify that this master's thesis entitled “International Competitiveness of Ethiopia's Leather and leather products industry to the EU-28 market “submitted by Ibrahim Mussa is his own work and has been submitted for examination with my approval as a university advisor.

I further confirm that this study has not been submitted for the award of any degree or diploma program in this or any other institution.

Name of Advisor

Signature

Date

Dr. Lakew Alemu

Addis Ababa University

School of Graduate Studies

This is to certify that the thesis prepared by Ibrahim Mussa, entitled: International Competitiveness of Ethiopia's Leather and leather products industry to the EU-28 market and submitted in partial fulfilment of the requirements for the degree of Master of Arts in International Business complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

APPROVED BY BOARD OF EXAMINERS

External examiner: _____ Signature _____ Date _____

Internal examiner: _____ Signature _____ Date _____

Advisor: _____ Signature _____ Date _____

Chair of Department: _____ Signature _____ Date _____

Acknowledgements

First and foremost, I would like to thank the Almighty divine energy, for giving me the strength and inspiration for the finalization of this thesis despite the difficulty of life, because of covid-19 which disrupts the system of living for all mankind. Secondly my special thanks to my advisor, Dr. Lakew Alemu for his guidance, Comments and inspiration throughout the development of this study.

Finally, I express my deep gratitude to my beloved family, especially my brother Abdu, for providing me with reliable support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them.

Abstract

In our quickly developing globalized reality, the competitiveness of a particular national economy and its business environment is a critical factor for the economic, political and societal development of a country as well as for economic alliances. In the light of substantial improvement in export growth and changing internal and external economic environment. The aim of this paper is to investigate the major sources of export performance, the changes in international competitiveness and comparative advantages of Ethiopia's leather and leather products export to the EU-28 market and analyze the reasons for these changes for the period between (2009–2019).

The performance indicators employed for the study are two measures of specialization; the Revealed Comparative Advantage (RCA) and the Revealed Symmetry Comparative Advantage (RSCA) and a measure of competitiveness, the Market Share (MS) Index using yearly data from 2009 -2019. To infer competitiveness from the changes in export value over time, a first- level Constant Market Share (CMS) analysis was used to decompose the changes in export value into a structural effect, competitive effect and second-order effect. To augment this technique, an empirical analysis on the determinants of Ethiopia's leather and Leather products export was conducted using the Armington trade model by OLS regression on yearly basis, with quantity market share as the dependent variable. The result of the indices of specialization, shows Ethiopia has a comparatively high RCA in leather and leather products exports to the EU-28 over the selected economies during the period of study. This indicates that Ethiopia has a comparative advantage which is significant potential for specialization in leather and leather products export. In terms of competitiveness, Ethiopia market share value has declined over the study period. Judging by the operational definition of competitiveness, Ethiopia has been less competitive. The CMS decomposition of changes in export values indicates that the changes in export value of Ethiopia can be attributed to structural effect (growth of the market) mainly. The result of empirical analysis indicates that level of specialization and relative price ratio has a strong impact on the Quantity market share of Ethiopia in EU-28 market, on the other hand, exchange rate and trade agreements seem less important determinants for the success of Quantity market share in the target market.

Keywords: *Ethiopia Export, Export growth, market share, specialization, competitiveness, relative export price, Determinants of market share*

Table of Contents	Page No
Acknowledgements	i
Abstract	ii
Table of Contents	iii
Acronyms	vi
List of Tables	viii
List of Figures	ix
CHAPTER ONE.....	1
1.1 Background of the study	3
1.1.1 The structure of the Ethiopian LLP sector	3
1.1.2 The Ethiopian LLP SECTOR	6
1.1.3 Productive capacity of Ethiopia's leather sector and export destination	6
1.2 Statement of the problem.....	8
1.3 Research Question	10
1.4 Objectives of the study.....	11
1.4.1 The General objectives.....	11
1.4.2 Specific objectives of the study	11
1.5 Significance of the study	11
1.6 Scope and limitation of the study.....	11
1.7 Organization of the paper	12
CHAPTER TWO.....	14
Review of Related Literature.....	14
2.1.1 Theoretical Literature review	14
2.1.2 Arguments on international competitiveness	19
2.1.3 Competitiveness indicators	21
2.1.4 Determinants of export performance	28

2.1.5 Export performance measuring models.....	32
2.2 Empirical Literature review	40
2.2.1 Empirical Evidence of Export performance on international competitiveness	40
CHAPTER THREE.....	45
Research Design and Methodology	45
3.1 Research Design.....	45
3.2 Target Population and sample size.....	45
3.3 Data and Data Collection Method.....	45
3.4 Sources and Type of Data Collected	45
3.4.1 Items of leather and leather products	46
3.4.2 Price.....	47
3.4.3 Exchange rate.....	47
3.4.4 Policy Effect	48
3.5 Methods of Data Analysis	49
3.6 Definition of Variables.....	49
CHAPTER FOUR.....	50
Results and Discussion	50
4.1 Descriptive Statistics	50
4.2 Specialization.....	53
4.3.2 Constant Market Share (CMS) analysis	65
4.4 Regression result	70
4.5 Discussion	73
CHAPTER FIVE	76
CONCLUSION AND RECOMMENDATIONS	76
5.1 CONCLUSION	76
5.2 POLICY IMPLICATIONS	77
5.3 Suggestions for Further Research	78

References	79
Appendix 1	88
Appendix 2	89
Appendix 3	90
Appendix 4	91
Appendix 5	92

Acronyms

ACP	African Caribbean and pacific
CAGR	compound annual growth rate
CMS	Constant market share
CMT	cut-make-trim
CN	Combined nomenclature
ECC	Ethiopian custom commission
EU-28	a group of 28 countries (Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom) that operates as an economic and political block
FAO	Food and agriculture organization
FDI	Foreign direct investment
FLP	Finished leather products
GDP	Growth domestic product
HS	Harmonized system
ITC	International trade centre
IPLC	International product life cycle
LIDI	Leather industry development institute
LLP	Leather and leather products
MSI	Market share index
NBE	National bank of Ethiopia
OBM	original brand manufacturing
ODM	original design manufacturing
OEM	original equipment manufacturer
OECD	Organization for economic co-operation and development
RCA	Revealed comparative advantage
RSCA	Revealed symmetric comparative advantage
RTA	Relative trade advantage
RXA	Relative export advantage
RMA	Relative import advantage

RHS	Raw hides and skin
RTA	Regional trade agreements
SITC	Standard international trade classification
UNCTAD	United nation conference on trade and development
USAID	United states agency for international development
WCO	World custom organization
WB	World bank
WEF	World economic forum
WTO	World trade organization
WITS	World integrated trade solution

List of Tables

Table 1.1: Exports of leather products (HS42) by article (USD million, 2010-2017)	7
Table 1.2: Exports of leather products by country (USD million	8
Table 1.3: Volume of Ethiopia leather and leather products export to EU-28: (2009 -2019) in 100kg	9
Table 3.1 the products forming leather and leather products are covered by SITC codes given in the table below:.....	46
Table 3.2 Measurement of variables and expected Sign	49
Table 4.1 Descriptive Statistics of annual import of leather and leather products to the EU-28 market: (2009-2019)	50
Table 4.2 Relative price ratio of competitors	52
Table 4.3: Revealed comparative advantage (RCA) from 2009 - 2019	54
Table 4.4: Relative growth in Revealed Comparative Advantage (RCA) 2009=100	57
Table 4.5: Revealed symmetric comparative advantage (RSCA) from 2009-2019	58
Table 4.6: Market Share (Value) of leather and leather products exporting countries to the EU-28 from 2009-2019	59
Table 4.7: Average Market Share (Value), 2009-2011, 2012-2014 and 2015-2019.....	60
Table 4.8: Relative growth in Market Share (Value) 2009=100	61
Table 4.9: Market Share (quantity) of leather and leather products exporting countries to EU-28: 2009-2019	62
Table 4.10 Relative growth in market share (quantity) 2009=100.....	63
Table 4.11: Average Market Share (quantity), 2009-2011, 2012-2014 and 2015-2019	64
Table 4.12: CMS decomposition procedure	65
Table 4.13: Results of CMS decomposition of the change in export value	68
Table 4.14 Results of the regression analysis.....	71
Table 4.15 OLS regression result	72

List of Figures

Figure 1.1: Export share of leather skins and hides by markets and products (% , 1994-2017).....	5
Figure 1.2: Ethiopia’s leather and leather products exports (USD million, 1993-2017)	6
Figure 1.3 Ethiopia’s volume of leather and leather products export to EU-28 from 2009 to 2019 and percentage change.....	10
Figure 4.1 value of leather and leather products imported by EU-28 from 2009 to 2019 ..	51
Figure 4.2 Quantity of leather and leather products imported by EU-28 from 2009 to 2019	52
Figure 4.3 Revealed comparative advantage (RCA) from 2009 - 2019	56
Figure 4.5 Revealed symmetric comparative advantage (RSCA) from 2009-2019 4.3 Competitiveness	58
Figure 4.7: Relative growth in Market Share (Value) 2009=100.....	62
Figure 4.8: Market Share (quantity) of leather and leather products exporting countries to EU-28: 2009-2019	63
Figure 4.9 Relative growth in market share (quantity) 2009=100	64
Figure 4.10: CMS decomposition procedure.....	67

CHAPTER ONE

Introduction

These days, national competitiveness and how to boost it are key concerns for policy-makers in both developed and developing nations. There is no unifying approach to the topic of national competitiveness in the literature. Much research has been conducted on this issue, with varying results. Krugman, P. (1995).for example, views competitiveness to be the inverse of productivity.

According to the Organization for Economic Cooperation and Development (OECD), competitiveness is defined as "the ability of companies, industries, regions, nations, or supranational regions to generate relatively high factor income and factor employment levels on a sustainable basis while being and remaining exposed to international competition" Hatzichronoglou, T. (1996). Other research in the topic (Kharlamova, G., & Vertelieva, O. (2013)., p. 40; Porter, M., Sachs, J., & Warner, A. (2000). emphasise that national competitiveness refers to a country's economic structures and institutions that aid economic growth as a weight in the global economy's structure.

Furthermore, the European Competitiveness Report (European Commission, 2014) defines a competitive economy as one with a persistent high rate of productivity growth. According to the research, a country's economic competitiveness is also determined by the performance of its small and medium enterprise (S.M.E.) sector, as well as the development and employment potential of these enterprises. A country must surpass its competitors in research and innovation, entrepreneurship, competitiveness, education, and training in order to be competitive. According to the report, effective public administration is a crucial driver of E.U. countries' competitiveness.

From a similar standpoint, the International Institute for Management Development (2003) defines competitiveness as a nation's ability to create and maintain an environment in which enterprises can compete, as well as to manage the totality of its resources and competencies in order to increase its population's prosperity. Competitiveness is defined by the World Economic Forum (2016, p. 4) as "the combination of institutions, policies, and circumstances that influence the degree of productivity of an economy, which in turn determines the amount of wealth that the country may attain."

We can see from the examples above that competition is a fairly complicated notion. In general, competitiveness denotes a country's favourable position, particularly in international commerce, as well as its capacity to enhance its position. If a nation has strong rates of economic growth, which can provide a continual increase in real wages, it will not only be able to promote and support domestic businesses on the global market, but it will also aid in the creation of new employment. Under these conditions, the country's economy can be deemed competitive.

The notion of international competitiveness as it relates to national economies is well-known. Politicians, businesspeople, and economists all use it in everyday conversations when comparing the external (export, import, market share, or trade balance) performance of various nations. Indicators are created to demonstrate changes in the levels of various countries Competitiveness (e.g the relative price or cost indices regularly published by the IMF and the OECD, or the absolute measures produced by organisations such as the Geneva world economic Forum and the lausanne institute for management development).

Successful countries have a better understanding of the dynamics of competitiveness specially managers in international business, Although the activities among managers in international business is to deal with the import and export of product or services in international trade (Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. 1998).

However, there are conflicting views and an overall lack of research regarding how best to manage international Competitiveness in highly dynamic environments, where subject knowledge is rapidly and continuously evolving.

Through this paper, we want to evaluate international competitiveness through export performance measuring models, and test which economic factors are determinants of competitiveness of the sector. This paper enriches the research by using a trade data set regarding import and export data from Eurostat database, exchange rate data, trade agreements, for selected LLP exporters to the EU-28 market (namely Ethiopia, Brazil, Argentina, India and Nigeria) for a period of 10 years (2009-2019).

To achieve the goal of the paper and to test the major hypothesis, we use Descriptive analysis, an RCA index, CMS analysis, relative export price analysis and an Empirical

analysis by modelling Market share as a dependent variable and relative export price, RCA, exchange rate ratio, and trade agreements as independent variables on panel data.

The novelty of our research consists of the competitiveness analysis, comparative advantage, relative export price analysis, and identifying possible determinants for export growth on the industry market share of a country. Previous studies have considered fewer indicators as determinants of competitiveness, or have investigated fewer countries (sometimes only one specific country). The identification of the main determinants of international competitiveness of the Ethiopia's leather and leather product sector to the EU-28 market would help the international business managers to decide on which economic issues should intervene in order to enhance the international competitiveness of their industry at a country level.

1.1 Background of the study

1.1.1 The structure of the Ethiopian LLP sector

The Ethiopian LLP value chain can be roughly divided into five key segments: (i) the livestock sector, which is dominated by small-scale farmers; (ii) collectors and local traders that link farmers with tanneries; (iii) tanneries, which produce wet blue, crust and finally coated or finished leather. Tanneries export either directly with further manufacturing taking place abroad or supply (iv) local leather manufacturers (e.g. footwear, gloves, bags, jackets) that (v) may export to global buyers or supply the domestic market. Leather product manufacturers also need inputs besides hides, e.g. soles from sole producers and different types of, in the case of Ethiopia mostly imported accessories in the footwear sector.

The Ethiopian livestock sector largely involves small cattle farmers without many large-scale ranches. Around 12.5 million households, or 70% of the total population, depend fully or partly on cattle for their livelihoods (FAO, 2018). The production of skins and hides is of comparatively minor importance for the livelihood of farmers in comparison to the production of meat and dairy products, since skins and hides are only by-products of meat production. Ethiopia has one of the world's largest livestock populations with around 58 million cattle (the largest in Africa and 6th in the world), 29 million sheep (3rd in Africa

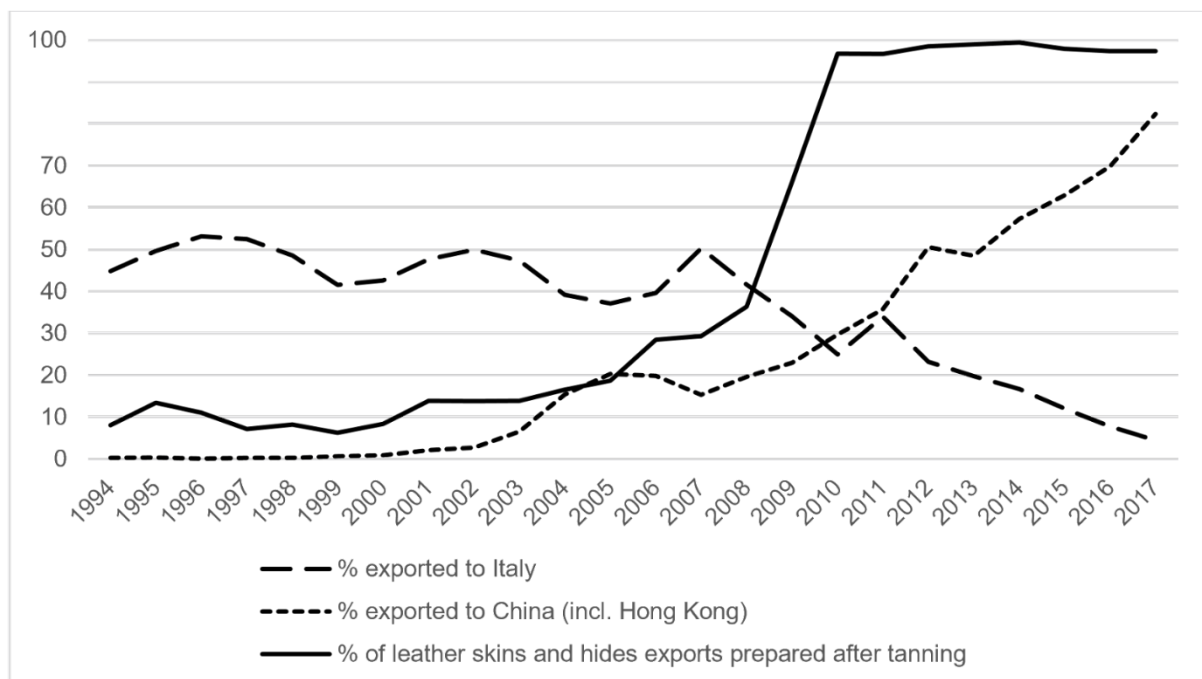
and 10th in the world) and 30 million goats (3rd in Africa and 8th in the world). The off-take rate is 14% for cows, 27% for goats and 40% for sheep (LIDI, 2017).

The key challenge in the livestock sector is the limited production of quality skins and hides due to parasitic skin diseases, traditional husbandry practices (flaying, branding, curing) and weak post-mortem management of skins and hides (backyard slaughtering and substandard collection, storage and transportation) (Abebe, G., and Schafer, F., 2015). There has been a stagnating trend of hides and skin supply to tanneries in recent years. What is more, interviewees have indicated that the quality has been deteriorating. In 2017, only 1.4 million bovine hides and 20 million sheep and goat skins-pieces were supplied to Ethiopian tanneries (LIDI, 2017).

Another challenge in the livestock sector is the seasonality of production in accordance with the three festival seasons in September (Ethiopian New Year, Meskel and Arefa), January (Ethiopian Christmas, Epiphany and wedding season) and May (Ethiopian Easter, Ramadan and wedding season). The seasonality of production and hence supply for a more or less uniform demand over the year lead to erratic price developments. As a result, most households in urban areas like Addis Ababa sell skins at or below the break-even point during holiday season in the last couple of years. At slack seasons, however, tanneries suffer from the lack of supply and are forced to buy at elevated prices. This was not the case for many years as either tanneries or raw hides and skin traders had the financial capacity and liquidity to absorb seasonal oversupply and store for slack seasons. In 2018, Ethiopia had 30 tanneries with 7,516 employees processing hides and skins to different types of finished leather. In 2018, the total wet-end installed capacity amounted to around 275 million square feet per year (LIDI 2018). The sector experienced significant FDI-inflows in recent years (10 out of the 30 companies were FDI in 2018), which indicates a significant shift in the sector's structure, the latter having been dominated by locally owned companies until the 2000s. FDI has been mainly attracted by raw material potential, competitive wages, preferential market access agreements and generally less stringent environmental practices. Some of these FDI-companies bought already existing tanneries and upgraded the facilities and products. The remaining FDI-companies invested mainly by dislocating and reconditioning their existing tannery and plant-machinery.

Since the late-2000s and in the context of comprehensive industrial policies and the introduction of the export tax on semi-processed leather, the sector successfully upgraded to the production and export of higher value-added finished leather products. The upgrading processes coincided with a shift in end-markets and increasing shares of FDI companies in exports. The key reason for the shift in end markets is the need for different buyers. The EU and in particular Italy used to be the key export market of semi-processed skins and hides, but the upgrading processes shifted end markets towards Asia, in particular China (Figure 1.1). In 2017, Ethiopia exported USD 86 million of finished leather mostly to China (incl. Hong Kong; 82% by value), the EU (12%; esp. Italy 5% and the UK 6%), India (2%) and Indonesia (2%). The increase of FDI-companies' share in leather exports from 32% in 2007/08 to 73% in 2017/18 is not only a consequence on increasing FDI investments, but also because locally-owned companies often lack the necessary capabilities and capacities to produce and export competitive finished leather, since the know-how necessary to produce and sell finished leather is significantly higher relative to semi-processed leather. (Grumiller,J., & Raza,w.,2019)

Figure 1.1: Export share of leather skins and hides by markets and products (% , 1994-2017)

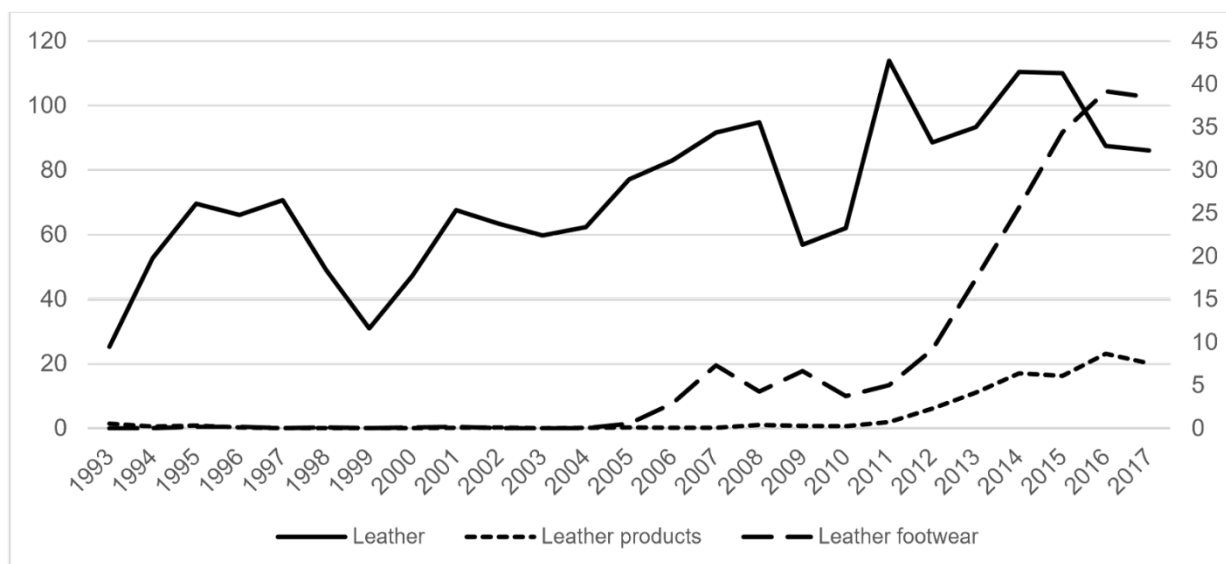


Note: Data represents global imports. % of leather skins and hides exports prepared after tanning includes HS410420, HS410620, HS410431 and HS410439. Data on leather exports includes raw hides and skins (HS 41). Source: UN Comtrade 2018 (WITS).

1.1.2 The Ethiopian LLP SECTOR

The expansion and upgrading processes are reflected in trade and employment data. The value of LLP exports increased from an average of USD 53 million between 1996 and 2000 to USD 135 million between 2013 and 2017 (UN Comtrade 2018: Figure 1.2). The increase in exports in recent years has been mostly driven by FDI companies in the leather footwear and gloves sub-sectors. Today, the most important leather exports include finished leather (USD 86.1 billion in 2017), leather footwear (USD 38.5 billion) and leather products (esp. Gloves and bags)(USD7.6billion).

Figure 1.2: Ethiopia’s leather and leather products exports (USD million, 1993-2017)



Note: Left hand scale: Leather (HS41, including raw hides and skins and pickled leather); Right hand scale: Leather products (HS42) and leather footwear (HS6403 and HS640510). Data represents global imports. Source: UN Comtrade 2018 (WITS)

1.1.3 Productive capacity of Ethiopia's leather sector and export destination

The leather products (excluding footwear) sector should be differentiated between manufacturers of leather bags, jackets, wallets and belts, and manufacturers of gloves. The first sub-sector is dominated by locally-owned SMEs, including three footwear manufacturers, producing bags, jackets, wallets and belts mainly for the local market. By

mid-2018, 42 formal companies produced leather products (excluding gloves and footwear), employing 1,285 thousand persons. Almost all of the locally-owned manufacturing companies have their own design and brand for the local market, but only a few of these companies have the capacity and capability to export a significant share of their production. In the leather products sub-sector, CMT and FOB are predominant, but some companies are also able to export their own designs and brands due to their small scale and more direct sales channels to retailers. The leather glove sub-sector has a fundamentally different dynamic since it is mainly driven by FDI. By mid-2018, four foreign-owned companies and one new Ethiopia's investment (Dev Impex Enterprise by Bahir Dar Tannery) employed a total of 1,148 persons. Ethiopia has a significant competitive advantage for the manufacturing of gloves due to the characteristics of its sheep leather and, in addition, there is only a small local and regional market for gloves due to the climatic conditions.

The increase of leather products exports since the early 2010s has been driven by FDI in the manufacturing of leather gloves. Exports of leather products increased from insignificant levels until the early 2010s to USD 7.6 million in 2017 (Figure 1.2). In 2017, the most important exported leather products were gloves (79% of leather product exports, excluding footwear), bags (11%) and cases (8%) (Table 1.1) Other products such as jackets, belts and wallets are currently of lesser importance. The US is the largest importer of Ethiopia's leather products (66% by value in 2017), followed by the EU (24%, in particular Germany, Italy and the UK), China (6%) and Japan (2%) (Table 1.2) (ibid)

Table 1.1: Exports of leather products (HS42) by article (USD million, 2010-2017)

Top exporting products	2010	2013	2017	% of exports (HS42)
Articles of apparel and clothing accessories (HS4203)	0.08	3.57	6.09	79.92
Gloves (HS420329)	0.06	3.55	5.99	78.61
Apparel, e.g. jackets (420310)	0.02	0.02	0.09	1.18
Trunks, cases, bags, etc. (HS4202)	0.19	0.57	1.53	20.08
Cases and containers with outer surfaces of leather etc. (HS420211 and 420291)	0.02	0.08	0.58	7.61
Handbags with outer surfaces of leather etc. (HS420221)	0.06	0.05	0.54	7.09
Handbags with outer surface of sheeting of plastics or textile materials (HS420222)	0.01	0.35	0.26	3.41

Others	0.00	0.01	0.00	0.04
Total (HS 42)	0.27	4.15	7.62	100
Note: Data represents global imports. Totals may not add up due to rounding. Source: UN Comtrade 2018 (WITS)		n, 2010-2	017)	
Table 1.2: Exports of leather products by country (USD million)				
Top importing countries	2010	2013	2017	% of exports (HS42)
United States	0.08	2.29	5.02	65.88
European Union	0.16	1.69	1.86	24.41
Germany	0.05	0.87	1.16	15.22
Italy	0.09	0.36	0.26	3.41
United Kingdom	0.02	0.07	0.22	2.89
China	0.00	0.00	0.44	5.77
Japan	-	0.12	0.16	2.10
Others	0.03	0.05	0.14	1.84
Total (HS 42)	0.27	4.15	7.62	100.00

Note: Data represents global imports. Totals may not add up due to rounding.

Source: UN Comtrade 2018 (WITS)

1.2 Statement of the problem

Export growth is seen as the engine of economic expansion, the primary source of foreign currency, and the primary component of globalization (Jordaan, A.C., & Eita, J.H., 2007).

Its growth results in economies of scale, increased production efficiency, job creation, capital formation, and improved resource allocation and distribution (Dar et al., 2013; Shahid, N., 2013; Mohammed, A. M., 2014 & UNCTAD, 2016; Njikam, O., 2018).

In Ethiopia, there is a huge gap between the livestock resource base of the country and the growth of its leather industry. Ethiopia's leather and leather product sector are one of the leading manufacturing sectors for Ethiopia. The sector bases itself on the country's livestock resources. Ethiopia possesses one of the world's largest livestock populations with 56.7 million cattle, 29.1 million sheep, and 29.3 million goats is eighth, twelfth and eighth place from the world respectively with a share of 2.75 percent from the world total (FAO, 2017). About 8 million of cattle hide 12 million of sheep skin and 8 million of goat

skin is available annually. The livestock sub-sector contributes about 12% of national GDP, over 45% of the agricultural GDP and 16% of total exports. This enormous population of livestock provides ample opportunity for the development of the leather industry in the country. This makes Ethiopia the 1st from Africa and the 10th from the world in its cattle population which enables the country to have a strong raw material base for the leather industry. As the share of these populations to total African livestock population is very significant there is a potential and possible strength for the country to source domestically produced hides and skins as an input for the domestic manufacturers in the leather sector. The country has a potential for price competitive and quality supply of skins and hides: The Ethiopia highland sheepskins have got a worldwide reputation in terms of quality, thickness, flexibility, strength, compact structure, and a clean inner surface. (ibid)

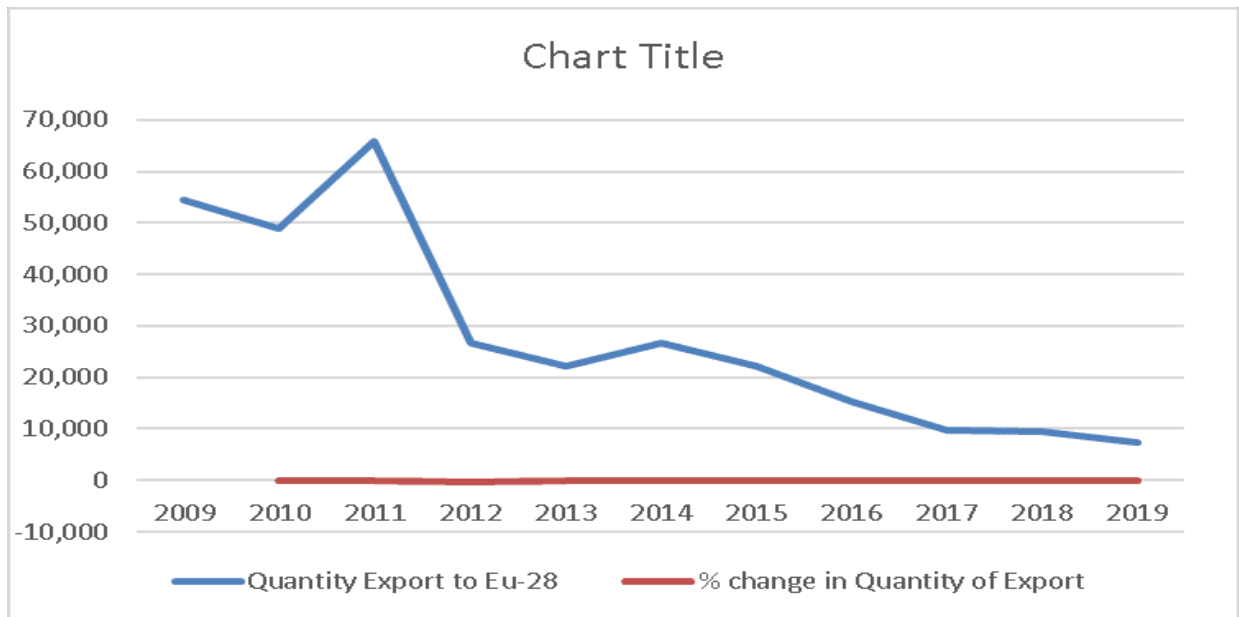
Despite the fact that Ethiopia has an enormous population of livestock which provides ample opportunity for the development of the leather industry in the country, the performance of leather and leather products exported to EU-28 since 2009 to 2019 is declining and vulnerable to constant fluctuations. From table 1.3. we can observe that the trend of Ethiopia's leather & leather products export to EU-28 from 2009 to 2019, which reveals that the sector being the main export item to the country and having a lot of resources in the sector, has become below expectation to the current periods.

Table 1.3: Volume of Ethiopia leather and leather products export to EU-28: (2009 - 2019) in 100kg

Indicator	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Quantity Export to Eu-28	54,351	48,870	65,894	26,591	22,061	26,655	22,169	15,371	9,627	9,408	7,410
% Change in Quantity of Export	-	-10%	35%	-60%	-17%	21%	-17%	-31%	-37%	-2%	-21%

Source: Eurostat

Figure 1.3 Ethiopia’s volume of leather and leather products export to EU-28 from 2009 to 2019 and percentage change



The export performance of Ethiopia with regard to volume exported to EU-28 in the period between 2009-2019, the country was only in the better performance in 2011 with relative growth of 11% compared to the study periods between 2009-2019.

Between 2009 and 2011, the average percentage was negative 12%, the same trend between the period 2012 to 2014 with negative 4% and the case getting worse in the Final period 2015 to 2019 with the negative 23% of the Quantity exported to EU-28.

So, taking into account the gaps mentioned in the preceding statement, this paper attempts to investigate whether a country’s exports have grown in line with its main competitors and whether a country’s comparative performance reflects a strong presence in high-growth regions or products or competitive gains in individual markets and the effect of changes in both level of standard exports and market share during the period. Although the country's comparative advantage and relative price is compared with selected competitors in the EU-28 market

1.3 Research Question

This study targeted to answer the following research questions: -

- What are the effects determining the change in the market share (Competitiveness) of Ethiopia’s leather and leather products exports to the EU-28 market?

1.4 Objectives of the study

1.4.1 The General objectives

- Whether a country's exports have grown in line with its main competitors and whether a country's comparative performance reflects a strong presence in high-growth markets or competitive gains in individual markets.

1.4.2 Specific objectives of the study

- To study the export performance of Ethiopia's leather and leather products industry.
- To analyze the comparative advantage of each Leather and leather product in the EU-28 market using the Revealed Comparative Advantage (RCA) method.
- To analyze the market share condition of Ethiopia's leather and leather products in the EU-28 market using Constant Market Share Model (CMS).
- To assess the relative export price of Ethiopia compared with selected countries.
- To identify the possible determinants of Quantity export share (Competitiveness)

1.5 Significance of the study

- The research is expected to identify the possible factors for change in export performance of the industry over the specified period.
- From the research findings, recommendation and conclusion to be stated will have a contribution by locating the determinant factors for further deep study and investigation by strategy and policy making institutions and International business managers especially in the international trade fields of managers

1.6 Scope and limitation of the study

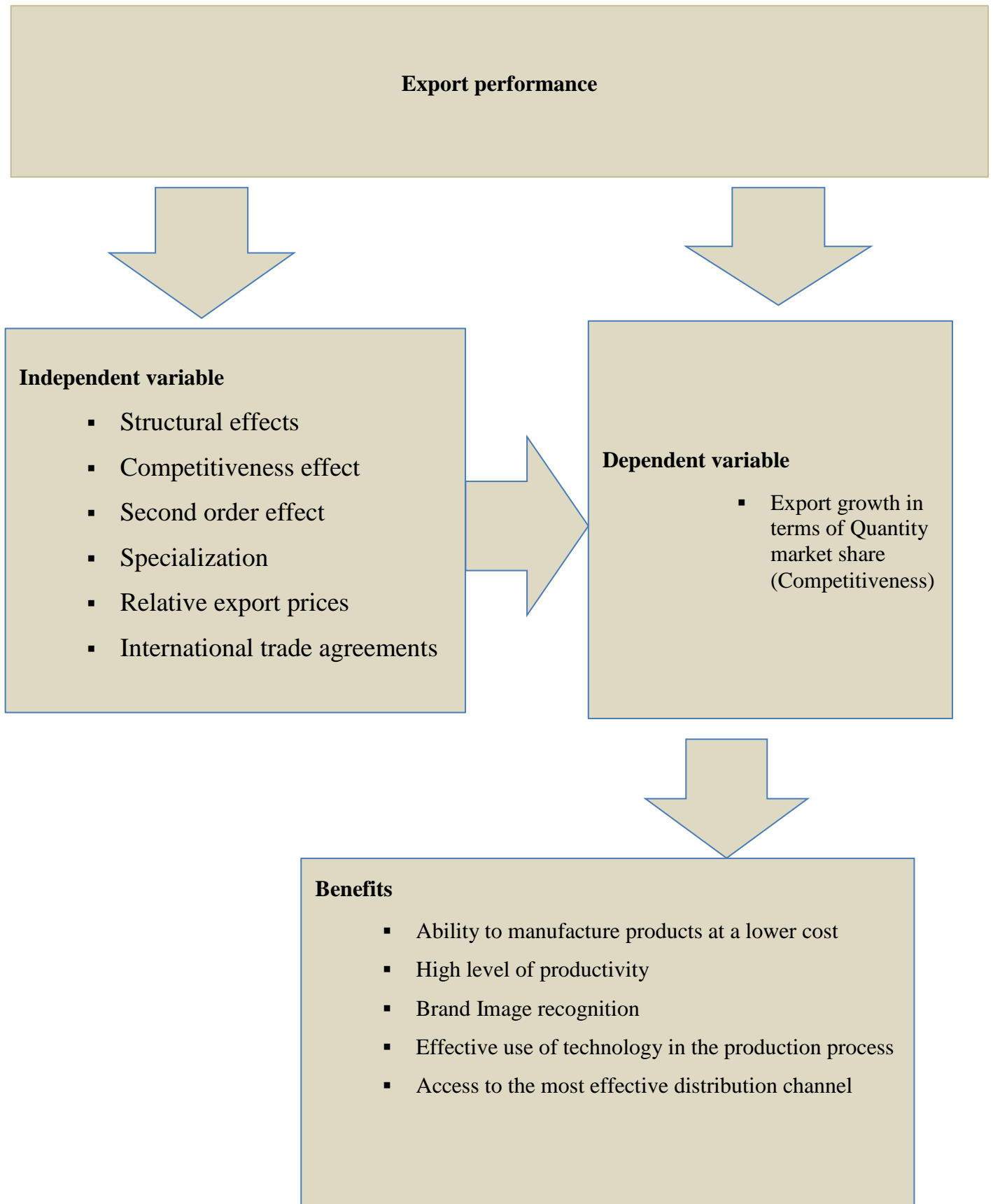
- This research paper aims to analyze the global Competitiveness of Ethiopia's Leather and leather products industry in the EU-28 market. so, its limited to items that Ethiopia able to export to Eu-28 that are listed under leather and leather products sections and its limited to products under heading sitc code 61 And shoes

and leather bags, parts, articles under other specified in Sitic code 83, travel goods, handbags and similar containers, Sitic code 84. Articles of apparel and clothing accessories. , Sitic code 85. Footwear and sitc code 89. Miscellaneous manufactured articles, n.e.s. are not included

- The main limitations of this study are the classification of goods under leather and leather products with different SITC, CN and HS code classification data extractions, and exclusive dependency of secondary data. Therefore, further study may be worthwhile prior to policy action based on finding of this research.

1.7 Organization of the paper

- This paper is organized and presented in five chapters. The first chapter will present the background of the study, statement of the problem, objectives of the study, significance of the study, scope and limitation of the study. Chapter two presents a review of related literature and chapter three presents“ data and methodology. Results and Discussion is presented in chapter four, finally conclusion and policy recommendation of the study is presented in chapter five.



CHAPTER TWO

Review of Related Literature

2.1.1 Theoretical Literature review

The major reason why countries trade with one another is economic. Essentially, it is the disparity in resource endowments of nations that necessitates international commerce." The unequal distribution of resource endowments, according to Dwivedi, D N. (2002, pp. 507-508), stimulates international commerce. "While some nations are better endowed with natural resources such as huge fertile and cultivable land, enormous mineral reserves, water, and forest resources, others are better equipped with money and technology," Dwivedi.

Furthermore, Jeannet, J., & Hennessey, H. (2001, p.38) proposed that "few persons in the world are completely self-sufficient," and therefore resources are transferred to close the sufficiency gap. In summary, nations trade with one another for the same reasons that individuals do; the primary reasons are the uneven distribution of resources around the world, and no nation is self-sufficient in producing and fulfilling its people. Furthermore, according to Dwivedi, D N (2002, p. 508), the benefit from trading is more essential. A variety of researchers have given their reasons and explanations for why nations trade with one another, and in the process of arguments and explanations, new ideas about new methods to cope with current events, problems, resources, and viewpoints have emerged.

Mercantilism

Several books claim that mercantilism was the first idea (or belief) of international commerce to develop in England in the mid-16th century. According to this international trade theory, it is in a country's best advantage to export more than it imports. The mercantilist philosophy, according to Hill, Charles W.L. (1998, p.126), promotes government involvement through policies that maximize exports by subsidizing exports and reduce imports by utilizing tariffs and quotas to limit imports. As a result, the balance of trade excess is managed. In 1752, the classical economist David Hume on the other hand, recognized an intrinsic conflict with the belief in mercantilism.

According to Hume, if one nation sells more than it imports, the ensuing influx would expand the local money supply and cause inflation in the exporting country. The outflow,

on the other hand, would have the opposite impact on the importing country. In other words, the importing country's money supply would shrink and its prices would decline. Hume finished his argument by stating that no country could sustain a trade surplus in the long run. Hill pointed out that the issue with mercantilism was that it regarded trade as a zero-sum game (a situation in which a gain by one country results in a loss by another).

Nonetheless, it is thought that mercantilism is still alive and well today; even lately, many governments' trade strategies have been geared to promote exports while limiting imports. Japan, for example, is a neo-mercantilist nation, according to Hill, Charles W.L (1998, p.126), because its government, while officially favouring free trade, concurrently wants to shield some sectors of its economy from more efficient foreign competition.

According to Hill's perspective, it was left to Adam Smith and David Ricardo to illustrate the short-sightedness of this method and that commerce is a positive sum game (a situation in which all countries can benefit, even if some benefit more than others).

Adam Smith's Theory of Absolute Advantage

Adam Smith, a classical economist, presented the first proof of the gain from international commerce in his theory of absolute advantage. Absolute advantage, according to Hill, Charles W.L. (1998, p.127), refers to a scenario in which one country is more efficient at manufacturing a product than any other country. According to Jeannet, J., & Hennessey, H. (2001, p. 42), "although there are numerous variables that may be identified as the major drivers of international trade, productivity disparities rank high on the list."

As a result, Smith's theory of absolute advantage argues that a country tends to specialize in the production of goods in which it has an absolute cost advantage. In support of this notion, Dwivedi, D N (2002, p. 508) elaborates on Smith's absolute advantage as follows: "It may be conceivable for all nations to produce all the goods they require, notwithstanding resource restrictions." Nonetheless, the cost of producing items for which a country lacks natural resources would be exorbitantly expensive. As a result, it is desirable for a country to specialize in goods that it can manufacture most effectively."

However, according to Jeannet, J., & Hennessey,H. (2002, p. 43), absolute disparities in production capacities are not required for trade to occur. As a result, the notion of comparative advantage emerges.

Comparative advantage

The Theory of Comparative Advantage by David Ricardo extended Smith's idea by examining what happens if one country has an absolute advantage or disadvantage. However, according to Jeannet, J., & Hennessey,H. (2002, p. 43), the theory of comparative advantage assesses a product's cost of production in terms of the missed chance to create something else, not in monetary terms. It is concerned with trade-offs.

Hill, Charles W.L (1998, p. 131) defines David Ricardo's theory of comparative advantage as a situation in which a country specializes in the production of goods that it produces most efficiently and purchases goods from other countries that it produces less efficiently, even if this means purchasing goods from other countries that it could produce more efficiently itself. Furthermore, Dwivedi, D N (2002, p. 59) defines Ricardo's theory of comparative advantage as "it is possible to have a profitable trade between two countries even if one country has an absolute advantage in the production of both commodities and the other country has an absolute disadvantage in the production of both commodities."

David Ricardo's theory of comparative advantage has been challenged for several reasons, including the assumption of global labour homogeneity; labour being the only element of production, the demand side being disregarded, and so on. As stated by Jeannet, J., & Hennessey,H (2001, p. 45), "...although the theory of comparative advantage has appeal, it is restricted only to the elements of production on land, labour, natural resources, and capital."

According to Jeannet, J., & Hennessey,H (2001, p. 46), the theory of comparative advantage implies that relative disparities in productivity, rather than absolute differences, might serve as a deciding foundation for international commerce. However, according to these two writers, this idea provides no insight into the cause of relative productivity. The concept of comparative advantage compels nations to make extensive use of the resources they have in plenty. They should export commodities where they have a competitive advantage and import things where they have a comparative disadvantage.

This implies that Ricardo's theory emphasizes comparative advantage resulting from variations in productivity or disparities in the cost of production as the foundation for international commerce.

The Heckscher-Ohlin Theory of Trade

This theory is also known as the "factor endowment theory of commerce" or "contemporary theory of trade." The theory attempts to explain why some nations have a comparative advantage in the production of certain products and how this comparative advantage serves as the foundation for international commerce. More precisely, Hill, C. W. L. (1998, p. 63) claims that the Heckscher-Ohlin theory attempts to resolve the following problems that the Ricardian theory did not address.

Theory of comparative advantage:

1. Why does a nation have a comparative advantage in the production of a commodity and a comparative disadvantage in the production of another commodity?
2. Why do the production possibility curves of any two nations differ?

According to Hill, C. W. L. (1998, p.151), the Heckscher-Ohlin hypothesis contends that disparities in factor endowments affect the structure of international commerce. It predicts that nations would export commodities that make extensive use of locally plentiful elements and import goods that make extensive use of locally limited factors.

The Leontief Paradox

One of the most significant theoretical theories in international economics is the Heckscher-Ohlin theory. The Heckscher-Ohlin theory is preferred by most economists over Ricardo's theory because it requires fewer simplifying assumptions and has been exposed to numerous empirical testing's. Many of these tests, beginning with renowned research published in 1953 by Leontief, W. (recipient of the Nobel Prize in economics in 1973), have raised doubts regarding the theory's validity.

Using the Heckscher-Ohlin theory, Leontief hypothesized that because the United States had a more ample supply of capital in comparison to other countries, it would be an exporter of capital-intensive products and an importer of labour-intensive ones. However,

he was surprised to discover that US exports required less capital than US imports. Because this outcome contradicted the theory's prediction, it became known as the Leontief paradox.

The Product Life-Cycle Theory

This hypothesis was first suggested by Raymond Vernon in the mid-1960s. According to the idea, where a new product is presented first influences trading patterns (Hill, C. W. L, p. 151). According to Jeannet, J., & Hennessey, H (2001, p.48), while the Heckscher-Ohlin theory contends that differences in factor endowments determine the pattern of international trade, the product life cycle theory focuses on the role of technology, economies of scale, transportation costs, and changing input requirements.

Furthermore, the Heckscher-Ohlin theory predicts that nations would export commodities that make intense use of locally plentiful elements and import goods that make intensive use of locally scarce factors. The product life cycle hypothesis, on the other hand, indicates that where a new product is launched influences trading patterns. Some academics, on the other hand, argue that the product life cycle theory appears to be less predictive in a more interconnected global economy.

The New Trade Theory

This hypothesis contends that in industries where significant economies of scale exist, the global market will economically sustain just a few businesses. Countries may dominate in the export of particular items merely because they had a first-mover advantage in that industry. First mover advantages are economic and strategic benefits that come to early entrants in a sector. According to Hill, C. W. L. (1998, p.141), the new trade theory differs from the Heckscher-Ohlin theory but not from the theory of comparative advantage.

Because economies of scale enhance the efficiency of resource usage and hence production the new trade theory finds a significant source of comparative advantage. Recent research showed that first mover advantages are key variables in explaining the dominance of businesses from particular countries in various industries, which is consistent with this hypothesis. According to Hill, C. W. L. (1998, p.142), the most controversial aspect of the new trade theory is the need for government involvement and strategic trade policy. The

new trade theory emphasizes the importance of chance, entrepreneurship, and innovation in providing a business with first mover advantages.

Porter's Theory of National Competitive Advantage

Michael Porter concentrated on the reasons why some countries thrive and others fail in international competitiveness. Porter discusses why a country obtains worldwide success in a certain industry (Hill, C. W. L., 2005, pp. 142-150). In his theory of national competitive advantage, Michael Porter outlines four main characteristics of a nation that influence the environment in which local companies compete, and that these characteristics either encourage or impede the establishment of competitive advantage.

Porter highlighted four attributes: factor endowments (such as skilled labor or infrastructure), demand circumstances (the nature of local product demand), related and supporting industries, and firm strategy, structure, and competition (the conditions in how companies are created, organized and managed and the nature of domestic rivalry). Michael Porter also believes that two other variables, chance and government, can have a significant impact on national demand. Chance occurrences, such as big inventions, generate discontinuities that can unfreeze or restructure industrial structure and give a chance for one nation's businesses to assist another's government through policy choices that detract from or improve national advantage. Regulation, for example, can affect home demand circumstances, antitrust rules can impact the degree of competitiveness within an industry, and government investment in education can affect factor endowments.

2.1.2 Arguments on international competitiveness

International competition is a hot subject for everyone, including managers, politicians, and academics, especially as the globalization process alters the competitive environment. The popularity of the notion of international competitiveness is plainly illustrated by the more than 6.5 million results returned by a Google search, as well as the growing interest in the problem of competitiveness rankings, particularly at the country level (Hassett, K. A., 2012).

International competitiveness has also emerged as a primary goal of national economic policies and strategies. Despite its ubiquity, international competitiveness has been regarded as one of the most misunderstood ideas, particularly in economics, with some

academics even expressing skepticism about the phrase itself (Krugman, P., 1994; Grauwe,p., 2010).

There are four major reasons why there is no commonly recognized definition of international competitiveness, much alone a broadly accepted philosophy of the topic (Lachmann, W., 2001).

To begin, the idea of international competitiveness is quite wide. It may be studied at several levels, including those of the product, company, industry or sector, area, nation, commercial block, or as a component of global commerce, and there is a close link or interaction between all of these levels of competitiveness (Anca, H., 2008).

It is a term that is understood by people from several disciplines, including economics, management, history, politics, and culture. Even within the discipline of economics, the theoretical underpinnings of international competitiveness are linked to many theories, including classical and neoclassical Keynesian theories, development economics theory, new growth theory, and new trade theory. Furthermore, the borders between local and international markets have blurred as a result of globalization and liberalization processes, resulting in the elimination of the distinction between national and international competitiveness.

Second, misunderstanding of the idea of international competitiveness reflects the fact that its major findings go counter to what our intuition encourages us to assume (ITS Global Report., 2008). The concept of international competitiveness, defined as the ability to compete successfully with rivals in worldwide marketplaces, is only adequately understood when applied at the microeconomic level. While businesses fight for resources and market shares, and some must go out of business if they fail, economies do not compete for resources, which are frequently fixed in space and time, and therefore never go bankrupt in an economic sense (Krugman, p., 1994). Depending on the level of debate, these varied ways of competing imply different ways of evaluating competitiveness for firms, sectors, and economies, making the idea of international competitiveness more confused.

Third, there are just a few claims in the literature that are universally acknowledged among academics working with concerns of international competitiveness. These people claim that international competitiveness is a result of competition (Porter, M. E., 1990).

Furthermore, many scholars have defined competitiveness as a relative and multidimensional notion (Spence, A. M., & Hazard, H. A., 1988; Flanagan, R., et al. 2007) and is often seen as synonymous with success and economic power in the global context (Srivastava, D., et al. 2006). Some economists believe that the origins of international competitiveness research may be traced in traditional international trade ideas.

Finally, the argument over international competitiveness is founded on a plethora of ideas, many of which lack a clear theoretical grounding. Reviews of the literature on international competitiveness are extremely infrequent (Chaudhuri, S., & Ray, S., 1997; Banwet, D. K., et al. 2002; Bhawsar, P., and Chattopadhyay, S., 2015). They all emphasize the variety of definitions, focus on various measures and theoretical models, and consistently define international competitiveness as an elusive term. They only offer an integrated and eclectic approach to studying international competitiveness concerns, integrating diverse schools of thinking and multiple measures.

There is one fundamental flaw in the present evaluations of international competitiveness literature. They do not synthesize the available literature and do not demonstrate the link between the many interpretations of the idea. Even the authors of the World Competitiveness Ranking acknowledge the challenges in fitting competitiveness measures to the conceptual framework of competitiveness, as well as the lack of causation among the structural components of the competitive-ness ranking (Bris, A., & Caballero J., 2015). We still don't know anything about the key publications or writers in the international competitiveness literature who may have served as the foundation for the development of international competitiveness theory.

To examine the competitiveness literature, a new technique, a new methodology, is required. According to Bofinger, P.(1995) and Mitschke, A. (2008), the notion of international competitiveness is most likely located in a scientific network interface region, and the traditional technique of literature analysis is inadequate.

2.1.3 Competitiveness indicators

The problem with the many literatures on the listing of competitiveness indicators is, of course, their ad hoc nature. While that fact has not stopped analysts piling up empirical results on the basis of whatever data becomes available, the issue is more serious than

commonly understood. Strictly speaking, the lack of coherent theory to choose important variables and determine cause and effect makes interpretation difficult.

The task is enormous. It actually transcends the ability of economists to go-it-alone and requires interdisciplinary solutions. Nonetheless, there have been attempts to construct consistent analytical frameworks that will be able to both benchmark industrial performance ex post and ponder the development of industrial capabilities ex ante. A well-known approach is reflected in the work of Porter, M. E. (1990) underlying his notion of competitive advantage vis a vis the staple economic concept of comparative advantage. The difference between the two is that, while comparative advantage is a timeless concept reflecting relative factor endowments, competitive advantage has change and a time element built into it. Competitive advantage can be created, and improved or lost. Porter's "diamond" postulates the primary importance of four sets of conditions that allow a nation to create and sustain competitive advantage in a specific industry:

(a) Factor conditions, (b) demand conditions; (c) firm strategy, structure, and rivalry; and (d) related and supporting industries' conditions. Porter, M. E. (1998).

Needless to say, Porter's work does not stand in a vacuum. There is a long tradition of work at the industry level by economists, business analysts, economic historians, and policy makers. Important serial publications by the US National Science Foundation (NSF, 2000), the European Commission (EU, 1997), the Organization for Economic Cooperation and Development (OECD, 2000), the World Bank (2001), and the United Nations (UNCTAD, 2000), as well as occasional publications of these and other organisations, discuss many of the National level indicators.

1. Productivity

A necessary step in the appraisal of the performance of firms, industries and economies is the measurement of productivity levels and trends. The widespread use of productivity measures and their use for benchmarking purposes, frequently internationally, have naturally created considerable debate on the concepts of productivity measurement and on data requirements and constraints. Important issues associated with productivity measurement include the following (OECD, 1996a, 1996b, 1996c):

(a) The choice between partial (e.g., labor) and total factor (multifactor) productivity measures

Labor productivity indexes relate the change in output to the change in the labor input utilized in producing that output. Multifactor (total factor) productivity indexes relate the change in output to the change in the combination of capital, labor, and intermediate inputs utilized in producing that output. The incorporation of a measure of combined inputs in multifactor productivity eliminates the influence of substitution of capital and intermediate inputs for labor, thus taking away a major limitation that affects measures of labor productivity. On the other hand, it increases data requirements and raises complications of data availability and comparability. The basic choice between labor productivity and total factor productivity measures is, then, typically a trade-off between measurability (which favors the former) and theoretical appropriateness (which favors the latter).

(b) The quality adjustment of price indexes neglecting the quality adjustment of deflators in sectors that experience rapid technological change may lead to very significant effects on measures of inter-industry productivity. The issue of quality-adjusted price indexes was largely initiated by the case of computers and other electronics which in the last few decades have experienced very significant jumps in performance paralleled by rapid decreases in price. A good number of “hedonic” estimates have been developed to construct performance-related computer prices.

These estimates have been produced on the basis of methods involving the use of regression analysis to estimate a hedonic function such as $p = f(X_1, X_2, \dots, X_n)$ where observed price p is related to quantities of associated characteristics X . This approach permits the separation of price changes induced by quality changes from residual price changes unexplained by shifts in characteristics.

The experience has been that hedonic price indexes have varied dramatically from their traditional counterparts. In addition, (a) maintaining hedonic price indexes has proven to be expensive and (b) only some of those countries that have developed such indexes have incorporated them in their national accounts. Moreover, we now understand that limiting quality adjustments to outputs is not sufficient and may again lead to miscalculation and erroneous attribution; inputs need equal consideration.

(c) Output measure choice

The choice of the appropriate measure for output has attracted a lot of attention. Choices include gross output, gross output adjusted for intra industry flows, value-added, and physical measures. Issues of aggregation over products or industries have also been

important, as the better approaches increase data quality requirements. A related topic involves the reduction of base-year biases of index numbers in the measurement of real output.

(d) The appropriate measurement of labor and capital inputs A basic problem here is the correct measurement of services from the capital stock to the production process. This has been the subject of a significant amount of literature which has tried to deal with the conceptual and measurement difficulties. For example, what is the correct definition of the stock of knowledge accumulated through R&D and other invention/innovation-related activities? Does this stock only accumulate in time or also depreciates and at what rate? (Griliches, Z., 1995) Not very different is the issue of the treatment of quality changes in capital goods which carries over in the measurement problems of real output.

(e) The international comparison of productivity levels (Gersbach,H. (1996);).

A recurrent issue in inter-country comparison of productivity levels is the derivation of appropriate conversion factors for the comparison of figures of real output and productivity in a common currency. At the industry level, the appropriate conversion factors are relative output prices. These are not normally readily available from official statistics, obliging analysts to use exchange rates or conversion indexes based on expenditure-based purchasing power parities (EPPP) and the unit value ratio (UVR). This problem multiplies to the use of appropriate index numbers to ensure coherent aggregation over time, across space and between more than two countries.

(f) Productivity measurement in service industries

Physical output is an attractive measure but it is not always feasible due to product variety and differences in quality. Especially in the service sector, physical productivity is a promising alternative to gross output and value-added comparisons. Physical productivity needs a detailed comparison of the different functional activities in an industry, finely defined so that each can be claimed to produce a relatively homogeneous output. Physical productivity measures can be applied in industries such as telecommunications, airlines, or retail banking. For example, in telecommunications labor productivity can be defined as a weighted average of access line productivity and call (minutes) productivity.

Physical productivity measurement is also possible in manufacturing industries although the required degree of disaggregation usually increases. As a result of the need for fine

breakdown into specific product categories, comparisons cannot usually be performed at the industry level, but rather at the company or product category level.

2. Market share

International market shares

One of the basic metrics used to gauge their competitiveness is market share. Since firms are the foundation of national competitiveness, the same metric aggregated to the industry level is frequently used as an indicator of the capacity of firms operating within the boundaries of a nation to win new markets. At this level, one needs to examine foreign market shares (export market shares) and domestic market share (import penetration).

Export share ES_{ij} for country i and product j is defined as the share of exports X_{ij} of product j by firms in country i in relation to world exports of this product.

$$(1) ES_{ij} = 100 X_{ij} / M_{ij}$$

The rate of import penetration MS_{ij} for country i and product j corresponds to the share of domestic demand D_{ij} which is met by imports M_{ij} .

$$(2) MS_{ij} = 100 M_{ij} / D_{ij}$$

Exports have provided the traditional way for accessing foreign markets. However, increasing globalization has meant that foreign markets can also be and increasingly are accessed through foreign direct investment and modes of technology transfer. While these different forms of globalization are interdependent, the relationship is not always clear. For example, foreign direct investment can both substitute for exports and complement exports. Similarly, foreign direct investment can substitute for imports or generate increased import flows due to intra-firm trade. Foreign direct investment is linked to technology transfer (patents, licenses, know-how). Foreign direct investment can be both a sign of strength and a sign of weakness. It is a sign of strength when it is related to efforts by domestic firms to exploit their competitive advantage abroad, including new products, technologies, and other intangible competence such as efficiencies in marketing, distribution, finance. Foreign direct investment is a sign of weakness when it is prompted by increasing domestic costs, better opportunities for accessing technologies abroad, and so forth. Offshore production can replace exports and even turn exports into import flows back to the country of origin. A number of indicators of foreign direct investment can be used as indicators of market gains, including:

- (a) FDI flows abroad;
- (b) FDI stocks;
- (c) Turnover (or production) of foreign subsidiaries;
- (d) Realized profits abroad.

Several factors influence market shares and should be taken into account when interpreting market share indicators:

(a) Changes in a country's specialization can impact market shares in the concerned sectors – gradual withdrawal from one sector and increased entry into another will have consequent changes in market shares.

(b) Difficult economic conditions in traditional export markets can also affect market shares without any change in the competitiveness of domestic industries;

(c) Differences in growth rates between domestic and foreign markets also have implications for market shares. For example, an increase in domestic demand is often matched by an increase in imports. If the impact on competitiveness of differing rates of growth of domestic and foreign demand is to be measured accurately, the difference must be calculated between the gains made by domestic producers on the domestic market as a result of the extra demand and the gains that would have been available by satisfying foreign demand under normal circumstances. In the opposite case of slower relative growth in domestic demand, the rate of import penetration may fall while the rate of export market shares may increase without any change in the competitiveness of the affected industry;

(d) Changes in the exports from one region to some destination will affect the exports of other regions to that destination without necessarily any change in competitiveness;

(e) Exchange rate movements can influence market shares and the way they are interpreted. Given these observations, it has been proposed that a more comprehensive evaluation of import penetration is needed. Such an evaluation must take into account both imports and the output of foreign affiliates, resulting in a measure of “effective” import penetration.

The traditional measure of apparent import penetration is $PA = M / D$

Where $D = Y - X - M$ and Y , X and M denote a country's manufacturing output, exports and imports, respectively. If Y_d and Y_f stand for the output of domestic and foreign

enterprises respectively and X_d and X_f stand for domestic and foreign exports, effective import penetration PE of the domestic market by foreign industries may be represented by:

$$(3) PE = (Y_f - X_f + M) / D$$

This measure of effective import penetration double-counts the part of foreign affiliates' production realized from imports that is already included in imports. If available, foreign affiliate imports should be subtracted. Similarly, for the import content of foreign affiliate exports. Care should be exercised in interpreting the apparent and effective import penetration rates. A low level of import penetration may be indicative of high productivity, lower domestic price levels, or barriers to entry. A high level of import penetration may be indicative of better integration in the world economy, rapid growth of domestic demand, or substantial depreciation of supplier country currencies. In addition, country size is also important. Smaller countries tend to have relatively higher rates of import penetration due to their inability to specialize in many sectors, thus becoming dependent on imports. Over the long term, industry competitiveness problems may be indicated by import penetration levels rising faster than domestic demand without being accompanied by equivalent gains in export markets.

Export-import ratios

Trade balance exports minus imports ($X-M$) – is probably the most frequently used indicator of industrial competitiveness. Another complementary indicator of competitiveness is export-import ratio (X/M), calculated as follows. The export market share by volume of country i for product j (EMS_{vij}) is:

$$(4) EMS_{vij} = [X_{ij} / P_{xij}] / D_{wj}$$

Where X_{ij} = exports of product j by country i ;

P_{xij} = export prices of product j by country i ;

D_{wj} = world demand by volume for product j .

The import penetration rate (MP_{vij}) of product j by country i is:

$$(5) MP_{vij} = [M_{ij} / P_{mij}] / D_{ij}$$

Where M_{ij} = imports of product j by country i ;

P_{mij} = import prices of product j by country i ;

D_{ij} = domestic demand by volume of product j by country i .

Then, the export/import ratio EM_{ij} will be:

$$(6) EM_{ij} = X_{ij} / M_{ij} = [EMS_{vij} / MP_{vij}] [P_{mij} / P_{xij}] [D_{wj} / D_{ij}]$$

The factors that come into play in the case of trade balances and export/import ratios are those affecting export market shares and import penetration, including improvement in structural competitiveness and/or relative prices, cyclical lags, terms of trade, etc.

Exposure to international competition

This is an indicator of market openness and competition. It rests on the assumption that the exported share of production is fully exposed to international competition whereas the share sold domestically is exposed to international competition to the same extent as the import penetration of the market.

It is constructed as follows. Starting again from the identity $Y + M = D + X$, the rate of exposure to international competition (Exp) is:

$$(7) \text{Exp} = X/Y + (1 - X/Y) M/D = ER + (1 - ER) MP$$

Where $ER = X/Y$ is the export ratio and $MP = M/D$ is the rate of import penetration.

International data with the constituent parts of this indicator show that: (a) import penetration has increased the past couple of decades for most countries; (b) small countries are exposed to international competition more than larger ones; (c) some countries are more exposed on foreign markets than on the domestic market; (d) some countries are more exposed on the domestic market than on foreign markets. Interestingly, research results indicate that exposure to international competition does not have a clear relationship with employment; similar employment trends can be accompanied by quite different exposure to competition, in terms of both levels and growth. This finding must be qualified with two observations. First, employment data are very sensitive to the reference period. Second, it cannot be concluded that there is no link between employment and competition as the latter depends on many factors and can be pretty severe even in the absence of strong exposure to foreign competitors (Hatzichronoglou, T., 1996).

2.1.4 Determinants of export performance

The debate over international competitiveness and the quest for its causes began in the 1970s and has dominated research in international economics ever since. Until the 1970s,

international trade theory was dominated by the idea of competitive advantage, which holds that a country may increase its competitive advantage by specializing in the manufacture of items that it can produce comparatively more effectively than other nations (Krugman, P. R., & Obstfeld, M., 2003).

However, after World War II, a rising portion of economic activity has consisted of large two-way commerce in related industries, which cannot be described by competitive advantage theory. This commerce is largely motivated by cost savings as a result of economies of scale (Smith, M.F., 2010). In the late 1970s, new monopolistic competition models were created (Krugman, P. R., 1990). The new trade theories claimed that economies of scale might explain trade flows of differentiated items at the level of intra-industry trade.

Both ideas, however, believed that advantage derives from specialization. Later, researchers switched their attention to oligopolistic competition, in which economies of scale at the company level are sufficient to restrict the number of rivals (Krugman, P. R., 1992). As a result, trade models based on an oligopolistic market structure were developed (Krugman and Obstfeld 2003).

These models suggest that even in businesses where internal economies of scale are essential, two-way commerce in similar items happens and may be mutually advantageous (Krugman, P. R., & Obstfeld, M., 2003).

Monopolistic and oligopolistic competition theories do not explain where real manufacturing should take place (Smith, M.F., 2010). Porter, M. E., (1990) offered a "new hypothesis" that explains geographical advantages and, as a result, a nation's competitive edge. Porter classifies country factors that determine national competitive advantage into four categories: factor conditions, demand circumstances, related and supporting industries, and firm strategy, structure, and rivalry. He also mentions two more elements, government policy and chance (exogenous shocks), that promote but do not produce the system of national competitiveness (Porter, M. E., 1990).

A key feature of Porter's proposal is that it integrates many different theories into a single concept, such as 'factor conditions' referring to classical/neoclassical economics, 'demand conditions' referring to product cycle theory and Rostow growth theory, 'related and supporting companies' referring to polarization theory and Marshall's industrial districts, and 'firm strategy, structure, and rivalry' referring to Schumpeter's works. Although the

diamond model has been frequently used to examine different nations' international competitiveness, it has received significant criticism.

According to Smith, M.F. (2010), the shortcomings of Porter's approach have been identified by management (Dunning, J.H. 1993) and economics academics (Boltho, A. 1996). Management experts have accused Porter of failing to account for multinational operations in his model, thus Dunning, J.H. (1993) expanded Porter's original model by including the following variables: foreign direct investment, government policies, and pro-competitive policies. Following that, Cho and Moon expanded Porter's original model by adding four more human variables: laborers, politicians and bureaucrats, entrepreneurs, and professionals (Cho, D., et al. 2008).

Nonetheless, because of Porter and his colleagues' sophisticated approach to the issue, the diamond model was a breakthrough in the study of international competition. It sparked a debate on the drivers and measures of international competitiveness, and it served as the foundation for the development of two major competitiveness indices: those published in the World Economic Forum Report and those published in the IMD's World Competitiveness Yearbook.

Several reviews of the literature revealed the most frequently cited variables used to explain export performance. Firm characteristics (size, managerial commitment, managerial perceptions), firm competencies (technology, market knowledge, market planning, export policy, control systems, quality control, and so on), communication skills), export strategy (market selection, use of intermediaries, product mix, product development, promotion, and pricing), and external environment.

According to Zou, S., & Stan, S., (1998) the determinants of export performance are either internal (export strategy, managers' perceptions and attitudes, characteristics of managers, and characteristics and competencies of the firm) or external (industry characteristics, external and characteristics of the Internal market). Moini, A.H., (1995) proposed three broad categories: organizational characteristics (such as size, international experience, competitive advantages, and so on); managers' expectations (both positive and negative); and managers' characteristics (such as age, formal education, experience, and knowledge of foreign languages), while adding a fourth factor, systematic search for new markets outside of the country.

Katsikeas, C., Leonidou, L., & Morgan, N. (2000) conducted a review and identified two sets of factors that have a direct effect on export performance target market selection and export strategy – and three sets of factors that have an indirect effect on export performance – manager characteristics, organizational characteristics, and environmental variables.

The impact on export performance varied depending on the specific facet or measure of export performance, according to Leonidou, L., Katsikeas, c., Samiee, s. (2002). Chosen and five types of variables appeared to dominate the majority of the studies: managerial characteristics, organizational factors, environmental forces, export target, and export marketing strategy.

The vast majority of empirical research on export performance, according to Holzmüller, H., & Stöttinger, B. (1996), has ignored the role of intervening variables. They suggested using partial models when more complex models were required. They proposed that organizational culture, subjective manager characteristics, objective manager characteristics, objective firm characteristics; all of these factors have an indirect and direct impact on export performance.

In general, the literature review identifies a number of factors influencing export performance, including the external environment, organizational and managerial characteristics, the specific export strategy employed, and the planning of each export venture. (Carneiro, J; Rocha, A; Silva, J. F., 2011).

The World Economic Forum's (WEF) technique, in particular, is quite similar to Porter's diamond model. It defines "global competitiveness" as the "collection of institutions, regulations, and variables that determine a country's level of production" Schwab, K. (2015). Porter also claims that international competitiveness is determined by a combination of microeconomic variables (such as business strategy and competition), macroeconomic conditions (such as demand), and factors influencing government authority.

Thus, the WEF methodology is founded on the idea that international competitiveness is such a complex phenomenon that measuring it as a single indicator requires a compilation of numerous distinct competitiveness measures. Following this premise, the WEF created the Growth Competitiveness Index (GCI), which is a weighted average of several distinct

components organized into 12 competitiveness pillars, each of which measures a different element of competitiveness.

Despite the fact that the GCI is one of the most widely acknowledged and recognized measures of international competitiveness in the literature, it is not without controversy. The most significant restriction, according to (Berger, T., & Bristow, G., 2009), is the lack of a strong theoretical foundation (particularly for variable selection).

As a result, there are still unanswered problems in the international competitiveness literature, particularly concerning the link between historical and current economic theories and present conceptions of international competitiveness.

2.1.5 Export performance measuring models

The Revealed Comparative Advantage (RCA)

Comparative advantage can be attained by either increasing the benefit generated by the manufacturing activity or decreasing its opportunity cost, according to Leung, P., & Cai, J. (2005). This implies that comparative advantage is affected by both demand-side (consumer preference) and supply-side factors (largely, factor endowment and technologies).

Comparative advantage has equilibrium as well as a dynamic component. As a result, comparative advantage can be examined from both of these perspectives.

The equilibrium aspect defines long-run equilibrium specialization patterns, whereas the concept of comparative advantage demonstrates latent changes in specialization and trade patterns.

These two aspects of comparative advantage provide valuable information on a country's most advantageous long-run trade pattern, as well as a country's short-term development priorities Leung, P., & Cai, J. (2005)

It is critical to distinguish between these two aspects because each has a different policy implication. Whether or not to increase specialization will be influenced by whether comparative advantage is viewed from an equilibrium or dynamic perspective (Cai, J., et al, 2009; Leung, P., & Cai, J. (2005). From a dynamic standpoint, if “an autarky country has a comparative advantage in one good, it implies that under free trade, this country has a proclivity to increase specialization in that good and export it” Leung, P., & Cai, J. (2005)

On the other hand, if the country's current level of specialization is already optimal, an attempt to increase specialization may be counterproductive. Cai, J., et al., 2009

Furthermore, comparative advantage can be used both descriptively (and positively) and prescriptively (or normatively). While the former offers a "basic explanation of the international pattern of specialization in production and trade," the latter provides "guidelines for government policies on resource allocation and trade." (United Nations Industrial Development Organization, 1986), as cited by Leung, P., & Cai, J. (2005).

The economic literature provides two complementary approaches to comparative advantage analysis (Leung, P., & Cai, J., 2005; Cai, J., et al., 2009). The two approaches are the Domestic Resource Cost (DRC) or Benefits-Costs (BC) approach and the Revealed Comparative Advantage (RCA).

To determine comparative advantage, the DRC/BC approach employs social profitability.

The DRC ratio measures a country's comparative advantage. A lower ratio indicates more efficient use of domestic resources and higher profitability, resulting in a greater advantage (Leung, P., & Cai, J., 2005; Cai, J., et al., 2009) This method necessitates more data and is especially unsuitable for international trade analysis.

According to De Benedictis, L., & Tamberi, M., (2001), countries will specialize in and be net exporters of commodities in which they have a competitive advantage under free trade conditions. The observation of the difference between autarkic and free trade relative prices should indicate commodities or sectors in which a country has a comparative advantage under generally general conditions. A positive sign denotes comparative advantage in the production and export of that commodity, whereas a negative sign denotes comparative disadvantage (Deardorff, A. V., 1980).

Relative autarky prices, on the other hand, are unobservable variables (De Benedictis, L., & Tamberi, M., 2001; Trade flows also influence post-trade prices (Ballance, R. H., Forstner, H., & Murray, T., 1987). As a result, prices cannot be used to determine true comparative advantage. To overcome this difficulty, comparative advantage patterns are assigned using information on post-trade variables such as production, imports, exports, and consumption (De Benedictis, L., & Tamberi, M., 2001; Ballance, R. H., Forstner, H., & Murray, T.(1987).

Ex post trade patterns are used in the RCA approach to determine or identify sectors in which a country has a comparative advantage. According to Ballance, R. H., Forstner, H., & Murray, T. (1987), the international pattern of comparative advantage is determined by economic conditions (EC) in various trading countries (CA). Comparative advantage patterns, in turn, influence the pattern of international trade, production, and consumption (TPC) among countries. TPC variables can be used to create indices that 'reveal' comparative advantages (revealed comparative advantage).

Ballance, R. H., Forstner, H., & Murray, T.(1987) add that, while the clear-cut application of this model to determine the relationship between CA and TPC will not be possible in a real-world situation (many countries, products, and factors), indices based on real-world post-trade observations may "reveal" much about the underlying pattern of comparative advantage.

Several methods or techniques for calculating RCA have been proposed in the literature, each employing a different combination of variables (production, imports, exports, and consumption) to infer comparative advantage.

The Balassa RCA index, also known as the Balassa Index, is a popular method. The Index measures a country's relative advantage or disadvantage in a product or group of products as evidenced by its export structure or "revealed" by observed trade flows. It compares normalized export shares to other countries' exports in the same industry. It "reveals" a country's comparative advantage or disadvantage rather than determining the causes of the advantage or disadvantage.

The Balassa index (BI) introduced by Balassa, B. (1965) is defined as this:

$$RCA_{ji} = (X_{ji}/X_{jw}) / (X_i/X_w) \quad (1)$$

Where;

RCA_{ji} = revealed comparative advantage index of country i in exporting product j,

X_{ji} = exports of product j from country i

X_{jw} = world exports of the product j

X_i = exports of country i

X_w = world exports

In this study, j = leather and leather products and i = Ethiopia and competitor countries.

The RCA index compares the national export structure (the numerator) to the global export structure (the denominator). The index accepts any positive value, and if the value of RCA is greater than one, it indicates that the country in question has a comparative advantage in exporting the specific product. Similarly, if the value of RCA is less than one, the country is said to be at a comparative disadvantage in exporting the given product. Equilibrium,

Forstner, H., & Murray, T. (1987) present three interpretations of the RCA indices. To begin, the index quantifies a country's commodity-specific degree of comparative advantage in comparison to any other country or set of countries. Second, based on the index's value, the index provides commodity-specific rankings of countries. Third, the index distinguishes between countries that have comparative advantage in a specific commodity or sector and those that do not. These three alternative interpretations are referred to as cardinal, ordinal, and dichotomous measures by Balance, R. H., Forstner, H., & Murray, T (1987).

De Benedictis, L., & Tamberi, M. (2001) demonstrated that interpreting the Balassa Index in a cardinal way preserves the raw export data information content and allows for the possibility of both rankings and demarcation interpretation values, but it has some drawbacks. Asymmetry (variability of the upper bound) and across-time ranking are two of these issues (variability of the mean value). Asymmetry means that the values of RCA range from 1 to infinity for products where a country's comparative advantage has been revealed, but only from 0 to 1 for products where a country's comparative disadvantage has been revealed (Iapadre, L., 2001).

Others have criticized the Balassa Index, claiming that it produces biased results due to the model's exclusion of imports. Alternative normalization of the index has been proposed to address these and other shortcomings.

The symmetric comparative advantage (RSCA) index revealed is different from the standard analysis proposed by Dalum, B., Laursen, K., & Villumsen, G. (1998) and Laursen, K., (1998)

$$(2) \text{ RSCA} = \frac{\text{RCA}_{ik} - 1}{\text{RCA}_{ik} + 1}$$

The RSCA is an approximation of the log transformation of the Balassa Index. This normalization makes the index symmetric with values ranging from -1 to 1. A country has

comparative advantage in a particular sector, if $0 < RSCA < +1$, while it has comparative disadvantage if $-1 < RSCA < 0$.

Vollrath, T. (1991) proposes three alternative specifications of the revealed comparative analysis. These are the relative trade advantage (RTA), the logarithm of the relative export advantage ($\ln RXA$) and the revealed competitiveness (RC).

Dalum, B., Laursen, K., & Villumsen, G. (1998) offer a new normalization termed the revealed symmetric comparative advantage (RSCA) index:

Trade advantage (RTA) is calculated as the difference between relative export advantage (RXA) and relative import advantage (RMA). RX is equivalent to the BI. The RTA can be expressed as follows:

$$(3) \quad RTA = RXA - RMA$$

The second alternate RCA definition is the logarithm of the relative export advantage (RXA), specified as:

$$(4) \quad \ln (RXA).$$

The third measure, the revealed competitiveness (RC) is defined as the difference between the logarithm of the RXA and the logarithm of the RMA, given as:

$$(5) \quad RC = \ln (RXA) - \ln (RMA)$$

Given the various and alternative RCA measures proposed in the literature, the consistency of these measures has been called into question. Ballance, R., H., Forstner, H., & Murray, T. (1987) investigated the empirical consistency of various RCA indices. Correlation coefficients for different pairs of RCA indices were compared in order to assess the consistency of cardinal RCA measures. The results of the calculations show that different specifications of RCA indices produce highly inconsistent values. As a result, the selection of the RCA index as a cardinal measure may be highly dependent on the index used.

Rank correlation coefficients were calculated to see if pairs of RCA indices consistently rank countries in terms of comparative advantage. The results show that the net export indices have a high level of consistency and the others have a moderate level of consistency. The consistency tests for RCA indices as dichotomous measures reveal a consistently high level of consistency in general.

Given the index's limitations, it is critical that policymakers interpret the RCA indices with caution. The statistical characteristics of the RCA index can provide very useful information on the state and dynamics of a country's competitive advantage in international trade (De Benedictis, L., & Tamberi, M., 2001). Furthermore, government policies and interventions such as import restrictions, export subsidies, and other protectionist measures may distort the true reflection of comparative advantage or disadvantage revealed (Ferto, I., & Hubbard, L. J., 2003).

Despite its limitations, the RCA index can provide a systematic framework for comparing specialization patterns across countries. This information can provide invaluable insight into the trade experiences of advanced-stage countries, which will aid in the formulation of trade development strategies (Leung, P., & Cai, J., 2005). Taking into account the limitations and issues raised by using the RCA as a cardinal measure of comparative advantage, the study focuses on the ordinal trends of revealed comparative advantage.

Market Share Index

A product's competitiveness and competitive position on the market are amply reflected in the product's market share. This index measures an exporting country's ability to increase its market share in the target market in comparison to countries exporting the same product to the same target market. The index is calculated using the following formula:

(6)

$$MS_{ik} = \frac{X_{ik}}{M_i} * 100$$

Where;

MS_{ik} = is market share of product k by country i in the target market,

X_{ik} = the total export of good k by country i to the target market

M_k = the total import of product k by area or region constituting the target market

Despite the fact that changes in market share are not entirely attributable to changes in competitiveness, the index provides an accepted indication of the exporting countries or region's competitiveness in relation to the export market (Chen, K., & Duan, Y., 2001).

The main benefit of this index is that it is simple to calculate and interpret. It provides simple but useful information for assessing a country's or firm's international competitiveness.

Constant Market Share (CMS) Model

The CMS model is used to infer competitiveness from changes in exports. To dissect changes in export value, the CMS analysis, also known as the "shift-share" analysis, is utilized. Tyszynski, H. (1951), there was the first to apply the concept to the study of international trade.

The model is used to identify factors or components that may affect a country's export share over time. CMS analysis can be used as either a descriptive or diagnostic tool (Ahmadi-Esfahani, F.Z., 2006). The basic model provides a two-level decomposition of export changes.

According to Chen, K., & Duan, Y. (2001), the CMS model decomposes changes in export into three factors: changes in export due to changes in the export market (structural effect), changes in exports due to changes in the exporting country's competitiveness (competitive effect), and changes in export due to the combined effect of structural and competitiveness (competitive effect) (second-order effect).

The structural effect is further decomposed into the growth effect, the market effect, the commodity effect, and the interaction effect at the second level decomposition; the competitive effect is further decomposed into the general competitive effect and the specific competitive effect.

The second-order effect is further subdivided into the pure second-order effect and the dynamic structural effect. This study will only look at the first level of CMS analysis.

This study's first-level CMS analysis employs a version provided by Chen, K., & Duan, Y. (2001)

(7)

$$\Delta q = \sum_i \sum_j s_{ij}^o \Delta Q_{ij} + \sum_i \sum_j Q_{ij}^o \Delta s_{ij} + \sum_i \sum_j \Delta s_{ij} \Delta Q_{ij}$$

Structural Effect
Competitive Effect
Second- order Effect

Where,

q = exporting country's export (value)

S_{ij} = exporting country's market share of product i market j

Q_{ij} = total import of product i by market j

Δ = change in the two periods,

The superscript 0 represents the base year.

Merkies, A.H., & Meer, T. (1988) related the CMS method to a two-stage homothetic demand model. They derived that the competitiveness term is a supply term and the structural or market term as a demand term

Determinants

An empirical analysis of the factors that affect the market share of a country is conducted using the Armington trade model. The trade model developed by Armington, P., S., (1969), distinguishes commodities by country of origin and import demand is determined in a two-step procedure. Such that, for example, Ethiopia's finished leather (FLP) is distinguished from FLP imported from Competitors and the two products would represent two imperfectly substitutable products on the EU-28 market.

The basic assumptions underlying the Armington model are; separability between different import sources and homotheticity of import demands. The implications of weak separability relate to the potential substitution effect among commodity groups (Alston, J. M., *et al.* 1990). Thus, the elasticity of substitution between two competing products on a market, are the same and constant. The assumption of homotheticity implies that the market share of a country is independent of group expenditure. As a result, all expenditure elasticities are identical and unitary and a country's import market shares vary only in response to relative price changes.

The model is specified either in the quantity market share or expenditure market share form. In this study, the quantity market share form is adopted. The model is specified as:

$$(8) \quad q_i/Q = b \sigma (p_i/P)^{-\sigma} \quad i = 1, 2, \dots, m$$

Where: $Q = \sum_{i=1}^n q_i$ is total import for commodity in question

q = the quantity imported from country i

P = import price index = $\sum_{i=1}^n (q_i / Q) p_i$, is the trade weighted price of the commodity

σ = the target's market elasticity of substitution for the commodity in question

b = country specific parameter

$q_i / Q = M_i$, the quantity market share of the commodity from country i the destination market

Equation

(9) Can be described in log-linear functional form as:

(10) $\ln M_i = \alpha - \sigma \ln (p_i/P)$, the variable α is the constant term.

2.2 Empirical Literature review

2.2.1 Empirical Evidence of Export performance on international competitiveness

Several studies are carried out to examine the international competitiveness of an exporting country and identify possible factors for optimising global competitiveness of an industry.

Among the research studies analyzed and presented in different publication and used as empirical evidence for these studies are: - The method of constant market shares analysis was developed by Tyszynski, H., (1951) and others, and further elaborated by Leamer, E. E, and Stern, R. M, (1970), as a tool to study the relation between structural changes in world trade and the export performance of individual countries. When applied to a sample of 20 industrial countries between 1961 and 1983, several interesting results emerged. First, the structural changes in OECD trade turned out to have been quite important for the export performance of most countries during the period under consideration. In general, the structural changes contributed positively to the export performance of the economically most advanced countries of the sample, and negatively to the export performance of the less developed ones. Second, differences in adaptability were in some cases quite important, especially for Japan, but also for a number of other countries. In general, the economically most advanced countries adapted less well than the others. Third, changes in market shares within individual commodity groups and markets turned out to be the single most important factor shaping the export performance of the OECD countries. The general picture was that some of the economically less developed countries of the sample won market shares at the expense of some of the more developed ones. (Fagerberg, J., & Sollie, G., 2014).

Similarly Chien, C. L., & Lee, Y. J. (2010) examine Taiwan's Export Competitiveness through analysis via the CMS model shows that during the period 1997~2007, the competitiveness effect of Taiwan's exports to China, HK, the US and Japan is US\$ -32,947.12 million, representing 30% of the value of export variation, and the commodity effect is US\$ -7,043.49 million. This means that on the one hand, Taiwan's export competitiveness decreased over the period, and on the other hand, the demand for export of Taiwan's products was lower than the total import demand of China, Hong Kong, the U.S. and Japan, that is to say, it did not follow the growth demand of merchandise trade in the four markets. In terms of market effect, Taiwan's export matched the import growth trends of the four markets, being more and more in conformity with more prosperous market orientations. Based on the analysis, the problems facing Taiwan's exports lay firstly in a decrease in competitiveness, and secondly in product-related factors. Meanwhile, the market share effect for the HK, US and Japan markets turned from negative in 1997~2002 to positive in 2002~2007, while it was positive in both periods for the China, HK, US and Japan markets, reaching US\$ 35,196.25 million, as compared with the US\$ 1,642.67 million for HK, the US and Japan; these findings show a rapid growth in the import market of Mainland China. Analysis of annual data further shows that during the period 1997~2007 Taiwan's exports to China, HK, the US and Japan experienced the most serious decrease in competitiveness in 2003 and 2007, representing respectively 62% and 52% of the value of export variation. This is in conformity with the suggestions of Richardson, J. D., (1971), Bowen, H. P, and Pelzman, J., (1984), and Fagerberg, J., and Sollie, G., (1987) to calculate multiple CMS values by using different base periods and then analyses the effects on a yearly basis, which is significant in that the key year in which export competitiveness changes can thus be observed. The study shows that starting from the year 2000; Taiwan's exports were constantly in accordance with the import growth trends in those markets. From the analyses, they realize that in the future, Taiwan's endeavours should be centered on enhancing the quality of Taiwan's products, continuously obtaining export shares from more advanced countries, strengthening Taiwan's export competitiveness, and responding to changes in the global economic environment by adapting the commodities it exports.

Correspondingly, Jain, M. P. (2017) examines Export Competitiveness of cotton a comparative study of India and china using Constant Market Share Analysis, according to

the observation from (2001 to 2010) The future growth of Indian Cotton exports depends on its abilities to maintain its export competitiveness and market share. However, a cautious approach and proper planning is required for leveraging the future opportunities and dealing with challenges. Once the Indian policy makers acknowledge the important gaps between growth of Indian cotton exports and that of China, they will be able to formulate necessary policies and plans for fostering the next stage of growth and development in this sector. In order to improve cotton's productivity, India will need to ensure appropriate irrigation facilities as approx. 65% of cotton crops are still dependent on rains. Further, through technology transfer and importing high quality seeds from other countries which are having better productivity such as China, Israel and Brazil, the productivity can be improved. It is also recommended that high density plantation (HDPS) in cotton and adoption of mechanized planters for HDPS seeds should be encouraged and promoted. India is the 2nd largest producer of cotton in the world but still the cotton industry doesn't keep a cotton buffer. On the contrary, China ensures that it has at least a one-year buffer stock of cotton for consumption. It is recommended that India needs to develop such faculties and mechanisms to maintain a one-year buffer so as it helps not only in regulating cotton prices but also in regulating supply to the domestic industry at competitive rates. China levies very high import duties on cotton items. India should pursue China to offer the similar arrangement that China offers to Pakistan i.e. zero duty import facility. This will provide a huge opportunity to boost cotton exports to China. After complete abolition of MFA, India and China both have been able to strengthen the export competitiveness they enjoy in world trade of cotton. Post MFA, the conditions are ripe for India to make the most of the opportunities, presented by abolition of MFA, by exploiting the factors advantages it enjoys like cheap and skilled labour, natural resources, demographic dividend etc.

Although, Bojnec, Š. and Fertő, I. (2014) in their research paper analyze the evolution of market shares in the global agri-food and dairy exports during the period 2000- 2011. The agri-food global market shares have declined in thirteen EU Member States and have remained at similar levels for Malta. Most of the countries with an increasing agri-food market share are Eastern EU Member States. This finding is largely consistent with previous findings using different methodological approaches. The EU enlargement has encouraged agri-food exports of Eastern EU Member States to both intra-EU (Bojnec and

Fertő, 2008, 2009a, 2010, 2012a) and extra-EU global markets. The CMS analysis suggests that the structural effects are more important than residual and second order effects in the structure of agri-food and dairy exports. While the structural effect is mostly positive for all EU Member States, the residual and second order effects are more often positive for the Eastern EU Member States and after the EU enlargements more often negative for the EU-15 Member States. This finding provides some new optimism for the agri-food sector in the Eastern EU Member States, which after the initial transitional downturn have recovered and are catching up with their agri-food and dairy exports to the intra-EU and the global markets

Taj, Z., & Wani, N. (2019) on their Evaluation of Afghanistan Export Performance using a Constant-Market-Share Analysis Approach, the result established that Afghanistan's exports registered a quite satisfactory and accelerated performance, having been influenced by combination of internal and external factors during 2005–2017. Export growth (4.91 per cent) was considerably higher as compared to world exports as well as exports of developed and developing countries. Further, actual growth was significantly higher than that of expected growth. Export performance was mainly attributed to their competitive strengths in the global export market, however world demand for exports also proved as its important source. Analysis emphasized that competitiveness of Afghanistan's export remained prone to high inconsistency arising out of changing external environments. Further, analysis also reveals that export competitiveness lies in case of all commodity groups, though it was considerably higher in case of low manufactured commodities to Pakistan. Similarly, market-wise analysis reveals that Afghanistan's exports competitiveness in the markets of developing countries was slightly lesser than that of the developing countries and helped them to improve their shares in respective markets and also in the world export market. The consistently negative composition effects up to 2008 indicate the country's inability to diversify its exports and having specialization in the slowly growing commodities in the global export market. Thus, it came out as the most disturbing aspect of Afghanistan's export performance; however it recorded signs of improvement in later periods. On the other hand, market distribution has also laid a positive impact on export performance. Given the export promotion outward orientation as strategy of development, inconsistent competitiveness, quickly responding to external environments, as well as wrong speculation patterns of exports could adversely influence

their performance in particular and also have wider implications for the external sector in general as there is nothing to control and regulate external factors within the domestic policy framework. Even, effective exchange rate management could be able to save the economy from vicissitudes of contemporary unregulated liberalization-led-globalization of trade and finance up to a limited extent. Furthermore, a proactive and conscious approach to the WTO negotiations and participation in regional trade agreements (RTAs) would help Afghanistan for optimizing market distribution of exports. For elimination of negative CCE, export diversification towards the rapidly growing commodities in the global export market, especially high-technology exports, is highly required and demands special attention at the policy level. It would enable the country to further improve its export performance and positively influence growth dynamics of the economy in the long run.

CHAPTER THREE

Research Design and Methodology

This chapter discusses the research Design and methodology. It contains the research design, target population and sample size, Data and data collection method, source and type of data collected, Method of data analysis, Definition of variable, Measurement of variables and Model specification.

3.1 Research Design

The overall objective of this study, which is to analyze Ethiopia's performance in terms of whether exports have grown in line with its main competitors and whether a country's comparative performance reflects a strong presence in high-growth regions or products or competitive gains in individual markets and the effect of changes in both level of standard and identifying the possible underlying factors on Export growth of the industry necessitates using a Descriptive research design. In this research, considering the nature of the phenomenon this study has utilized mainly a quantitative research approach. Therefore, the study adopted this type of research design and approach to examine the possible factors that hinder the growth and unstable export performance of the leather and leather products industry of a country by using monthly and annual data from 2009-2019.

3.2 Target Population and sample size

The population target for this study is the value and volume of annual and monthly Export trade on leather and leather products exported to EU-28s market. The data that have been used are based on time intervals by using monthly data from 2009 to 2019.

3.3 Data and Data Collection Method

This paper is primarily based on secondary data by summarizing relevant research documents, annual and monthly reports from local government, world international trade statistics database and leather and lather products industry involved stakeholders.

3.4 Sources and Type of Data Collected

The study employed Monthly and annual data from the period 2009-2019, the Export data were extracted from Eurostat database, ITC data, Ethiopia Customs commission (ECC), and annual reports of National Bank of Ethiopia (NBE). Mainly Eurostat database was

used for the RCA index calculation and analysis of specialization and competitiveness monthly data of import values and quantity of finished leather product as well total imports all products into the EU-28 market were summarized to a yearly basis data was used.

On the other hand, for the regression analysis to determine the factors influencing Ethiopia's Quantity market share, monthly data that were summarized to a yearly base observation covering the same period (2009- 2019) were used.

3.4.1 Items of leather and leather products

The product under consideration is finished leather and leather products data for the analysis, the data were taken according to the European union previous and amended Regulation re-established a goods nomenclature ('Combined Nomenclature' or 'CN') to meet, at one and the same time, the requirements of the Common Customs Tariff, the external trade statistics of the Union, and other Union policies concerning the importation or exportation of goods, as required by an internationally standardized system of names and numbers for classifying traded products developed and maintained by the World Customs Organization (WCO) (formerly the Customs Co-operation).

The classification of goods that are internationally accepted codes can be assigned in different forms such as HS, CN codes and SITC codes describing commodities which can be used to extract international trade data.

Table 3.1 the products forming leather and leather products are covered by SITC codes given in the table below:

SITC	Description
61	Leather, leather manufacturers, n.e.s., and dressed furskins
611	Leather
61143	Hides & skins not further prepared in the wet state
61144	Hides & skins not further prepared in the dry state
61145	Leather further prepared after tanning/crusting, including parchment-dressed leather
61151	Sheep-/lambskin leather, without wool on, tanned/crust skins, but not further prepared, whether/not split (other than leather of subgroup 611.8)
61152	Sheep-/lambskin leather, without wool on, parchment-dressed
61161	Goat-/kidskin leather, without hair on, tanned/crust hides & skins, but not further prepared, whether/not split (other than leather of subgroup 611.8)
61162	Goat-/kidskin leather, without hair on, parchment-dressed or

61179	Leather of other animals, other than leather of subgroup 611.8
61181	Chamois (including combination chamois) leather
61183	Patent leather & patent-laminated leather; metallized leather
612	Manufacturers of leather, n.e.s.; saddlery & harness
61220	Saddlery and Harness for any animal (including leads, muzzles ,saddle cloths and bags, dog coats ,etc.),of any material
61290	Articles of leather or of composition leather n.e.s .
613	Furskins, tanned or dressed, excluding those of 8483
61319	Whole furskins, n.e.s, with or without head, tail or paws ,not assembled
61330	Whole furskins and fursin pieces or cuttings, assembled

Source: World Trade Organization (WTO) 2018

In this research for the Descriptive, competitiveness and Arrington OLS Regression Analysis Eurostat data that are extracted under manufactured goods classified chiefly by material (SITC Section 6) SITC 61 is used. 611 Leather, 612 Manufactures of leather or of composition leather, nes; saddlery, harness 613 Furskins, tanned or dressed, other than those of heading 848.31.

3.4.2 Price

Dataset on prices were constructed by dividing the value of import by the quantity imported derived from the Eurostat database, in a euro per 100 kg unit of measurement. We include in the regression model, relative price index as an explanatory variable.

3.4.3 Exchange rate

Theoretically we know that, the currency depreciation of the domestic currency (appreciation of the foreign currency against the local currency) makes domestic products cheaper relative to its competitors in the international market. This will increase foreign demand resulting in increased export market share, ceteris paribus. By implication, a depreciation of Ethiopia's birr relative to its competitors is expected to increase the competitiveness of Ethiopia's Leather and leather product export in the EU-28 market. In line with this theory, the bilateral exchange rate variable was included in the model as an explanatory variable for changes in Ethiopia's market share. Historical data on the exchange rate between the Euro currency (EUR) and Ethiopia's birr (BR) were obtained from NBE yearly average (EUR/BR) inter-bank exchange rates.

3.4.4 Policy Effect

There are three main types of EU trade agreement: Customs Unions eliminate customs duties in bilateral trade, and; establish a joint customs tariff for foreign importers. Association Agreements, Stabilization Agreements, (Deep and Comprehensive) Free Trade Agreements and Economic Partnership Agreements Remove or reduce customs tariffs in bilateral trade. Partnership and Cooperation Agreements provide a general framework for bilateral economic relations, and; Leave customs tariffs as they are. Among the agreements, there were Agreements in place, Agreements being adopted or ratified, Agreements being negotiated, and Agreements on hold in the study periods for Ethiopia and competitors. Argentina and Brazil signed Mercosur Association Agreement and Negotiations concluded in June 2019, Nigeria and Ethiopia are among the ACP countries, specifically Ethiopia (ESA) Economic Partnership Agreement Negotiations started in 2004, paused and Agreements on hold in 2011. In the case of India, India Free Trade Agreement Negotiations started in 2007, last round in 2013, in this agreement type there are removal or reduction of tariff between the EU and India in bilateral trade.

Trade analyst have suggested that opening of reduced tariff quota for India in 2007 could impact negatively upon the competitive advantage of ACP exporting countries, Brazil and Argentina by eroding the gains of the preferential access treatment enjoyed and tariff reduction advantage

Empirically tariff and non-tariff agreements tested by including a dummy variable as an explanatory factor for changes in Ethiopia's market share to capture the effect of this policy.

The dummy variable takes the value of zero (0) for the period after the EU-India negotiations in June last round in 2013 and 1 for the prior period. A method proposed by Halvorsen, R., and Palmquist, R., (1980) was used to interpret the effect of the dummy variable. The percentage effect on the dependent by the factor represented by the dummy variable is given as $100 * g = 100 * \{ \exp(c) - 1 \}$ where the relative effect on the dependent variable is $g = \exp(c) - 1$ and c is the coefficient of the dummy variable obtained from the regression results

3.5 Methods of Data Analysis

The study utilizes a combination of methods including Revealed Comparative Advantage (RCA) and the Revealed Symmetric Comparative Advantage (RSCA) indices and Market Share (MS) index; a first-level Constant Market Share (CMS) analysis

Descriptive analyses were used to show the trend of export share value and volume growth over time in Ethiopia by using percentages, Tables, Charts and Graphs.

An empirical analysis on the determinants of Ethiopia's leather and leather product export is also conducted using a regression method on annual data from January 2009 – December 2019, with quantity market share as the dependent variable.

3.6 Definition of Variables

In this study market share (quantity) as the dependent variable, Where, β_0 is the constant term, β_1 is the coefficient of price ratio, β_2 is the coefficient of exchange rate (EUR/BR), β_3 is the coefficient of the RCA index of Ethiopia, and β_4 is the coefficient of the dummy variable to capture the effect of the opening of reduced tariff and non-tariff agreement on trading countries and ε is the error- term.

$$\ln MS = \beta_0 + \beta_1 \ln \text{RLTV price} + \beta_2 \ln \text{XR} + \beta_3 \ln \text{RCA} + \beta_4 \text{DUM} + \varepsilon$$

Where, MS is the Ethiopia's market share (quantity), β_0 is the constant term, β_1 is the coefficient of price ratio, β_2 is the coefficient of exchange rate (EUR/BR), β_3 is the coefficient of the RCA index of Ethiopia, and β_4 is the coefficient of the dummy variable to capture the effect of the opening of reduced tariff and non-tariff agreement on trading countries and ε is the error- term.

Table 3.2 Measurement of variables and expected Sign

Variable	Measurement	Variable Name	Expected sign
MS	In of Quantity Market share	Quantity market share	
RLTV price	In of relative price	Relative price index	-
XR (EUR/BR)	In of exchange rate	Exchange rate ratio	-
RCA Index	In of revealed comparative advantage	RCA index	+
Dummy variable	In of Dummy variable	Dummy variable	-

CHAPTER FOUR

Results and Discussion

This chapter presents the results of specialization, competitiveness and empirical analysis in which to determine the competitiveness position and What affects global market share of Ethiopia's leather and leather products industry of Ethiopia for the period 2009-2019. It is composed of four sections. The first section shows Descriptive analysis of the data, the second specialization, third competitiveness analysis and the fourth section present the results of Arrington OLS Regression Analysis.

4.1 Descriptive Statistics

Table 4.1 Descriptive Statistics of annual import of leather and leather products to the EU-28 market: (2009-2019)

Indicator	AVERAGE	Standard dev.	MIN	MAX	country
Value in EURO	452,839,094	88,450,438	304,123,039	593,000,417	AR
Quantity in 100kg	477,249	74,763	381,490	658,314	AR
Price in €/100kg	968	243	673	1,474	AR
Value in EURO	1,436,183,924	321,917,687	871,892,584	1,878,694,852	BR
Quantity in 100kg	3,614,515	542,029	2,999,054	4,339,930	BR
Price in €/100kg	406	110	222	549	BR
Value in EURO	53,641,705	27,835,185	21,998,838	117,288,186	ET
Quantity in 100kg	28,037	19,763	7,410	65,894	ET
Price in €/100kg	2,206	531	1,224	2,969	ET
Value in EURO	969,689,140	163,312,488	571,487,230	1,133,167,820	IN
Quantity in 100kg	739,019	81,984	568,603	851,365	IN
Price in €/100kg	1,308	157	1,005	1,584	IN
Value in EURO	425,084,612	67,816,346	294,247,098	503,954,862	NG
Quantity in 100kg	214,683	31,102	158,592	250,986	NG
Price in €/100kg	1,987	242	1,613	2,487	NG

Source; Eurostat data, own calculation

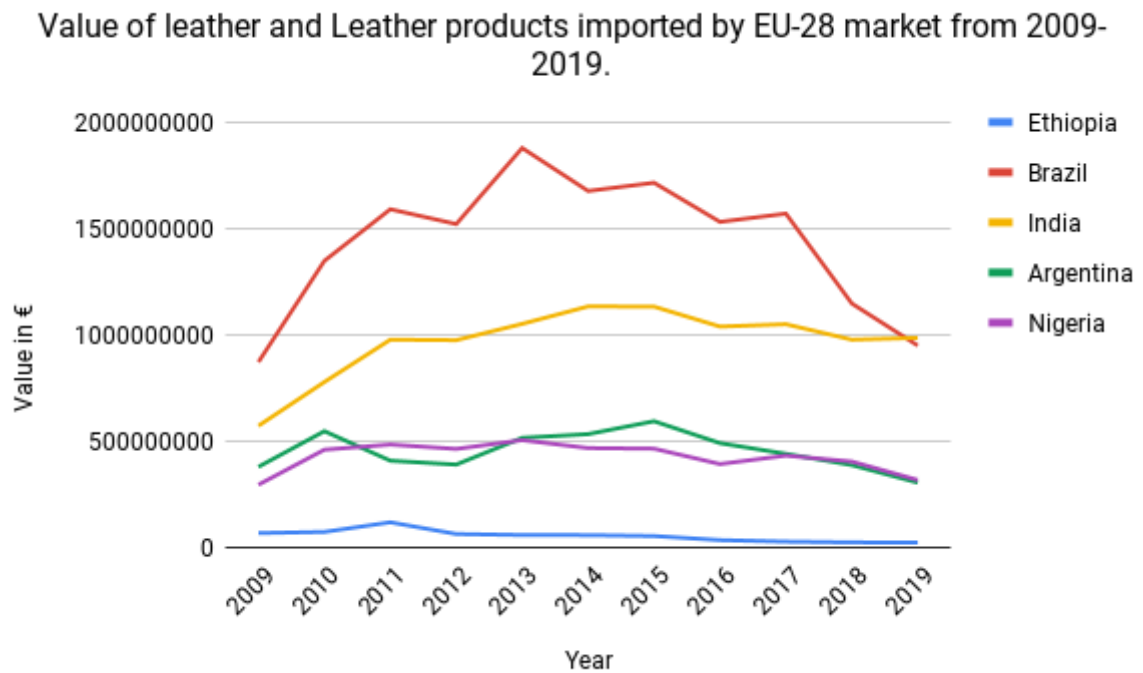


Figure 4.1 value of leather and leather products imported by EU-28 from 2009 to 2019

From Table 1-E, the value of Leather and Leather products exported from Ethiopia has decreased significantly by 67% from 66,530,154 EURO in 2009 to 21,998,838 EURO in 2019. On the other hand, Argentina has decreased the export value by 20%. whereas, India's export value increased by 72% substantially and Brazil's, Nigeria export value also increased by 9% and 8% respectively, over the same time span.

From Table 1-F, in terms of volume (quantity), Ethiopia's share of the market decreased by a marginal 86% from 54,351 quintals in 2009 to 7,410 quintals in 2019 whereas, the volume of export from Argentina decreased by 16% over the same period respectively.

On the other hand, Brazil's volume share increased by 42%, and also Nigeria and India's volume share increased by 19% and 9% apiece.

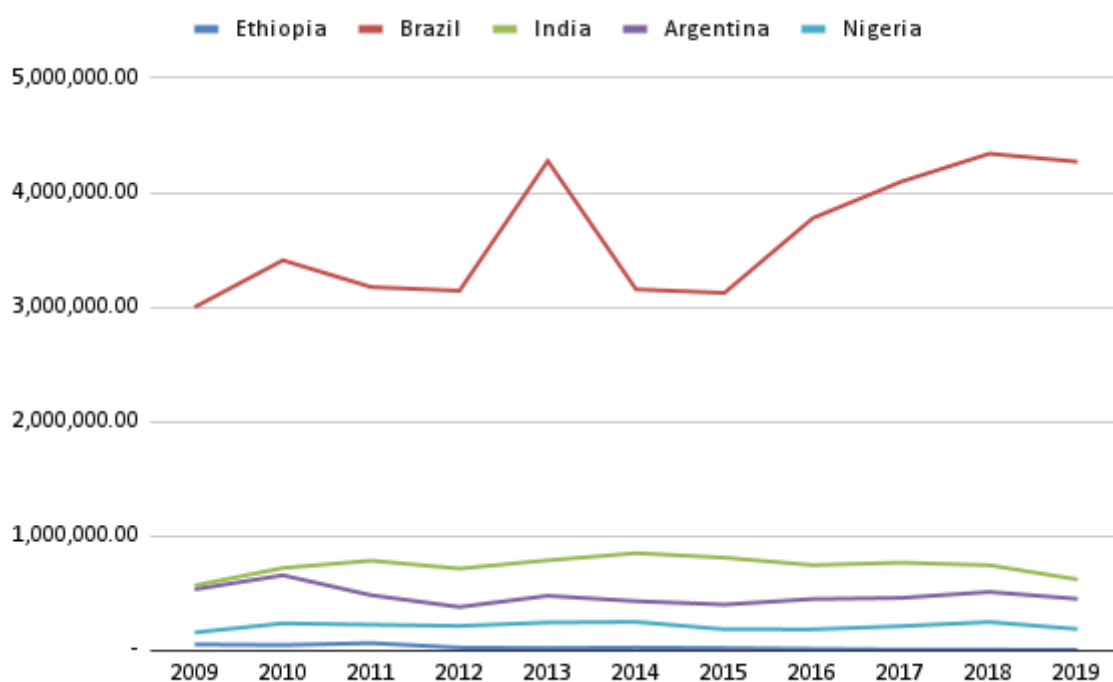


Figure 4.2 Quantity of leather and leather products imported by EU-28 from 2009 to 2019

The disparity between changes in value and quantity of import can be explained by changes in price. The percentage decrease in the value of Ethiopia’s export is not commensurable with the decrease in the volume of export. The percentage decrease in the export value of Ethiopia’s was more than the decrease in export quantity. This implies an increase in price over the period commands higher prices relative to the other countries, to observe this effect we calculated relative the price ratio of each competitor. Ethiopia’s export.

Table 4.2 Relative price ratio of competitors

Year	ET:BR	ET:AR	ET:IN	ET:NG
2009	612.04:145.36	612.04:353.37	408.02:335.02	1224.08:1855.37
2010	1474.65:395.365	1474.65:829.63	737.32:538.44	134.05:175.02
2011	1779.95:500.95	593.31:280.31	593.31:414.21	1779.95:2131.74
2012	2341.35:483.902	2341.35:1019.69	2341.35:1359.39	2341.35:2142.78
2013	2604.09:439.38	434.01:179.11	2604.09:1331.91	1302.04:1025.10

2014	237.10:59.04	2133.94:1231.67	2133.94:1331.00	2133.94:1859.02
2015	2378.535:549.02	2378.53:1473.59	29.01:17.01	2378.53:2487.15
2016	727.17:135.149	727.17:362.09	727.17:463.28	2181.51:2102.98
2017	2744.62:383.40	1372.31:477.16	392.08:195.07	2744.62:2015.21
2018	1217.18:132.14	1217.18:377.01	2434.37:1309.72	2434.37:1613.39
2019	1484.40:111.15	53.01:12.01	371.10:198.05	1484.40:839.05

Source; Eurostat data, own calculation

From the above table we can observe that Ethiopia's and Nigeria's have relatively higher price ratios compared to the remaining competitors' countries.

4.2 Specialization

The results of the RCA analysis (Table 4.3) show that based on the dichotomous interpretation of the RCA index, Ethiopia as well as the other competitor countries have an RCA greater than 1; therefore, have a comparative advantage in the export of Leather and Leather products in all the period under study. Ethiopia made impressive strides in the growth of its RCA index from 2009 to 2011 simultaneous with a similar trend in its market share over the same period before declining in 2012. Nigeria experienced a relatively similar trend in its RCA index growth. Brazil, India and Argentina on the other hand, experienced unstable trend of their RCA indices over the same period.

In terms of the ordinal interpretation of the RCA, Ethiopia ranked first, with an average RCA index of 616.85 over the period 2009-2019. Argentina, Nigeria India and Brazil ranked, second, third, fourth and fifth with RCA of 166.07, 153.44, 112.46 and 73.19 respectively over the same period..

Over the period 2009- 2014, Ethiopia's RCA index made a steady increase and slowly decreased from 1164.27 in 2009 to 644.65 in 2014 and after that constantly decreasing in the study period.

Table 4.3: Revealed comparative advantage (RCA) from 2009 - 2019

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	1164.27	69.12	96.08	171.61	174.68
2010	846.37	61.79	101.54	185.57	192.42
2011	892.81	62.39	100.16	137.77	103.48
2012	578.97	68.56	117.71	146.52	80.38
2013	585.30	73.00	117.10	176.16	95.53
2014	644.65	66.42	128.61	174.41	86.31
2015	639.85	71.48	119.81	181.57	148.41
2016	531.03	80.16	124.75	166.17	266.85
2017	339.78	81.21	114.73	141.61	225.80
2018	326.10	79.74	106.53	158.04	153.59
2019	236.27	91.25	110.00	187.28	160.36

Source; Eurostat data, own calculation

Nigeria enjoyed a consistent increase in its RCA index, moving from 174.68 in 2009 to 266.85 in 2016. The same with India experienced unstable trend moving from 96.08 in 2009 to 128.61 in 2014

Nevertheless, Argentina and Brazil experienced an unstable RCA index decrease and increase in the period, reaching their maximum in the final period of study, scoring 187.28 and 91.25 respectively in 2019. In terms of ranking, Ethiopia is ranked first with an average RCA index of 616.85 followed by second placed Argentina with 166.07. Nigeria, India and Brazil ranked third, fourth and fifth with 153.44, 112.46 and 73.19 respectively.

Between the two periods (2009- 2011 and 2012-2014), the RCA index of Ethiopia and Nigeria decreased with 38% and 44% respectively, the worst decline of Nigeria RCA index is very noticeable and remarkable., while relatively, India and Brazil both increased with 22% and 8%, Argentina made insignificant increase.

In the last four years of the study period (2015-2019), Ethiopia experienced a general upward trend in its RCA index with 15% increase, also all competitors showed a

tremendous increase with Nigeria taking the first place with 264%, Brazil 94%, Argentina 68% and India 58% progress.

Interpreting the RCA index as ordinal measure, the results of the analysis shows that, for the period 2009-2011, Ethiopia maintained its first-place position with an RCA index of 2903.45 and in two sub-periods RCA of 1808.92 and 2073.03 respectively. Argentina was able to maintain its position with RCA 494.95 and 497.09 in the first two periods, finally losing its position with RCA of 834.68 ranked next to Nigeria.

In the case of Nigeria, in the first two periods it ranked third and was able to maintain second place by making a tremendous increase to an RCA index of 955.01. India was in fourth position till it was ranked third in the second period with RCA of 363.42. Brazil continued as fifth position in the whole period.

Overall, analyzing the trend in RCA index in terms of averages between the three sub-periods, Ethiopia has maintained a high RCA index throughout the study, indicating a high level of comparative advantage in the export of leather and leather products. Ethiopia's RCA index has increased between the periods 2009-2011 and 2015-2019 the same as Nigeria. Nevertheless, it is significant to note that, it is only Argentina, India and Brazil that have successfully and consistently increased their RCA index over the three sub-periods.

There may be a possible reason for Ethiopia's superiority in revealed comparative advantage, among these is that Ethiopia has domestic sectoral advantage in its leather and leather products sector from all products export.

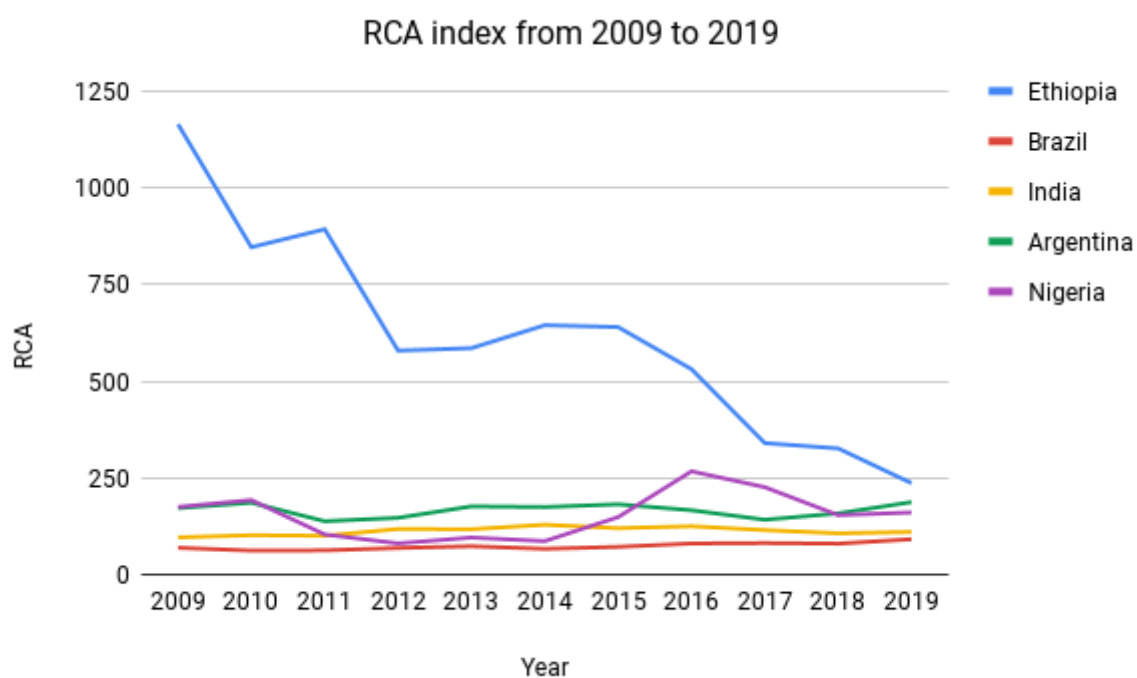


Figure 4.3 Revealed comparative advantage (RCA) from 2009 - 2019

In relative terms, setting 2009 = 100, Ethiopia's RCA index has negative growth by 79.71% in 2019 the same for Nigeria 8.2%, compared to 32%, 14.49% and 9.13% increase for Brazil, India and Argentina respectively. This is shown in Table 4.4

Table 4.4: Relative growth in Revealed Comparative Advantage (RCA) 2009=100

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	100.00	100.00	100.00	100.00	100.00
2010	72.70	89.38	105.68	108.13	110.16
2011	76.68	90.26	104.24	80.28	59.24
2012	49.73	99.18	122.51	85.38	46.02
2013	50.27	105.60	121.88	102.65	54.69
2014	55.37	96.08	133.85	101.63	49.41
2015	54.96	103.41	124.70	105.81	84.96
2016	45.61	115.96	129.84	96.83	152.77
2017	29.18	117.48	119.41	82.52	129.27
2018	28.01	115.36	110.88	92.09	87.93
2019	20.29	132.00	114.49	109.13	91.80

Source; Eurostat data, own calculation

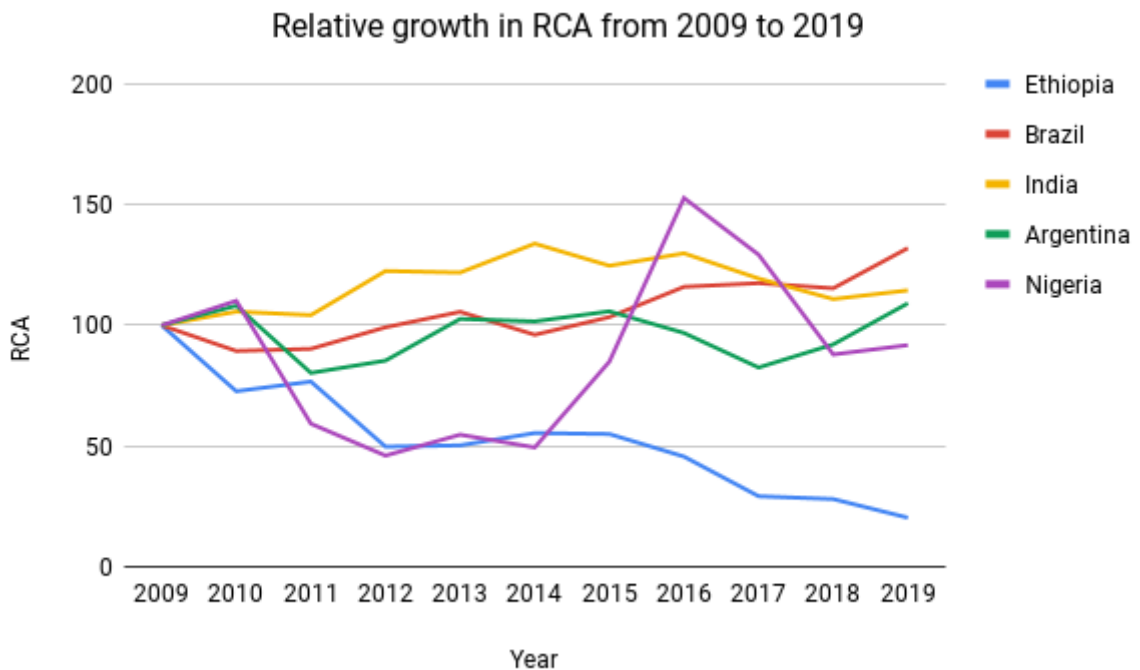


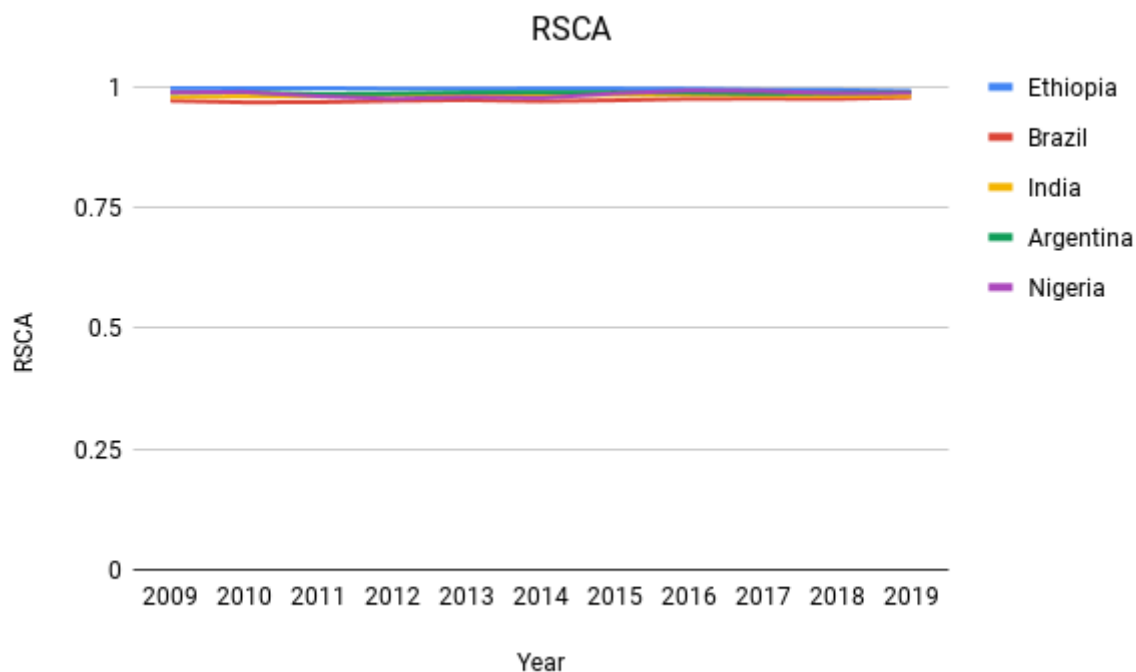
Figure 4.4 Relative growths in Revealed Comparative Advantage (RCA) 2009=100

Ethiopia's growth rate comes fourth after India. The performance of Ethiopia reflects a high level of specialization over the first sub period of the study. For purposes of comparison, we computed the RSCA index to assess the comparative advantage or disadvantage of the leather and leather products exporting countries. The results of RSCA analysis provided in (Table 4.5) show that all the countries have an RSCA index greater than zero and as such have comparative advantage in exporting leather and leather

products into the EU-28 market. It is revealing to note that, unlike the RCA index, there is no wide disparity between the indexes of the various countries. The RSCA index shows that all the countries have almost the same index value (close to unity), apart from Ethiopia being the first and Brazil that has an RSCA clearly below the other countries throughout the study period.

Table 4.5: Revealed symmetric comparative advantage (RSCA) from 2009-2019

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	0.998	0.971	0.979	0.988	0.989
2010	0.998	0.968	0.980	0.989	0.990
2011	0.998	0.968	0.980	0.986	0.981
2012	0.997	0.971	0.983	0.986	0.975
2013	0.997	0.973	0.983	0.989	0.979
2014	0.997	0.970	0.985	0.989	0.977
2015	0.997	0.972	0.983	0.989	0.987
2016	0.996	0.975	0.984	0.988	0.993
2017	0.994	0.976	0.983	0.986	0.991
2018	0.994	0.975	0.981	0.987	0.987
2019	0.992	0.978	0.982	0.989	0.988



Source; Eurostat data, RSCA own calculation

Figure 4.5 Revealed symmetric comparative advantage (RSCA) from 2009-2019

4.3 Competitiveness

4.3.1 Market Share Index

The competitiveness of Ethiopia's export and that of competing countries measured by its market share (value) is presented in (Table 4.6). Ethiopia's market share has generally been on the decrease from 2012 to 2019. Prior to this period, Ethiopia's market share has generally been on the decline after reaching an all-time high in the year 2011. Ethiopia's market share dropped sharply after this all year which resulted in competitiveness from all competitors. Reasons for this are not clear but probably this can be explained by the growth of total market value of the EU-28 market in those periods. Brazil has enjoyed such an impressive increase in its market share right from 2009 dominating the market and reaching its maximum in 2013, apart from the setback it suffered in 2014 gradually falling until losing its first-place market share in 2019 next to India. India's market share has been very constant in increasing its market share since 2009 and reaching its maximum in 2019 that results in first place in market share among the competitors.

On the other hand, Argentina was a middle competitor that scored increase a good competitive position in the first periods and reaching its pick in 2010. after then relatively decreasing but able to maintain its third position in the study period except 2011- 2012 and the last periods of 2018-2019 which result in Nigeria to become third place in those periods.

In the case of Nigeria, it was able to increase its market share position in the first periods till reaching its maximum in 2010 and slightly decreasing after on.

Table 4.6: Market Share (Value) of leather and leather products exporting countries to the EU-28 from 2009-2019

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	1.19%	15.54%	10.19%	6.75%	5.24%
2010	0.90%	16.83%	9.71%	6.82%	5.73%
2011	1.20%	16.29%	10.00%	4.17%	4.95%
2012	0.66%	16.01%	10.26%	4.10%	4.87%
2013	0.54%	17.76%	9.94%	4.87%	4.76%
2014	0.49%	14.33%	9.69%	4.55%	3.99%
2015	0.46%	14.80%	9.77%	5.12%	4.00%
2016	0.33%	15.17%	10.29%	4.85%	3.88%
2017	0.26%	15.32%	10.24%	4.29%	4.21%
2018	0.25%	12.55%	10.69%	4.23%	4.41%
2019	0.27%	11.77%	12.21%	3.77%	3.92%

Source Eurostat data, own calculation

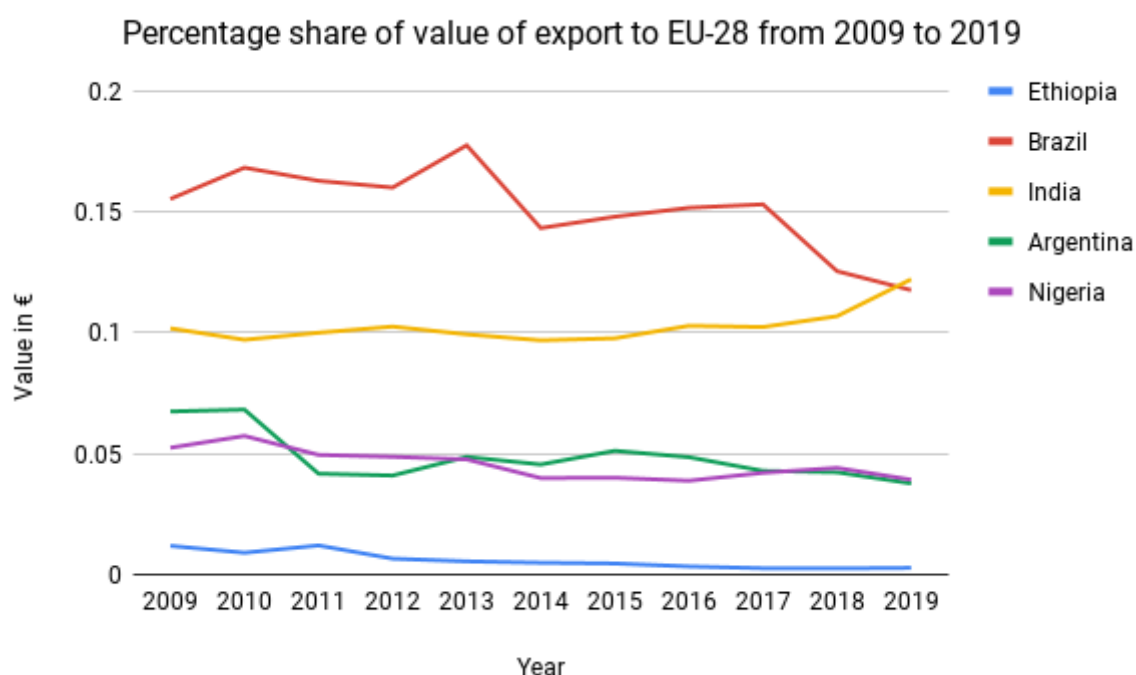


Figure 4.6: Market Share (Value) of leather and leather products exporting countries to the EU-28 from 2009-2019

Analyzing the changes in market share value from another perspective, the average market shares of the periods 2009 – 2011, 2012 – 2014 and 2015 – 2019 are compared. The results are presented in (Table 4.7). The average market share of Ethiopia has seen a steady decline throughout the three periods. The same can be said for Nigeria, Argentina and Brazil faced a relative decline in those three periods. Only India was able to revive the declining market share trend and reached its peak in the last periods of the study.

Table 4.7: Average Market Share (Value), 2009-2011, 2012-2014 and 2015-2019

Sub periods	Ethiopia	Brazil	India	Argentina	Nigeria
2009-2011	1.10%	16.22%	9.97%	5.91%	5.31%
2012-2014	0.56%	16.03%	9.96%	4.50%	4.54%
2015-2019	0.31%	13.92%	10.64%	4.45%	4.08%

Source; Eurostat data

Ethiopia lost a significant 49% and 44% market share value from 2009-2011 to 2015-2019, and also the same case for other competitors Argentina have lost a significant 24% and 1%, Nigeria lost 14% and 10% and Brazil also lost 1% and 13% of their

respectively. The only country that was able to maintain and increase its market share in the last period with 7% growth was India.

It is significant to note that, all competitors lost their market share value except India, among the most significant losers are Ethiopia, Argentina and Nigeria. It appears that those countries are losing their share of the market to India. On a balance, except India all competitors altogether lost 88% of their market share between 2009-2011 and 2012-2014, the same case all competitors lost 68% altogether in the last periods, whereas India was able to gain 7% market share in the same period.

In relative terms, setting 2009 = 100, Ethiopia's market share value has decreased by a significant 77 % in 2019. Argentina, Nigeria and Brazil share of the market decreased by 44.1%, 25.21 % and 24.28 % respectively. On the other hand, India market share value increased by -19.92 % over the same period. The relative growth in value market share is presented in Table 4.8

Table 4.8: Relative growth in Market Share (Value) 2009=100

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	100.00	100.00	100.00	100.00	100.00
2010	75.92	108.33	95.36	101.14	109.33
2011	101.31	104.83	98.22	61.84	94.39
2012	55.28	103.03	100.72	60.72	92.88
2013	45.80	114.29	97.55	72.15	90.84
2014	41.02	92.25	95.13	67.48	76.08
2015	38.38	95.26	95.95	75.88	76.34
2016	28.03	97.64	101.03	71.98	73.98
2017	21.74	98.56	100.52	63.57	80.25
2018	21.13	80.76	104.93	62.73	84.11
2019	23.00	75.72	119.92	55.90	74.79

Source; Eurostat data, own calculation

Relative growth in value of share to EU-28 from 2009 to 2019

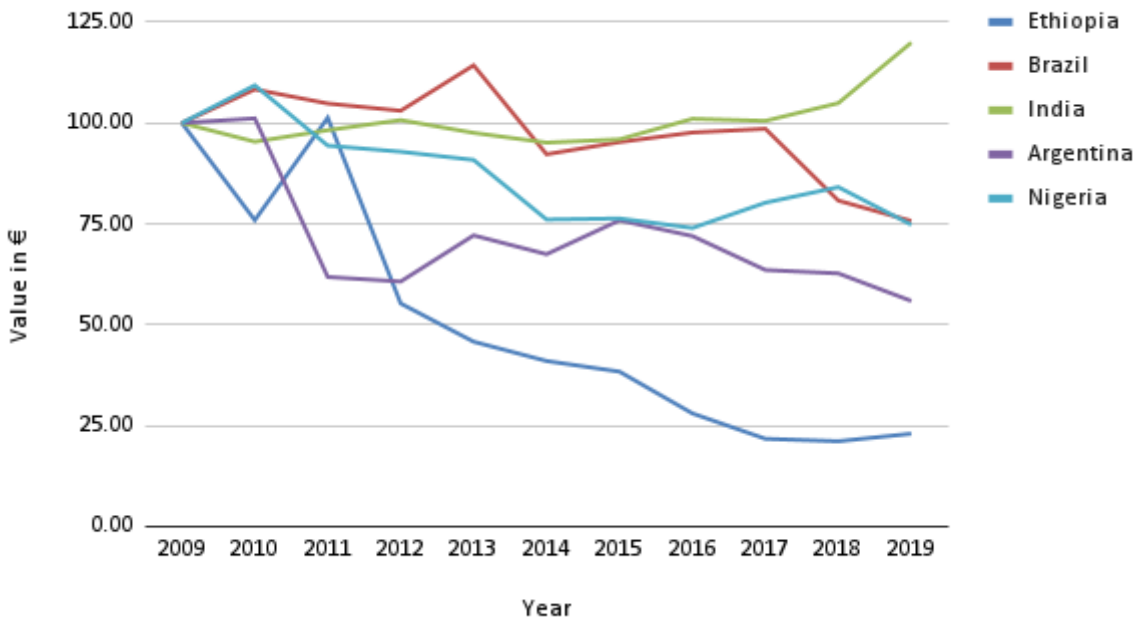


Figure 4.7: Relative growth in Market Share (Value) 2009=100

In terms of quantity market share (Table 4.9), the trends are similar to the value market share. Ethiopia’s quantity share of the market has decreased from 0.43 % in 2009 to 0.05 % in 2019, a loss of 0.38 % on its share. Similarly, Argentina and India have also lost 0.97% and 0.01% of their quantity market share respectively. Conversely, Brazil and Nigeria have gained 7.2 % and 0.1 % apiece.

Table 4.9: Market Share (quantity) of leather and leather products exporting countries to EU-28: 2009-2019

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	0.43%	23.93%	4.54%	4.27%	1.27%
2010	0.33%	22.89%	4.85%	4.42%	1.60%
2011	0.43%	20.89%	5.17%	3.19%	1.49%
2012	0.20%	23.09%	5.27%	2.80%	1.59%
2013	0.14%	26.84%	4.95%	3.01%	1.54%
2014	0.16%	19.24%	5.19%	2.64%	1.53%
2015	0.15%	20.96%	5.45%	2.70%	1.25%
2016	0.10%	25.22%	4.99%	3.01%	1.24%
2017	0.06%	25.90%	4.86%	2.91%	1.35%
2018	0.06%	28.36%	4.87%	3.35%	1.63%
2019	0.05%	31.12%	4.53%	3.30%	1.37%

Source; Eurostat data, own calculation

Figure 4.8: Market Share (quantity) of leather and leather products exporting countries to EU-28: 2009-2019



Table 4.10 Relative growth in market share (quantity) 2009=100

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	100.00	100.00	100.00	100.00	100.00
2010	75.68	95.66	106.88	103.47	126.54
2011	99.97	87.29	113.99	74.57	117.88
2012	45.05	96.50	116.09	65.60	125.37
2013	31.92	112.13	109.16	70.35	121.90
2014	37.49	80.41	114.47	61.70	120.99
2015	34.29	87.56	120.04	63.17	98.85
2016	23.67	105.37	109.96	70.48	98.23
2017	14.04	108.21	107.13	68.16	106.98
2018	14.17	118.50	107.40	78.42	129.01
2019	12.45	130.02	99.88	77.12	108.56

Source; Eurostat data, own calculation

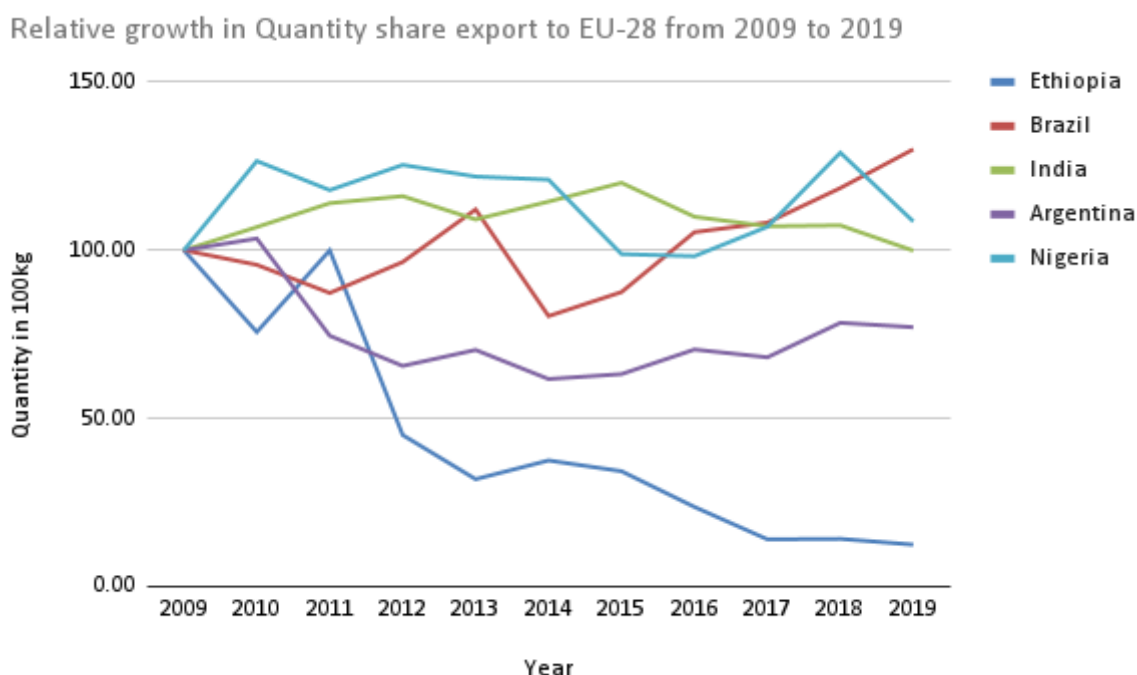


Figure 4.9 Relative growth in market share (quantity) 2009=100

In relative terms, setting 2009=100, the 2019 market share figure, represents an 87.55%, 22.88%, 0.12% decrease for Ethiopia, Argentina and India respectively. On the other hand, 2019 compared to the base year, the quantity market share of Brazil and Nigeria increased by 30.02% and 8.56% respectively.

Table 4.11: Average Market Share (quantity), 2009-2011, 2012-2014 and 2015-2019

Sub periods	ETHIOPIA	BRAZIL	INDIA	ARGENTINA	NIGERIA
2009-2011	0.40%	22.57%	4.85%	3.96%	1.45%
2012-2014	0.17%	23.06%	5.14%	2.82%	1.55%
2015-2019	0.09%	26.31%	4.94%	3.05%	1.37%

Source; Eurostat data, own calculation

Ethiopia decreased 58% and 47% in both 2009-2011 to 2015- 2019, Brazil able to increase its quantity market share 0.022% and 0.14% in the same periods, in the case of Argentina decrease in 29% in the period between 2009-2012 to 2012-2012 and an increase of 8% between second and third periods. India and Nigeria experienced the same scenario in the second period with an increase of quantity market share by 6% and 7%, in the last periods both lost 4% and 12% of their previous quantity market share respectively.

Judging by the operational definition of competitiveness as the ability of a product or sector to achieve and maintain a certain market share, Ethiopia, Argentina and Nigeria were not competitive. Brazil and India maintained and increased their market share values and can therefore be said, these two countries were competitive.

4.3.2 Constant Market Share (CMS) analysis

Using equation (8), a first level constant market share decomposition is conducted to explore the sources of changes in export. The whole study period is divided into three sub-periods, 2009-2011, 2012-2014 and 2015-2019. The average export values were computed for each sub -period and compared. 2009 -2011 was compared with 2012- 2014, such that 2009 -2011 was considered the base year and 2012- 2014 the current year. Similarly, the 2012-2014 was compared with 2015-2019 and the two sub- periods considered as base and current year respectively. A summary of the computations and the decomposition procedure is presented in the tables below.

Table 4.12: CMS decomposition procedure

		q = exporting country's export (value)	Qij = total import of product i by market j	Sij = exporting country's market share of product in market ij	Δs = change in the two periods,	ΔQ = change in the two periods,
Country	Year	q (€)	Q (€)	s	Δs	ΔQ (€)
ETHIOPIA	2009-2011	255,884,709.00	23,381,070,080.00	0.011		
	2012-2014	176,588,298.00	31,772,255,115.00	0.006	-0.005	8,391,185,035.00
	2015-2019	157,585,749.00	49,133,522,494.00	0.003	-0.002	17,361,267,379.00
BRAZIL	2009-2011	3,810,030,445.00	23,381,070,080.00	0.163		
	2012-2014	5,075,853,607.00	31,772,255,115.00	0.160	-0.003	8,391,185,035.00
	2015-2019	6,912,139,116.00	49,133,522,494.00	0.141	-0.019	17,361,267,379.00

INDIA	2009-2011	2,325,797,036.00	23,381,070,080.00	0.099		
	2012-2014	3,158,676,268.00	31,772,255,115.00	0.099	0.000	8,391,185,035.00
	2015-2019	5,182,107,232.00	49,133,522,494.00	0.105	0.006	17,361,267,379.00
ARGENTINA	2009-2011	1,331,881,919.00	23,381,070,080.00	0.057		
	2012-2014	1,436,106,365.00	31,772,255,115.00	0.045	-0.012	8,391,185,035.00
	2015-2019	2,213,241,749.00	49,133,522,494.00	0.045	0.000	17,361,267,379.00
NIGERIA	2009-2011	1,236,565,537.00	23,381,070,080.00	0.053		
	2012-2014	1,433,212,683.00	31,772,255,115.00	0.045	-0.008	8,391,185,035.00
	2015-2019	2,006,152,509.00	49,133,522,494.00	0.041	-0.004	17,361,267,379.00

Source; Eurostat data, Own calculation

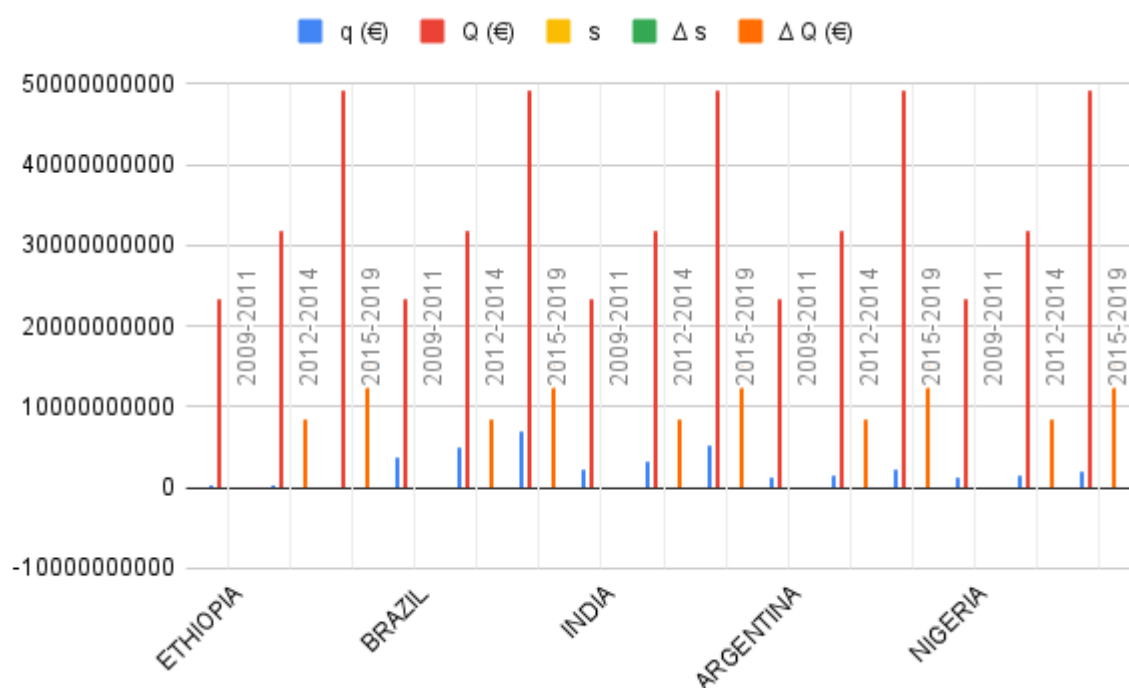


Figure 4.10: CMS decomposition procedure

The results of the CMS decomposition of the change in export values to the EU-28 from 2009 to 2019 for Ethiopia and the competitor countries are provided in Table 4.13. Between the first two sub-periods, 2009-2011 and 2012-2014, all countries except Ethiopia increased their export values with Brazil being the largest gainer. Ethiopia lost about 79.2 million euro of its export value, which equated to 1.09% decrease in its market share. Brazil, India, Nigeria and Argentina increased their export value by 1.2 billion, 832.8 million, 196.6 million and 104.6 million euro respectively. In contrast, the EU-28 market value increased by over 8.4 billion euro over the same period. The first level CMS decomposition shows that the contribution of structural effect to the change in total export value, the relative growth rate was negative for Ethiopia and positive for other competitors. The contribution of structural effect to the changes in Ethiopia's export value was positive, however the gains from the growth of the market was offset by the negative effects of the other components.

Table 4.13: Results of CMS decomposition of the change in export value

Countries	Decomposition	2009-2011 compared to 2012-2014		2012-2014 compared to 2015-2019	
		Value (€)	%	Value (€)	%
Ethiopia	change in total export	-79,296,411	100.00	-19,002,549	100.00
	Structural effect	91,833,946.59	-115.81	96,492,888.10	-507.79
	Competitive effect	-125934116.70	158.81	(74,685,272.01)	393.03
	Secondary effect	-45196240.88	57.00	(40,810,165.09)	214.76
Brazil	change in total export	1,265,823,162	100.00	1,836,285,509	100.00
	Structural effect	1,367,374,134.01	108.02	2,773,591,340.27	151.04
	Competitive effect	(74,730,936.94)	-5.90	(606,110,013.70)	-33.01
	Secondary effect	(26,820,035.08)	-2.12	(331,195,817.57)	-18.04
India	change in total export	832,879,232	100.00	2,023,430,964	100.00
	Structural effect	834,700,602.50	100.22	1,725,990,901.62	85.30
	Competitive effect	(1,340,338.96)	-0.16	192,339,996.48	9.51
	Secondary effect	(481,031.54)	-0.06	105,100,065.90	5.19
Argentina	change in total export	104,224,446	100.00	777,135,384	100.00
	Structural effect	477,996,412.86	458.62	784,729,522.57	100.98
	Competitive effect	(275,057,232.15)	-263.91	(4,910,759.41)	-0.63
	Secondary effect	(98,714,734.71)	-94.71	(2,683,379.16)	-0.35
Nigeria	change in total export	196,647,146	100.00	572,939,826	100.00
	Structural effect	443,788,508.97	225.68	783,148,332.11	136.69
	Competitive effect	(181,870,298.67)	-92.49	(135,931,599.13)	-23.73
	Secondary effect	(65,271,064.30)	-33.19	(74,276,906.98)	-12.96

Source; Eurostat data, own calculation

In terms of competitiveness, the contribution of the competitive effect to the change in export was negative for all competitors in those two sub periods; India was relatively the strongest competitor with the list decrease in its competitiveness position in those periods compared to other competitors, followed by Brazil and Nigeria respectively. On the other hand, the competitive effect contributed negatively to Ethiopia's export value. In actual terms, Ethiopia's export value was reduced by over 125.9 million euro due to the negative competitive effect.

Over all, between the two sub-periods (2009-2011 and 2012-2014) Ethiopia made a poor performance in terms of competitiveness and structural market share compared to the other countries.

Between the second sub-period (2012-2014) and the third sub-period (2015-2019), the results of the CMS decomposition indicates that, exceptionally, Ethiopia's export values declined by 19.0 million euro while the export values of India, Brazil, Argentina and Nigeria increased. It is remarkable that Ethiopia performed a negative position in export values, now current decline also results in 0.32% of its export share. The increase in export value for under competitors yielded a less magnitude marginal increase in their market share.

Structural effects contributed positively to increase in relative growth rate in export for Brazil, Nigeria, Argentina and India respectively. The contribution of structural effect to the changes in Ethiopia's export value was positive, however the gains from the growth of the market was offset by the negative effects of the other components.

Although the competitiveness of Ethiopia has not improved, the changes in export are still mainly due to structural effect and it can therefore be said that it is less competitive compared to countries like Nigeria which is an African, Caribbean and pacific states agreement member. It is insightful to note that; generally, ACP exporting countries have been less competitive compared to Brazil, India and Argentina.

Brazil has lost significantly on its competitiveness, from slight negative relative growth rate between the first and second sub periods to massive negative between the second and third sub-periods. On the contrary, Nigeria and Argentina relatively competitors in the previous periods made a progress in their positions with slight percent increase with in negative records

India, a previously strong competitor, boosts its competitive position by increasing its performance by scoring positive 9.51 increases from previous sub periods.

Ethiopia in these sub periods had a poor performance by scoring negative positioned in the bottom among all competitors. It is clear that the decrease in export share was due mainly to the growth of the market.

Over all, between the two sub-periods (2012-2014 and 2015-2019) Ethiopia made a poor performance in terms competitiveness compared to the other countries. Reasons for this are not obvious, but the effects of exchange rate movements cannot be ruled out.

4.4 Regression result

We conduct an empirical analysis on the determinants of the Ethiopia's leather and leather products export using the Quantity market share as the dependent variable. The Armington model (equation 9) is converted to a log-linear functional form and evaluated with the OLS. The following extended form was used to estimate the model:

$$(10) \quad \ln MS = \beta_0 + \beta_1 \ln \text{RLTV price} + \beta_2 \ln \text{XR(EUR/BR)} + \beta_3 \ln \text{RCA} + \beta_4 \text{DUM} + \varepsilon$$

Where, MS is the Ethiopia's market share (Quantity), β_0 is the constant term, β_1 is the coefficient of relative price, β_2 is the coefficient of exchange rate (EUR/BR), β_3 is the coefficient of the RCA index of Ethiopia, and β_4 is the coefficient of the dummy variable to capture the effect of the Free Trade Agreement Negotiations started in 2007, last round in July 2013, in this agreement type there are removal or reduction of tariff between the EU and India in bilateral trade, The dummy variable takes the value of zero (1) for the period prior to July 2013 and (0) thereafter) and ε is the error- term.

A prior, a negative relationship between quantity market share and the price ratio is expected, as is a negative relationship between market share and exchange rate (strengthening of local currency versus Euro currency) and a positive relationship with level of specialization (as measured by the RCA).

Data Shortage of quarterly Euro to Birr trend exchange rates a 5% significance level is used to determine whether a coefficient is statistically significant. The results of the regression analysis presented in (Table 4.14), indicates a high coefficient of determination (R²). About 90% of the total variation in Ethiopia's market share can be attributed to the variations in the explanatory variable and 10% to random variations. The Durbin- Watson

(DW) statistics indicate the absence of autocorrelation in the model (but it can be said a normal correlation exists).

Table 4.14 Results of the regression analysis

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.95
R Square	0.90
Adjusted R Square	0.83
Standard Error	8100.23
Observations	11.00

Data period 2009 -2019

ln RLTV price

The relative price ratio shows a negative sign and statistically significant with quantity market share. The negative sign here is quite acceptable hence its consonance with the general theory of demand, confirming the prior expectation and it is statistically significantly different from zero, the coefficient of the price ratio indicates that demand for Ethiopia's leather and leather product is inelastic. This means that a percentage increase in price will lead to less than proportionate decrease in quantity market share of Ethiopia.

ln XR (EUR/BR)

The effect of exchange rate on Ethiopia's quantity market share is positive which indicates it is insignificant to the market share change in the selected study period, but from the general understanding the Ethiopia's international trade transaction and base of custom tariff tax payment is based on USD this may led to Euro currency to be less vulnerable to exchange rate fluctuation within the study period

In RCA Index

The relationship between the levels of specialization (measured by the RCA index) is positive as expected and it is statistically significant. This implies that, as Ethiopia's increases its comparative advantage or level of specialization in the export of leather and leather product, its quantity market share will increase

Dummy variable

The coefficient of the dummy variable, representing the effect of the opening of reduced tariff quota for India in 2007 and lasted July 2013 was insignificant in effect of Ethiopia's quantity market share in the EU-28 market.

Autocorrelation test

Autocorrelation test is conducted by applying Durbin-Watson Test (d-statistics) and Breusch- Godfrey Serial Correlation LM Test. The Durbin Watson statistics fall between 0 and 4. if there is no autocorrelation, d is expected to be about 2. As a rule of thumb, if *it is* found to be 2 in an application, we may assume that there is no autocorrelation. As per table below the regression result of the model shows, Durbin Watson statistics value is 2.2 which is above two. Therefore, it is concluded that there is no autocorrelation

Table 4.15 OLS regression result

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-30,070.24	56,697.44	-0.53	0.61	-168,803.87	108,663.40
ln RLTV price	-10.30	13.18	-0.78	0.46	-42.55	21.94
ln XR (EUR/BR)	1,635.15	1,161.80	1.41	0.21	-1,207.66	4,477.97
ln RCA Index	58.60	32.38	1.81	0.12	-20.64	137.83
Dummy variable	12,133.21	7,118.13	1.70	0.14	-5,284.22	29,550.64
Durbin-Watson	2.20					

4.5 Discussion

The analysis results suggest that Ethiopia needs to continue to improve its export market growth and relative export price; in particular against the leather and leather products market players in the EU-28, including Brazil, India and Argentina. Despite the country having ample resources in the livestock that gave a natural comparative advantage to the leather sector in the world market. Ethiopia's leather and Leather products relative export prices are more expensive than its competitors so reducing the cost of leather and Leather products export is a key strategy for Ethiopia. Export pricing has to respond effectively to the contingencies in the external environment. Similarly (Coppeaux,Z.,Collière,C, C., Ilhami, A., Laigle, R.,Savu, N., & Soudan,M et al.,2016), the Ethiopia's leather industry suffers from a low penetration on the international market, because of a lack of competitiveness in terms of selling price. 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.

(Iyer, G.R., et al. 2015) state that pricing is a decision that needs to be continuously examined and frequently adjusted, consequently pricing calls for detailed information on the environment as well as information on the impacts of prices on the company's marginal profits. According to (Smith, M.FS., et al. 1999) pricing in today's competitive markets is a difficult task because the fluctuations in prices and the quick reactions by competitors to any price moves by large companies has made it difficult to establish consistent long-term pricing policies. (Rusetski, A., 2014), argues that “the complexity of pricing decisions and time pressures that often accompany them, prompt the need for fast, simplified decision algorithms”. Easier access to information for customers and the increasing dynamism of the environment have transformed the basis of competitiveness and have led to a fact that one of the most critical elements for companies becomes the ability to set and manage pricing strategies in order to deal with these new situations. This is especially true for companies active in highly dynamic and hyper-competitive industries (Narangajavana,Y., et al., 2014).

Furthermore the RCA and RSCA analysis results suggest that Ethiopia needs to continue to improve its comparative advantage in the EU-28 market, since the country has a higher comparative advantage against the selected economies but the trend of its comparative

advantage is in a decline Similarly, (Leung, P., & Cai, J., et al., 2005), Comparative advantage can be attained by either increasing the benefit generated by the manufacturing activity or decreasing its opportunity cost. (Fitawek, W., et al., 2016), the RCA of Ethiopia's finished leather products was more than one during the period 2006 to 2014, while increased more after 2010. (Abtey, M., et al., 2015), Ethiopia has a potential to invest more and expand in the leather and leather products industry. To strengthen this potential concerned governmental body, the entrepreneurs, investors and policy makers of the leather industry have to actively participate for proper implementation. If the investors and policy makers concentrate more on leather and Leather products export, then the country can earn more export revenue. (UNCTAD., et al., 2018), Ethiopia's leather sector in general enjoys significant international comparative advantages owing to its abundant and available raw materials, highly disciplined workforce and cheap prices. However, the extent to which these comparative advantages translate into a competitive advantage on international markets depends on various factors, especially the overall technical efficiency of the sector, labor productivity, and the quantity and quality of the locally supplied raw materials.

The competitiveness analysis results suggest that Ethiopia needs to continue to improve its market competitiveness by increasing Value and volume of export share throughout the dynamics of EU-28 market; in particular, against the leather and leather products market players, including Brazil, India and Argentina. From the operational definition of competitiveness as the ability of a product or sector to achieve and maintain a certain market share. Among the positive and significant contribution of the competitiveness effect implies an increase implies increase in exports if the country in question was able to maintain its initial share of global exports during the period. Similarly, (Chen, K., & Duan, Y., 2001) Despite the fact that changes in market share are not entirely attributable to changes in competitiveness, the ability of a product or sector to achieve and maintain a certain market share provides an accepted indication of the exporting countries or region's competitiveness in relation to the export market (ibid). correspondingly (Fitawek, W., et al., 2016), 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. Similarly (Tadesse, T., & Brar, J., S., 2016). Ethiopia's exports grew by 951.6% between 1995 and 2014. In other words, the country

has seen more than 10-fold increment in its exports (in current USD) from its 1995 value of \$421.9 million to \$4.4 billion in 2014; A constant market shares analysis of Ethiopia's export performance reveals the importance of two key factors as drivers of growth: the growth in total world trade and improvements in Ethiopia's competitiveness. Ethiopia's export growth has been driven principally by the growth in world trade. The leading role played by the rising by rising world trade effect is a reflection of the fact that the country has been sharing from the expansion of global trade during the past two decades. Thus, regardless of the structure of its exports, Ethiopia has benefited much from the expansion of global trade over the past two decades and growth in world demand has been generally good to the growth of the country's exports. Large part of the relative success in exporting over the past two decades is attributed primarily to the favourable growth in world demand. This has been accompanied by the robust contribution of improved competitiveness of the country's exports. The enhanced competitiveness of the country's exports is indicative of the usefulness and broader success of the trade and exchange rate reforms implemented since 1992 and overall improvements in the domestic supply capacity of the country. Perhaps, the positive competitiveness effect is a sign that judicious domestic policy reforms have the capacity to pay off in terms of additional export growth through enhancing the relative external competitiveness of the country's exports.

Finally, from the empirical analysis of determinants of Ethiopia's export quantity market share, the results of regression analysis shows that the level of specialization and relative price ratio has a strong impact on the Quantity market share of Ethiopia in EU-28 market, on the other hand, exchange rate and trade agreements seem less important determinants for the success of Quantity market share in the target market.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

In this study it was analyzed to determine whether Ethiopia's exports have grown in line with its main competitors and whether a country's comparative performance reflects a strong presence in high-growth markets or competitive gains in individual markets.

The performance of the leather industry in Ethiopia and made its comparison with selected EU-28 market competitors Brazil, India, Argentina and Nigeria.

For the study descriptive statistics has been employed to analyze Ethiopia's export performance trend from year 2009 to 2019.

From the study results it has been observed that the value of Leather and Leather products exported from Ethiopia has decreased significantly by 67% from 66,530,154 EURO in 2009 to 21,998,838 EURO in 2019. Similarly Ethiopia's export performance in terms of volume (quantity), the result shows that Quantity exported decreased by a marginal 86% from 54,351 quintals in 2009 to 7,410 quintals in 2019. This study also analyzed performance indicators in the export, two measures of specialization; the Revealed Comparative Advantage (RCA) and the Revealed Symmetry Comparative Advantage (RSCA). The results of the RCA analysis show that based on the dichotomous interpretation of the RCA index, Ethiopia as well as the other competitor countries have an RCA greater than 1; therefore, have a comparative advantage in the export of Leather and Leather products in all the period under study.

Despite having a comparative advantage in the sector, the trend is assessed through relative growth terms, setting 2009 = 100, Ethiopia's RCA index has negative growth by 79.71% in 2019 the same for Nigeria 8.2%, compared to 32%, 14.49% and 9.13% increase for Brazil, India and Argentina respectively.

In terms of the ordinal interpretation of the RCA, Ethiopia ranked first, with an average RCA index of 616.85 over the period 2009-2019. Argentina, Nigeria India and Brazil ranked, second, third, fourth and fifth with RCA of 166.07, 153.44, 112.46 and 73.19 respectively over the same period.

Correspondingly the results of RSCA analysis shows that all the countries have an RSCA index greater than zero and as such have comparative advantage in exporting leather and leather products into the EU-28 market.

Constant Market Share (CMS) analysis CMS model was used to analyze the third objective, which is to determine the competitiveness and a first level constant market share decomposition is conducted to explore the sources of changes in export.

The results of the CMS decomposition of the change in export values to the EU-28 Between the first two sub-periods, 2009-2011 and 2012- 2014, all countries except Ethiopia increased their export values with Brazil being the largest gainer.

Brazil, India, Nigeria and Argentina increased their export value by 1.2billion, 832.8 million, 196.6 million and 104.6 million euro respectively.

Over all, between the two sub-periods (2009-2011 and 2012-2014) Ethiopia made a poor performance in terms of competitiveness and structural market share compared to the other countries.

Finally, from the empirical analysis of determinants of Ethiopia's export quantity market share, the results of regression analysis shows that the level of specialization and relative price ratio has a strong impact on the Quantity market share of Ethiopia in EU-28 market, on the other hand, exchange rate and trade agreements seem less important determinants for the success of Quantity market share in the target market.

5.2 POLICY IMPLICATIONS

Based on the results of the study, the following recommendations are made to enhance the production and export potential of the leather and leather products industry to the EU-28 market.

1. The research provided valuable information that Ethiopia has a comparative advantage, so the government should consider a policy that will help specialization from a dynamic standpoint, under free trade, whether Ethiopia's has to inclination towards the increased specialization in the leather and leather products and export it to EU-28 market. Or increase specialization by counterproductive.
2. In the short run, increasing and maintaining a certain market share in terms of value and quantity, may enhance the competitiveness of the leather industry. In the long run the

government should consider alternatives competitiveness boosting policies in the sector, so that the Ethiopia's leather industry will become competitive as Brazil, India and other exporting countries to the EU-28 market.

3. Due to the negative effect of relative export price to quantity market share in the EU-28 market, it is necessary for the Ethiopia's government and stakeholders in the industry to search for an efficient global value chain and export pricing strategy because it may have powerful and immediate effect on a company's performance success in foreign market

4. The Ethiopian government and all the parties in the leather and leather products industry should enhance the innovation and produce new products derivative from the leather industry as the reaction of rapid changing of the global leather and leather products market.

5) Introducing international and continental trade agreements for optimizing market distribution of exports comparative advantage between trading countries and custom tariff rates.

5.3 Suggestions for Further Research

1) The more commodities of leather related based-products to be analyzed to make a more complete explanation on the leather and leather products industry.

2) As RCA and CMS models are limited in area of discussion, the further studies may include another method, such as Acceleration Ratio (AR) to analyze the competitiveness of the commodity and Trade Specialization Index (TSI) to analyze the export specialization of a country.

3) The more objects of study, not only Ethiopia, but also more countries involved and the scope of area of study will be broader than the EU-28 market. It is possible to analyze even the world market

References

- Abebe, G. & Schaefer, F. (2015). Review of Industrial Policies in Ethiopia: A Perspective from the Leather and Cut Flower Industries. *Industrial Policy and Economic Transformation in Africa*. New York.
- Ahmadi-Esfahani, F. Z. (2006). Constant Market Shares Analysis: Uses, Limitations and Prospects *The Australian Journal of Agricultural and Resource Economics*, 50, 510-526.
- Alston, J. M., Carter, C. A., Green, R., & Pick, D. (1990). Whither Armington Trade Models. *American Journal of Agricultural Economics*, 72, 455-467.
- Anca, H. (2008). Literature review of the evolution of competitiveness concept. <http://steconomiceuoradea.ro/anale/volume/2012/n1/004.pdf>
- Armington, P. S. (1969). A Theory of Demand for Products Distinguished by Place of Production. *IMF Staff Papers*, 16, 159-176.
- Balassa, B. (1965). Trade Liberalisation and Revealed Comparative Advantage. *Manchester School of Economics and Social Studies*, 32, 99-123
- Ballance, R. H., Forstner, H., & Murray, T. (1987). Consistency Tests of Alternative Measures of Comparative Advantage. *Review of Economics and Statistics*, 69(1), 157-161
- Banwet, D.K., Momaya, K., & Shee, H.K. (2002). Competitiveness: Perceptions, reflections and directions. *IIMB Management Review*, 14(3), 105–116.
- Berger, T., & Bristow, G. (2009). Competitiveness and the benchmarking of nations—A critical reflection. *International Advances in Economic Research*, 15(4), 378–392.
- Bhawsar, P., & Chattopadhyay, U. (2015). Competitiveness: Review, reflections and directions. *Global Business Review*, 16(4), 665–679.
- Bofinger, P. (1995). A systematic retrieval of international competitiveness literature: a bibliometric study. [The international competitiveness of economies: a phenomenon of a theory's search]. *Kredit und Kapital*, 28, 467–497
- Boltho, A. (1996). The assessment: International competitiveness. *Oxford Review of Economic Policy*, 12(3), 1–16.

- Bowen, H.P. & Pelzman, J. (1984). US Export Competitiveness: 1962 – 77. *Applied Economics* 16: 461-473.
- Bojnec, Š. and Fertő, I. (2008): European Enlargement and Agro Food Trade. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie* 56 (4), 563-579. <http://dx.doi.org/10.1111/j.1744-7976.2008.00148.x>
- Bojnec, Š. and Fertő, I. (2009a): Agro-Food Trade Competitiveness of Central European and Balkan Countries. *Food Policy* 34(5), 417-425. <http://dx.doi.org/10.1016/j.foodpol.2009.01.003>
- Bojnec, Š. and Fertő, I. (2010): Structure and Convergence of AgroFood Trade of Central and Eastern European Countries with the European Union during Pre-Accession. *Journal of Economics* 58 (7), 677-689
- Bojnec Š. and Fertő I. (2012a): Does EU Enlargement Increase Agro-Food Export Duration? *The World Economy* 35 (5), 609-631. <http://dx.doi.org/10.1111/j.1467-9701.2012.01441.x>
- Bojnec, Š. and Fertő, I. (2014). Agri-food exports from European Union Member States using constant market share analysis," *Studies in Agricultural Economics*, Research Institute for Agricultural Economics, vol. 116(2), pages 1-5, August.
- Bris, A., & Caballero J. (2015). Revisiting the fundamentals of competitiveness: A Proposal. *IMD Report*. <https://www.imd.org/uupload/imd.website/wcc/Fundamentals.pdf>.
- Carneiro, J;Rocha, A;Silva, J. F. (2011). Determinants of export performance: a study of large brazilian manufacturing firms. *Brazilian Administration Review*, Rio de Janeiro, v. 8, n. 2, p. 107-132, Apr./June 2011.
- Chaudhuri, S., & Ray, S. (1997). The Competitiveness Conundrum: Literature Review and Reflections. *Economic and Political Weekly*. <http://www.jstor.org/stable/4406121>.
- Chen, K., & Duan, Y. (2001). Competitiveness of Canadian Agri-food Exports Against Competitors in Asia: 1980-97. Project Report 01-01, AARI Project(99M431).
- Chien, C. L., & Lee, Y. J. (2010). A Study of Taiwan's Export Competitiveness Based on The CMS Model. *Journal of Global Business Management*, 6(2), 1.

- Cho, D., & moon,H. (2008). Characterizing international competitiveness in international business research: A MASI approach to national competitiveness," Research in International Business and Finance, Elsevier, vol. 22(2), pages 175-192, June.
- Coppeaux,Z., Collière,C, C., Ilhami, A., Laigle, R.,Savu, N., & Soudan,M et al.,(2016).Does Ethiopia have a comparative advantage in the leather industry?
- Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (1998). International business: Environments and operations. Addison-Wesley.
- Dalum, B., Laursen, K., & Villumsen, G. (1998). Structural Change in OECD Export Specialisation Patterns: De-specialisation and Stickiness. International Review of Applied Economics, 12, 447-467.
- Deardorff, A. V. (1980). The General Validity of the Law of Comparative Advantage. The Journal of Political Economy, 88(5), 941-957.
- De Benedictis, L., & Tamberi, M. (2001). A Note on the Balassa index of Revealed Comparative Advantage. Working Papers 158, Dipartimento di Economia, Universita' Politecnica delle Marche.
- Dunning, J.H. (1993) Multinational Enterprises and the Global Economy.,Berkshire: Addison-Wesley.
- Dwivedi, D. N. (2002). Managerial Economics, sixth edition (New Delhi: Vikas Publishing House Ltd).
- European Commission. (1997). Second European Report on S&T Indicators, Luxembourg: Office of the Official Publications of the European Communities.
- European Commission. (2014). European competitiveness report: Helping firms grow. Commission staff working document SWD (2014) 277 final. Brussels: European Union.
- FAO (2017) Food and Agricultural Organization Statistics available at: <http://www.fao.org/faostat/en/#data/>.
- FAO. (2018): Livestock and livelihoods spotlight. Ethiopia Cattle Sector. <http://www.fao.org/3/i8676en/I8676EN.pdf>.

- Fagerberg, J. & Sollie, G. (1987). The Method of Constant Market Shares Analysis Reconsidered. *Applied Economics* 19: 1571-1583.
- Fagerberg, J., & Sollie, G. (2014). The method of constant market shares analysis reconsidered: A Study of Taiwan's Export Competitiveness Based on the CMS Model.
- Ferto, I., & Hubbard, L. J. (2003). Revealed Comparative Advantage and Competitiveness in Hungarian Agri-Food Sectors. *World Economy*, 26, 247-259.
- Fitawek, W., (2016). The Effect Of Export Tax On The Competitiveness Of Ethiopia's Leather Industry, Research Theses 265673, Collaborative Master's Program in Agricultural and Applied Economics.
- Flanagan, R., Lu, W., Shen, L., & Jewell, C. (2007). Competitiveness in construction: A critical review of research. *Construction Management and Economics*, 25(9), 989–1000.
- Gersbach, H. (1996). International productivity comparisons at the industry level”, in OECD Industry Productivity: International Comparison and Measurement Issues, Paris: OECD.
- Grauwe, P. (2010). Dimensions of competitiveness. Cambridge: Published: July 23, 2010, The MIT Press
- Griliches, Z. (1995). “R&D and productivity: Econometric results and measurement issues”, in P. Stoneman (ed.) *Handbook of the Economics of Innovation and Technological Change*, Oxford: Blackwell.
- Grumiller, J., & Raza, W. (2019). The Ethiopia's Leather and Leather Products Sector: An Assessment of Export Potentials to Europe and Austria. OFSE Austrian Foundation for Development Research, March.
- Halvorsen, R., & Palmquist, R. (1980). The interpretation of dummy variables in semi logarithmic equations. *American Economic Review*, 70, 474-475.
- Hassett, K. A. (Ed.). (2012). *Rethinking competitiveness*. Washington: The AEI Press.
- Hatzichronoglou, T. (1996). Globalisation and competitiveness: Relevant indicators. OECD science, technology and industry working papers 5. Paris: OECD Publishing, Organisation for Economic Co-operation and Development.

- Hill, Charles W. (1998). *Global Business Today*. USA: McGraw-Hill Companies. 5th ed.
- Hill, Charles W.L. (2005). *International Business: Competing in the global marketplace*. 5th ed. New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Holzmüller, H., & Stöttinger, B. (1996). Structural modelling of success factors in exporting: cross-validation and further development of an export performance model. *Journal of International Marketing*, 4(2), 29-55.
- International Institute for Management Development. (2003). *World competitiveness yearbook 2003*. Lausanne, Switzerland: International Institute for Management Development.
- Iapadre, L. (2001). Measuring International Specialization. *International Advances in Economic Research* volume 7, pages 173–183 (2001)
- Iyer, G. R., Xiao, S. H., Sharma, A., & Nicholson, M. (2015). Behavioral issues in price setting in business-to-business marketing: A framework for analysis. *Industrial Marketing Management*, 47, 6-16.
- Jain, M. P. (2017). Export Competitiveness of cotton: A comparative study of India and China using Constant Market Share Analysis. *Pacific Business Review International*, 10(1), 77-84
- Jeannot J. P., and Hennessey H., D., (2001). *Global Marketing Strategies*, 2nd edition Mumbai: Jaico Publishing House. Retrieved from www.google.com, retrieved on April 20, 2020.
- Jordaan, A.C., & Eita, J.H. (2007). Export and Economic Growth in Namibia: A Granger Causality Analysis. *South African Journal of Economics*, 75 (3), 540-547.
- Kharlamova, G., & Vertelieva, O. (2013). The international competitiveness of countries. Economic Mathematical approach. *Economics & Sociology*, 6(2), 39–52.
- Katsikeas, C. S., Leonidou, L. C., & Morgan, N. A. (2000). Firm-level Export Performance Assessment: Review, Evaluation, and Development. *Journal of the Academy of Marketing Science*, 28(4), 493-511.
- Krugman, P. (1990). *Rethinking International Trade*. Cambridge, MA: MIT Press.

- Krugman, P. (1992). Does the new trade theory require a new trade policy? *World Economy*.
- Krugman, P. (1994). Competitiveness: A dangerous obsession. *Foreign Affairs*.
- Krugman, P. (1995). Growing world trade: Causes and consequences. *Brookings Papers on Economic Activity*, 1995(1), 327–377.
- Krugman, P., & Obstfeld, M. (2003). *International economics: Theory and policy* (4th ed.).
- Lachmann, W. (2001). Improving the international competitiveness of nations. WEP Working Papers.
- Leamer, E., and Stern, R. (1970). *Quantitative international economics: International Series in Economics*.
- Leonidou, L., Katsikeas, C., Samiee, S. (2002). Marketing Strategy Determinants of Export Performance: A Meta-Analysis.
- Leontief, W. (1986). *Input-Output Economics*. New York. Oxford University Press.
- Leung, P., & Cai, J. (2005). A Review of Comparative Advantage Assessment Approaches in Relation to Aquaculture Development. College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa.
- LIDI (2017): Annual Report by the Leather Industry Institute of Ethiopia. <http://www.elidi.org/images/AllAfricanLeatherFair2017.pdf>.
- LIDI (2018): Leather Industry Development Institute held discussion with stakeholders on 2017/18 performance review and 2018/19 fiscal year planning. <http://www.elidi.org/images/discussionwithstakeholders.pdf>.
- Merkies, A. H. Q. M., & Van der Meer, T. (1988). A Theoretical Foundation for Constant Market Share Analysis. *empec*, 13, 65-80.
- Mohammed, A. M. (2014). What is the Role of Export on Economic Growth? *European Journal of Business and Management*, 6 (31), 261-266.
- Moini, A.H. (1995), “An inquiry into successful exporting: an empirical investigation using a three-stage model”, *Journal of Small Business Management*, July, pp. 9-25.

- Mitschke, A. (2008). The influence of national competition policy on the international competitiveness of nations: A contribution to the debate on international competition rules.
- National Science Board. (2000). Science and Engineering Indicators, Arlington,VA: National Science Foundation.
- Narangajavana, Y., Garrigos-Simon, F.J., García, J.S., & Forgas-Coll, S. (2014). Prices, prices and prices: A study in the airline sector. *Tourism Management*, 41, 28–42.
- Njikam, O. (2018). Export Market Destination and Performance: Firm-level Evidence Across Sub-Saharan African Countries. *Journal of Africa Trade* , 4 (1), 1-19.
- Organization for Economic Cooperation and Development. (1996a). *Industry Productivity: International Comparison and Measurement Issues*, Paris: OECD.
- Organization for Economic Cooperation and Development. (1996b). *Technology and Industrial Performance*, Paris: OECD.
- Organization for Economic Cooperation and Development. (1996c). “Technology, Productivity and Job Creation”, Analytical Report, Paris: OECD.
- Organization for Economic Cooperation and Development (2000) *Science, Technology, and Industry Outlook*, Paris: OECD.
- Porter, M. E. (1990). *The competitive advantage of nations*. London: MacMillan.
- Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment Competitiveness relationship. *Journal of Economic Perspectives*.
- Porter, M. E.. (1998) “Clusters and the new economics of competition”, *Harvard Business Review*, Nov.-Dec.: 77-90. (1998)
- Porter, M., Sachs, J., & Warner, A. (2000). Executive summary: Current competitiveness and growth competitiveness. *The global competitiveness report 2000*. Oxford: Oxford University Press
- Richardson,J..D.(1971),Constant-market-shares analysis of export growth. *Journal of International Economics*.
- Rusetski, A. (2014). Pricing by intuition: Managerial choices with limited information. *Journal of Business Research*, 67, 1733–1743.

- Schwab, K. (2015). Global Competitiveness Report (2014-2015). http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2014-15.PDF.
- Shahid, N. (2013). Export-Led Growth Strategy: Tool for Economic Development in India. *Indian Journal of Commerce & Management Studies*, 4 (1), 1 - 7.
- Smith, M.F., Sinha, I., Lancioni, R., & Forman, H. (1999). Role of Market Turbulence in Shaping Pricing Strategy. *Industrial Marketing Management*, 28, 637–649.
- Spence, A. M., & Hazard, H. A. (Eds.). (1988). *International competitiveness*. Cambridge: Ballinger Publishing Company.
- Srivastava, D., Shah, H., & Talha, M. (2006). Determinants of competitiveness in Indian public sector companies: An empirical study. *Competitiveness Review*.
- Tadesse, T., & Brar, J. S., (2016). Sources of Ethiopia's Export Growth: a Constant Market Shares Decomposition Analysis
- Taj, Z., & Wani, N. (2019). Afghanistan Export Performance using a Constant-Market-Share Analysis Approach.
- Tyszynski, H. (1951). *World Trade in Manufactured Commodities, 1899–1950*. The Manchester School of Economic Social Studies, 19, 272-304.
- United Nations Conference on Trade and Development (UNCTAD). (2016). *Trade and Current Account Balances in Sub-Saharan Africa: Stylized Facts and Implications for Poverty*
- UN Comtrade.(2018):UN Comtrade Database. United Nations Statistics Division. New York.
- United Nations Conference on Trade and Development. (2000). *World Investment Report*, Geneva: UNCTAD.
- Vollrath T. (1991). A theoretical evaluation of alternative trade intensity measures of revealed comparative advantage. *Review of World Economics*, 127(2): 265–280.
- World Economic Forum. (2016). *the global competitiveness report 2016–2017*. Geneva: World
- World Bank. (2001). *Economic Forum: World Development Indicators*, Washington DC:

Zou, S., & Stan, S. (1998). The determinants of export performance: a review of the empirical literature between 1987 and 1997. *International Marketing Review*, 15(5), 333-356. .

Websites

<https://ec.europa.eu/eurostat>

<https://www.intracen.org/>

<https://www.wto.org/>

<https://unctad.org>

Appendix 1

Table 1-A: Aggregated data of all products in the EU-28 market (2009 -2019) in Euro and in 100Kg

EU28_EXTRA - Extra-EU 28 (= 'WORLD' - 'EU28_INTRA') Total of all products

Year	Value	Quantity
2009	1,236,473,958,527	15,399,650,055
2010	1,529,088,859,721	16,397,692,553
2011	1,729,368,617,891	16,742,514,402
2012	1,797,798,834,004	16,381,267,038
2013	1,687,030,833,162	16,233,863,178
2014	1,687,684,786,935	16,365,085,888
2015	1,725,313,254,143	16,852,358,653
2016	1,706,608,895,917	16,941,322,692
2017	1,854,736,380,300	17,417,640,196
2018	1,984,532,736,625	17,788,045,483
2019	2,058,022,800,200	17,484,765,850

Source: Eurostat

Appendix 2

Table 1-B: aggregated data of all products in theEU-28 market (2009 -2019) in Euro

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	383,661,386	26,063,863,437	255,031,982	8,214,735,093	10,416,459,685
2010	491,120,474	33,648,402,252	33,465,183,237	9,316,847,997	14,505,451,679
2011	698,346,900	39,927,463,005	39,926,998,048	10,695,717,995	24,403,093,525
2012	643,946,551	38,010,644,884	37,528,816,558	9,959,413,505	33,045,404,690
2013	545,356,649	33,307,601,716	36,842,595,620	8,141,160,027	28,678,392,359
2014	572,281,178	31,244,218,673	37,172,411,592	7,697,670,570	28,115,120,078
2015	711,038,966	30,966,871,956	39,490,865,435	8,134,105,619	18,529,661,287
2016	576,005,927	29,674,064,004	39,269,437,152	8,219,206,931	10,924,059,260
2017	719,204,871	31,163,106,797	43,999,797,932	8,186,467,666	15,162,324,925
2018	652,399,466	31,764,422,666	45,936,377,767	8,389,468,749	22,790,731,114
2019	781,493,809	29,788,977,893	48,214,133,528	7,809,596,350	23,087,169,545

Source: Eurostat

Table 1-C: Aggregated data of all products in theEU-28 market (2009 -2019) in 100Kg

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	2,022,191	787,247,698	132,244,730	173,844,311	300,832,186
2010	1,872,421	1,010,254,704	186,577,280	181,644,121	331,870,942
2011	2,346,440	1,030,755,360	185,976,631	191,393,302	428,536,162
2012	1,960,045	952,420,839	171,198,179	161,689,754	517,965,181
2013	1,988,235	954,216,948	174,961,736	130,454,794	457,656,678
2014	1,876,072	899,633,032	155,988,330	129,710,759	482,233,830
2015	3,259,339	912,906,364	153,967,301	145,095,479	484,278,410
2016	2,525,725	867,492,534	167,524,476	151,649,143	349,927,153
2017	2,475,388	880,379,291	200,385,082	151,201,117	408,841,849
2018	2,202,035	881,598,584	207,916,469	136,159,953	505,813,719
2019	2,224,746	754,337,680	234,156,329	138,455,388	538,755,351

Source: Eurostat

Appendix 3

Table 1-D: Annual import value and Quantity of Leather and Leather products to the EU-28: (2009 -2019) in Euro currency and in 100kg

Year	Value	Quantity
2009	5,610,972,780	12,531,486
2010	8,006,129,930	14,888,728
2011	9,763,967,370	15,197,219
2012	9,498,795,848	13,608,647
2013	10,578,446,486	15,933,305
2014	11,695,012,781	16,391,930
2015	11,586,552,822	14,907,402
2016	10,090,846,478	14,974,256
2017	10,250,471,827	15,811,119
2018	9,139,476,980	15,303,332
2019	8,066,174,387	13,720,694

Source: Eurostat

Appendix 4

Table 1-E: Annual import value of Leather and Leather products to the EU-28: (2009 - 2019) in Euro currency

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	66,530,154.00	871,892,584.00	571,487,230.00	378,463,419.00	294,247,098.00
2010	72,066,369.00	1,347,672,092.00	777,576,640.00	546,159,323.00	459,028,746.00
2011	117,288,186.00	1,590,465,769.00	976,733,166.00	407,259,177.00	483,289,693.00
2012	62,258,997.00	1,520,787,352.00	974,421,880.00	389,003,274.00	462,667,710.00
2013	57,449,025.00	1,878,694,852.00	1,051,086,568.00	514,776,432.00	503,954,862.00
2014	56,880,276.00	1,676,371,403.00	1,133,167,820.00	532,326,659.00	466,590,111.00
2015	52,729,764.00	1,715,170,217.00	1,132,290,967.00	593,000,417.00	463,831,710.00
2016	33,532,056.00	1,531,013,639.00	1,038,369,692.00	489,899,149.00	391,488,279.00
2017	26,422,494.00	1,569,863,833.00	1,049,487,345.00	439,523,272.00	431,371,058.00
2018	22,902,597.00	1,147,003,920.00	976,748,777.00	386,695,872.00	403,115,835.00
2019	21,998,838.00	949,087,507.00	985,210,451.00	304,123,039.00	316,345,627.00

Source: Eurostat

Appendix 5

Table 1-F: Annual import Quantity of Leather and Leather products to the EU-28: (2009 - 2019) in 100kg

Year	Ethiopia	Brazil	India	Argentina	Nigeria
2009	54,351.00	2,999,054.00	568,603.00	535,502.00	158,592.00
2010	48,870.00	3,408,672.00	722,055.00	658,314.00	238,424.00
2011	65,894.00	3,174,883.00	786,011.00	484,289.00	226,711.00
2012	26,591.00	3,142,754.00	716,804.00	381,490.00	215,919.00
2013	22,061.00	4,275,771.00	789,155.00	479,006.00	245,806.00
2014	26,655.00	3,154,589.00	851,365.00	432,198.00	250,986.00
2015	22,169.00	3,124,011.00	811,990.00	402,417.00	186,491.00
2016	15,371.00	3,776,109.00	747,100.00	450,983.00	186,158.00
2017	9,627.00	4,094,559.00	768,557.00	460,556.00	214,057.00
2018	9,408.00	4,339,930.00	745,769.00	512,843.00	249,855.00
2019	7,410.00	4,269,337.00	621,804.00	452,141.00	188,512.00

Source: Eurostat

RCA index for each item

SITC	Exported value in 2009	Exported value in 2010	Exported value in 2011	Exported value in 2012	Exported value in 2013	Exported value in 2014	Exported value in 2015	Exported value in 2016	Exported value in 2017	Exported value in 2018	Exported value in 2019	country
61	9.8878	10.9596	6.6118	7.2155	9.8420	9.7783	10.6621	9.9057	9.5269	9.8253	9.7851	AR
611	10.9970	11.8475	6.6205	7.4576	10.7508	10.7098	11.9183	11.1395	11.4063	12.0300	12.8637	AR
61143	7.2311	6.2469	2.9533	3.4722	4.0050	3.7718	3.9259	4.6508	4.5383	6.7989	7.4972	AR
61144	75.9497	76.2771	60.7171	70.1056	70.7246	65.8937	58.5629	50.9834	56.8317	61.6586	82.1461	AR
61145	8.6875	11.1465	4.6365	3.2209	9.9556	8.3508	10.3033	8.3241	7.5644	6.6700	6.1129	AR
61151	0.0339	0.0176	0.0043	o	o	0.0000	0.0017	o	0.0001	0.0217	o	AR
61152	0.0233	0.0099	0.2937	0.0917	0.0095	0.0197	0.0110	0.0026	0.1006	0.0074	0.0043	AR
61161	0.0074	0.1799	0.0059	o	o	o	0.0013	o	0.0392	o	o	AR
61162	0.0031	o	0.0440	0.0006	0.1504	0.0062	0.0030	o	0.0391	o	0.0015	AR
61179	1.1998	1.0147	0.4188	0.4985	0.1409	0.3993	0.9124	1.1544	0.8562	1.1644	0.0123	AR
61181	0.1959	0.0306	o	0.0026	0.0085	o	0.0013	0.0156	o	0.0040	0.0408	AR
61183	0.0837	o	0.0039	o	o	o	o	o	0.6321	0.0353	1.6822	AR
612	3.6050	3.3570	2.8295	2.5784	2.2717	1.9175	1.7746	1.8563	1.1515	1.1477	1.3251	AR
61220	4.7409	4.7228	4.3458	4.2583	4.0825	3.9009	3.7647	3.6960	2.1828	2.0746	2.5930	AR
61290	1.7247	1.0870	0.7682	0.6066	0.4784	0.2514	0.1189	0.1058	0.0940	0.1695	0.1719	AR
613	14.1154	18.2374	14.9294	14.7944	17.5878	23.4356	31.4051	30.3152	17.0960	21.4344	23.4342	AR
61319	21.5881	27.4364	20.7942	21.0476	26.3613	33.3104	41.2351	36.4850	23.1117	26.9168	27.7464	AR
61330	11.5356	12.9976	11.7925	11.1703	19.7946	12.6601	6.9720	7.5405	6.4400	8.0809	11.8617	AR
Total	171.6100	185.5685	137.7696	146.5209	176.1636	174.4054	181.5735	166.1748	141.6109	158.0395	187.2786	
61	7.1702	7.4691	6.8917	7.3613	8.7589	7.5720	8.0862	8.5569	8.9311	7.6890	7.9831	BR
611	9.1138	9.1019	8.4457	9.2676	10.9421	9.5600	10.4590	11.0991	11.6690	10.4274	11.7962	BR

61143	9.5285	9.4483	7.6447	10.5685	13.0281	10.3593	12.1545	14.0730	14.5273	14.3314	16.1397	BR
61144	7.3814	9.8497	9.9837	9.3681	11.3804	12.6589	14.0255	12.5205	13.1467	11.2362	13.7049	BR
61145	18.3663	16.8007	16.1605	16.6711	18.0879	15.6930	15.5662	15.9621	17.1085	14.7911	16.7868	BR
61151	0.4148	0.2346	0.1703	0.2006	0.7306	0.3371	0.2410	0.3753	0.2784	0.6949	1.4214	BR
61152	0.5089	0.0675	0.0644	0.0439	0.1089	0.1092	0.1708	0.2614	0.3343	0.3754	0.0957	BR
61161	0.0125	0.1038	0.5828	0.7563	0.9735	0.4931	0.2932	0.1949	0.5246	0.6738	1.5458	BR
61162	0.0351	0.0039	0.0243	0.0063	0.0052	0.0428	0.0086	0.0300	0.0012	0.0003	0.0047	BR
61179	0.1220	0.0488	0.1282	0.0442	0.0623	0.3477	0.1978	0.3816	0.2627	0.1431	0.4289	BR
61181	0.0136	0.0140	0.0307	0.0042	1.7747	0.6447	0.0008	0.1569	0.1941	0.8552	0.9481	BR
61183	6.1508	0.4988	6.4592	7.9323	1.4454	0.1314	0.1773	0.1988	0.1208	1.2720	1.5954	BR
612	0.3772	0.4904	0.4790	0.3696	0.2366	0.1878	0.1022	0.1059	0.0844	0.0623	0.0541	BR
61220	0.0098	0.0124	0.0081	0.0020	0.0010	0.0055	0.0029	0.0684	0.0694	0.0552	0.0534	BR
61290	0.9854	1.2848	1.1192	0.8011	0.4699	0.3410	0.1848	0.1415	0.0997	0.0698	0.0548	BR
613	2.2093	1.7874	1.4001	1.6275	1.5051	2.2132	2.6402	4.8100	3.7396	4.6510	5.3232	BR
61319	2.8224	2.5295	2.1418	2.4484	2.3143	2.9569	3.0439	5.2871	4.6458	5.3043	5.7463	BR
61330	3.9019	2.0396	0.6565	1.0864	1.1722	2.7633	4.1247	5.9342	5.4689	7.1058	7.5635	BR
Total	69.1240	61.7851	62.3912	68.5595	72.9973	66.4171	71.4797	80.1576	81.2065	79.7383	91.2459	
61	37.1352	27.3415	29.0267	17.7804	16.3579	14.0265	10.8266	9.6546	6.5130	7.4748	7.0531	ET
611	48.5430	34.0724	36.3660	22.9131	20.6948	18.0205	14.2204	12.8118	8.6822	10.3691	10.7014	ET
61143	2.4474	0.1969	0.0000	0.0000	0.0000	0.0249	0.0000	0.0000	0.0369	0.0000	0.0000	ET
61144	0.0000	0.5578	5.6177	2.5385	1.0587	0.3437	0.0015	0.0000	0.0000	1.0047	0.0000	ET
61145	0.4398	2.3270	6.4878	2.3650	3.5223	4.2855	1.0069	0.7278	0.0687	0.0411	0.6513	ET
61151	368.2694	406.1050	342.1760	96.2522	41.9542	35.1361	47.7941	72.5939	70.7089	85.2308	111.2081	ET
61152	447.1084	199.1826	275.2555	308.8238	431.7583	461.1287	388.9112	337.1894	230.4627	196.5596	84.4266	ET
61161	235.8947	114.7181	165.4108	84.3354	36.2628	45.5020	2.3291	16.9444	2.6907	2.9280	11.2216	ET
61162	23.9997	53.1275	28.8147	41.4675	32.0193	47.4461	60.2588	51.2008	20.6137	20.0565	6.2712	ET
61179	0.3888	7.7948	2.9261	1.9658	0.0000	0.8373	0.0000	0.0000	0.0000	1.8762	4.3938	ET

61181	0.0399	0.8387	0.0000	0.4915	0.0000	17.2118	114.4869	29.5789	0.0000	0.0000	0.1804	ET
61183	0.0000	0.0000	0.0000	0.0000	0.7006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	ET
612	0.0000	0.0108	0.0049	0.0126	0.0354	0.0046	0.0064	0.0272	0.0004	0.1835	0.0544	ET
61220	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	ET
61290	0.0000	0.0287	0.0115	0.0274	0.0705	0.0085	0.0117	0.0530	0.0009	0.3771	0.1034	ET
613	0.0000	0.0083	0.2726	0.0000	0.3266	0.2698	0.0000	0.1125	0.0000	0.0000	0.0000	ET
61319	0.0000	0.0000	0.4385	0.0000	0.5387	0.4009	0.0000	0.1384	0.0000	0.0000	0.0000	ET
61330	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	ET
Total	1164.2662	846.3730	892.8087	578.9733	585.3001	644.6469	639.8534	531.0327	339.7782	326.1014	236.2657	
61	4.8066	4.3349	4.2296	4.7829	4.4322	4.3028	4.1869	4.3885	4.2292	4.5292	5.1206	IN
611	3.9717	3.6317	3.7171	4.3527	3.9491	3.7863	3.5959	3.5651	3.3668	3.5535	3.3305	IN
61143	0.0848	0.0546	0.0509	0.0363	0.0085	0.0384	0.0280	0.0355	0.0461	0.0756	0.0671	IN
61144	1.3579	1.3190	1.4010	1.1375	1.3871	0.5866	0.3150	0.2675	0.1883	0.1812	0.1682	IN
61145	5.8382	6.4524	6.0917	7.3958	7.2804	7.6137	6.9643	6.4043	6.2315	6.0117	4.7076	IN
61151	0.3479	0.2959	0.1857	0.2921	0.3111	0.3925	0.1904	0.1009	0.1694	0.2102	0.2739	IN
61152	4.3921	3.5621	5.2322	6.1233	4.0208	7.7623	5.6667	6.1007	4.8765	6.5069	5.5946	IN
61161	8.3739	6.8544	5.0712	6.3823	8.9165	9.4060	9.4433	10.4566	9.9519	12.4345	11.9616	IN
61162	17.9865	17.1555	18.0302	19.9473	17.9652	20.8868	20.9186	24.2763	24.4333	24.9993	25.5217	IN
61179	0.3406	0.3844	0.8331	1.2046	0.7114	0.6785	1.3301	1.4283	1.5793	1.1013	1.9916	IN
61181	7.3685	10.2238	12.4298	17.5590	16.5127	19.9560	13.4806	11.3940	8.5262	5.8593	5.9152	IN
61183	11.4424	17.7068	15.5452	19.0338	22.9011	25.2272	27.9506	27.3060	23.5288	13.9430	14.2461	IN
612	10.0225	9.7614	8.9968	8.9806	8.4655	7.6724	7.1965	8.0119	8.1670	8.2220	9.6335	IN
61220	12.6249	11.4464	11.2862	11.8066	11.6599	11.4830	10.8948	10.6044	10.6649	11.4130	10.2197	IN
61290	5.7149	6.9606	5.8842	5.6639	5.3023	4.4714	4.1193	5.5452	5.6057	4.8549	9.1002	IN
613	0.1970	0.1903	0.1314	0.2708	0.2900	0.3632	0.3676	0.6109	0.2982	0.2092	0.3022	IN
61319	0.1190	0.0686	0.0432	0.0834	0.0915	0.0721	0.1300	0.3149	0.1360	0.0207	0.1205	IN
61330	1.0918	1.1334	0.9961	2.6567	2.8935	3.9097	3.0341	3.9375	2.7270	2.4085	1.7279	IN

Total	96.0810	101.5361	100.1557	117.7097	117.0988	128.6089	119.8127	124.7485	114.7261	106.5339	110.0027	
61	6.0493	5.8964	3.4228	2.5748	2.7287	2.3420	3.6545	5.9435	5.0437	3.7662	3.4338	NG
611	7.9076	7.3481	4.2908	3.3165	3.4573	3.0118	4.7991	7.8950	6.7236	5.2555	5.2220	NG
61143	0.0000	0.0000	0.0051	0.0064	0.0074	0.0000	0.0000	0.0375	0.0063	0.0057	0.0053	NG
61144	0.0000	0.0000	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	NG
61145	0.0049	0.0000	0.0001	0.0000	0.0007	0.0010	0.0000	0.0001	0.0000	0.0003	0.0001	NG
61151	19.1820	20.5054	14.0023	10.4329	15.3713	24.1328	39.4908	71.6928	53.8734	44.4887	36.2553	NG
61152	57.7993	66.4761	32.7213	22.2761	24.8137	8.5267	5.9687	15.9450	11.5954	7.8884	15.6703	NG
61161	24.6238	31.2703	21.9895	19.8161	21.2623	26.4781	41.4737	69.8869	60.1305	37.2696	31.4557	NG
61162	46.2129	39.5126	24.6871	18.5137	20.5490	10.1047	13.4146	4.4627	5.4299	5.8023	11.0960	NG
61179	0.8546	5.1167	0.0000	0.0000	0.0002	5.7133	8.2401	2.2601	0.8175	0.0000	0.0000	NG
61181	12.0415	16.2806	2.3603	3.4157	7.3391	6.0028	31.2997	88.7264	82.1840	49.1114	57.2177	NG
61183	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	NG
612	0.0001	0.0000	0.0000	0.0096	0.0000	0.0000	0.0000	0.0004	0.0000	0.0000	0.0004	NG
61220	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	NG
61290	0.0003	0.0001	0.0000	0.0210	0.0000	0.0000	0.0000	0.0007	0.0000	0.0000	0.0008	NG
613	0.0000	0.0066	0.0000	0.0003	0.0000	0.0000	0.0285	0.0000	0.0000	0.0000	0.0000	NG
61319	0.0000	0.0111	0.0000	0.0005	0.0000	0.0000	0.0382	0.0000	0.0000	0.0000	0.0000	NG
61330	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	NG
Total	174.6763	192.4239	103.4802	80.3837	95.5297	86.3134	148.4078	266.8511	225.8042	153.5881	160.3575	