ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

THE IMPACT OF IMPORTED TEXTILE GOODS ON DOMESTIC TEXTILE INDUSTRIES IN ETHIOPIA

BY

GIRMA MULETA

August 2016

Addis Ababa, Ethiopia

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A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF DEVELOPMENT ECONOMICS.

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THE IMPACT OF IMPORTED TEXTILE GOODS ON DOMESTIC TEXTILE INDUSTRIES IN ETHIOPIA

APPROVED BY BOARD OF EXAMINERS

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DECLARATION

I declare that this thesis is my own original work. No one has tried before and has submitted to any university in order to earn any degree. The thesis is prepared under the close supervision of Girma Estiphanos (PhD). The reference materials used in this thesis have been dully acknowledged.

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St. Mary's University, Addis Ababa   August 2016

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

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    Advisor   Signature

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Table of Contents

List of Tables:

List of Figures:

ACRONYMS

ADF	Augmented Dickey Fuller
AGOA	African Growth and Opportunity Act
COMESA	Common Market for Eastern and South Africa
CRDW	Co integrating Regression Durbin- Watson
DF	Dickey Fuller
DP	Domestic Price
EBA	Everything but Arms
ERCA	Ethiopian Revenues and Customs Authority
ETIDI	Ethiopian Textile Industry Development Institute
FDI	Foreign Direct Investment
GATT	General Agreement on Terms of Trade
GSPT	General System of Preferences Trade
GTP1	Growth and Transformation Plan I
GTP2	Growth and Transformation Plan II
GV	Growth Value
IP	Import Price
IV	Import Volume
LDC	Least Developed Countries
MFA	Multi Fiber Arrange
SMS	Small and Medium Scale
VAT	Value Added Tax

ABSTRACT

Textile sector is an industry in which Ethiopia has a competitive advantage. The study found to assess the impact of imported textile goods on domestic textile industry in Ethiopia. In this study both quantitative and qualitative research approaches were used. To investigate the impact of textile import into Ethiopia in terms of price and volume on the domestic textile industry both primary and secondary data sources were used. The secondary data is a time series data of 16 years collected from Ethiopian Textile Industry Development Institute and the primary data collected from purposively selected 6 domestic textile factories through the application of open ended questionnaire to those key informants of the factories. Co –integration and error correction mechanism were employed to analyze the time series data and simple descriptive method was used to explain other serious problems faced by domestic textile industries. The result of the time series data analysis showed that the import volume has negative impact on domestic textile industry but import price has got positive impact. In addition, the analysis from qualitative data indicated that lack of skilled workers, poor technology, obsolete machinery, hard currency shortage, price pressure due to mass textile goods import, and low-tariff textile import were identified as serious problems the domestic textile industries in Ethiopia are facing. Reduce the volume of textile and garments imported into Ethiopia, conduct studies to improve the performance of domestic textile industries, replace old machineries, train manpower by working with universities and improve infrastructures are policy implications to Ethiopian government.

Key words: Ethiopia, textile, import, domestic industry

CHAPTER ONE: INTRODUCTION

1.1. Background

The manufacturing sector has long been considered as the main engine of economic growth and structural transformation. To this end, Ethiopia formulated new, comprehensive Industrial Development Strategy (IDS), which commenced in the year 2002/2003. It was more concretized into action by various sub-sector strategies and by the successive development plans. The 2003/2003 IDS declared priority sectors for government direct support which include textile and garment among others. The selection of the textile sub-sector is justified on the ground that it is labor-intensive and provides strong linkage with the agricultural sector and competitive advantage to compete in the export market (Mulu, 2011). Despite the ambitious plan and the many preferential economic and non-economic incentives given by the government to this sector, import still continues to enjoy a higher share of the market. More than 73% of standard fabrics volumes are imported in forms of fabrics and ready-made garments costing the country dearly in foreign exchange (chambers of commerce, 2011).

The textile world is constantly changing. New development brings new opportunities in terms of Production and products. Starting from early time back to 1939, Ethiopians have made tremendous effort to develop the textile industry. The effort made was manifested through the establishment of different government and private owned textile industries. But, the Ethiopian Textile Industry Development Institute (ETIDI) has lately declared that exports for the first six months of Ethiopian fiscal year 2015/2016 are lagging behind the plan target. ETIDI stated that the target was to obtain $60.07 million from textile export, while only $41.1 million was achieved, meeting 70% of the plan (www.Allafrican.com).The major challenges are low production of local cotton, unmatched supply and demand, low capacity usage of textile industry and low capacity utilization in garment factories, lack of diversification of products and low quality, limited production, inability to compete internationally due to price pressure, etc.(ETIDI,2015).

In the mid 2014, the government revealed ambitious plans to stimulate the sector by offering attractive incentives to investors. The incentives include duty free import of spare parts of 15%

of capital goods for the first five years of operation. In addition, there is the possibility to hire expatriates free from income tax provided they stay for no more than two years. The government also offers reconciliation of value added tax (VAT) for materials purchased locally during the project period if declared within six months (www.Allafrican.com). According to the general Director of ETIDI, the country is working to be the leading country in light manufacturing in Africa which will lay the foundation for heavy and high tech industry by 2025 (www.Allafrican. com).

More than 152 new investments were expected and at least $1 billion income was anticipated from the sector's export. The Growth and Transformation Plan II (GTP2) is also expected to create more than 70,000 job opportunities. However, it was revealed that while the cotton production was planned on 262, 000 hectors of land, only 65, 000 hectors were used for cotton production. The El Niño destroyed cotton crops over 14,000 hectors of land. Other negative factors included lack of continuous power supply, weak company linkage, shortage of manpower, and delay in implementing investment projects accounted for the weak export performance of Ethiopian textile industry during the six months period (John Sambo, 2016).

The Ethiopian government wants the textile sector to be export-oriented and gives emphasis to quality. The textile institute is also believed that the textile industry could achieve the export target for the year in six months ending June 2016(John Sambo, 2016). According to the ETIDI view, the sector has comparative advantage of high quality cotton that is grown in the country and duty free access to US through the African Gross and Opportunity Act (AGOA) and the European Union (EU) market. There are also several foreign owned enterprises involved in the Ethiopian textile industry coming from US, China, Turkey, and the EU (John Sambo, 2016).

1.2. Statement of the Problem

In the first Growth and Transformation Plan (GTP1) period, 2010/11 to 2014/15, the government had planned to earn one billion dollars from textile exports in the course of those 4-5 years. The actual performance of the sector was 456 million dollars in garment exports in 2014/2015 which was 23.2million in 2010/11. It is still considered as a big success but far distant from meeting the projected one billion USD. The reasons for the large gap were low productivity of the textile factories in 2010, lack of diversification in products, low quality products, and inability to compete on the international market due to price pressure (ETIDI, 2015). The relative success was because of the demographic location of Ethiopia, having favorable weather condition and good land for quality cotton production compared to other African countries, and the availability of cheap electric power and water supply (ETIDI, 2015). The focus of the government is aligning cotton production with demand, constructing strong forward and backward linkages, and attracting new prospects to the country by increasing Foreign Direct Investment (FDI) (ETIDI, 2015).

According to business opportunity report on Ethiopian textile and apparel industry in 2015, the Ethiopian government identified that there is weak backward linkage between the textile sector and the cotton production and supply. In addition, the domestic textile and clothing industry in Africa is hit by imports from Asian countries which it finds it difficult to compete with (Rudolf, 2006). The impacts from the influx of textile goods into Kenya has led to notable reduction in the capacity utilization of the local textile mills to about 50 percent following Kenya's market liberalization in 1990 (Omolo and Omit, 2006). Cheap imports and the elimination of quotas exposes most African countries to stiff competition on the local markets from more established manufacturing economies such as China. International competition suppressed domestic price as local manufacturers have had to compete with their global counterparts. Cheap imports put price pressure on local manufacturers to drop clothing prices.

Quality related issue is a serious matter to the survival of the textile industries in Ethiopia. Low market share locally and internationally is the result of poor quality products (Matebu, 2006). This poor production in local coupled with lack of competitiveness, poor leadership, lack of commitment, lack of awareness of workers, inadequate training of workers, poor quality supplies

of raw materials, poor relationship with customers and suppliers, poor product design and absence of team work marked the plight of the industry all the more serious. The major binding constraint in apparel export is poor trade logistics which nearly eliminate the country's wage advantage. The poor logistics in Ethiopia can be attributed to two factors: high handling and financing costs and physical distance from production centers to Djibouti port. Deficient facilities, unskilled workers, weak industrial base, cumbersome exports, lack of tradition of industrial discipline and of good labor relations, and poor industrial infrastructure such as frequent power cut which reduce the competitiveness of the domestic industry are factors that hinder our textile factories from competing in local and international markets.

Therefore, the impact of imported textile and apparel goods to Ethiopia, on domestic textile industry is high. But research has to be conducted pertaining to production capacity, local market share, and imports price pressure on domestic finished textile products and other challenges that have impacted this domestic textile industry in Ethiopia; hence the need for this research.

1.3. Objective of the Study

1.3.1. General Objective

The general objective of this study is to assess the impact of imported textile goods on domestic textile industries in Ethiopia.

1.3.2. Specific Objectives

    i)   To assess the impact of imported textile price on the price of domestic textile goods;

    ii)   To assess the impact of imported textile volume on the price of domestic textile goods;

    iii)   To give an overview of the import policy of textile goods in Ethiopia,;

    iv)   To identify import related domestic textile industry challenges in Ethiopia ; and

    v)   To suggest possible recommendations based on findings.

1.4.   Research Questions

The following are the research questions**:**

     i)   What is the impact of imported textile goods price on the price of domestic textile goods in Ethiopia?

     ii)   What is the implication of policies on textile goods import in Ethiopia?

     iii)   What other factors are affecting domestic textile industry in Ethiopia?

1.5   Research Hypothesis

1. The null hypothesis, H_o: the volume of imported textile goods does not affect domestic textile industry in Ethiopia.

   The alternative hypothesis, H_1: The volume of imported textile goods affects domestic textile industry in Ethiopia.

2. H_o: The price of imported textile goods affects the domestic textile industry in Ethiopia positively.

   H_1: The price of imported textile goods affects the price of domestic textile goods in Ethiopia negatively.

1.6   Significance of the Study

Firstly, this study will help Ethiopian to revise the existing textile goods import policies, and textile good import tariffs and the government to solve the problem of dumping of finished textile goods to the country from different parts of the world by unlicensed importers and contraband traders. Secondly, since it focuses on impact analysis of imported textile goods on domestic textile industry, it can also be used as starting point for other researchers to conduct studies in this area to further investigate the challenges of textile goods import to Ethiopia and encourage the export of textile goods by minimizing import volume over time and to contribute to the development of the country.

1.7. Scope and Limitation of the Study

The major limitations of the study are time constraint and budget.

1.8. Organization of the Study

The first chapter treats introduction, including background and basic concepts. Chapter two presents the review of related literatures. The third chapter is about data and methodology. Chapter four, deals with data analysis, discussion, and findings. The last chapter consists of conclusions and recommendations.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1 Theoretical Literature

The gravity model states that there is a strong empirical relationship between the size of a country's economy and the volume of both its imports and its exports. The bilateral trade between two countries is proportional, or at least positively related to the product of the two countries' GDPs and to be smaller the greater the distance between the two countries. That is the larger and the closer the two countries are, the larger the volume of the trade between them is expected to be.

Economic historians tell us that a global economy, with strong economic linkages between even distance nations, is not new. In fact, there has been two great wave of globalization, with the first wave relying not on jets and the internet but on railroads, steamships, and the telegraph. In 1919, the great economist John Maynard Keynes described that surge of globalization. There were two subsequent world waves, the great depression of the 1930s, and widespread protectionism did a great deal to depress world trade.

Globalization is a revolution which in terms of scope and significance is comparable to the industrial revolution but whereas the industrial revolution took place over a century, today's global revolution is taking place under our very eyes in decades or two. The rapid globalization started with the end of World War II in 1945 and extended to about 1980. It was characterized by the rapid increase of international trade as a result of the dismantling of the heavy trade protection that had been put in place during the great depression that started in the United States in 1992 and during World War II.

As all revolutions, however, today's globalization brings many benefits and advantages but also has some disadvantages or harmful side effect. In fact, there is a great deal of disagreement as to the extent and type of advantages and disadvantages. These disadvantages and negative aspects of globalization have given rise to a rethinking of the old beliefs in free trade and to a strong ant globalization movement.

The best policy for the world as a whole is free trade. With free trade each nation will specialize in the production of the commodities that it can produce most efficiently and by, exporting some

of them, obtain more of other commodities than it could produce at home. In the real world however, most nations impose some restrictions on the free flow of trade. Although invariably justified on national welfare grounds, trade restrictions are usually advocated by and greatly benefit a small minority of producers in the nation at the expense of the mostly silent majority of consumers.

The problem is now exacerbated by the increasing competitive challenge that advanced countries face from the leading emerging market economies particularly China and India. Widespread job losses have led to calls for protection from foreign competition in advanced countries, especially the United States. The challenge for advanced countries is how to remain competitive, avoid major job losses, and share in the benefits of globalization, and avoid increased protectionism of trade (Salvatore,2013).

The current Ethiopian government follows market led economic policy since it seized power. The first plan developed under this government was structural adjustment plan that was targeting to reverse the command economic system by the way of fostering competition, opening the economy, and promoting the private sector. During this period some measures have been undertaken. These includes: liberalization of the foreign exchange market starting with a massive devaluation of birr by about 150 percent in October 1992, removal of subsidies and export tax, reduction of the maximum import tariff from 230 percent to 80 percent and liberalization of market entry for privately owned banks and insurance companies. The plan also aimed at limiting the role of the state in the economic activities and promotion of greater private capital participation.

2.1.1   Basic Concepts and Definitions

A **textile** is something or artifact made by knitting, weaving, or crocheting fibers together. Textile comes from the Latin word *textilis* for "woven fabric". **Apparel** is clothing in general. Its origin is Latin. **Garment** is an article of clothing. It is derived from the French word for "equipment". Garment is a somewhat generic term; we can use it when the specific kind of clothing we are describing is not the point. A dress for example is a dress and pants are pants; they are not the same thing unless you refer to them both as garments in which case they are the same thing. **Import** means to bring in from abroad or something brought in. Its origin is literally

"to bring into port." **Industry** is the organized action of making of goods and services for sale, http://www.vocabulary.com /dictionary.

Agriculture, which comprises 46% Gross Domestic Product (GDP), is still the leading sector in Ethiopian economy. But, over the last two years, the government has been determined to diversify the exports with a priority set to strategic sectors like light manufacturing and textiles. The textile- and apparel industry has grown at an average of 51% in GTP 1 period, 2010/11 to 2014/15(ETIDI, 2015). Since the textile industry has huge potential, the government is driven to open up the textile and apparel market to mid-and large scale foreign investors. In 2012, retailers like H and M, Primark and Tesco have established offices and are buying finished clothing products from Ethiopian manufactures (ETIDI, 2015). Half of Ethiopian textile and apparel companies are Small and Medium Scales (SME's) of 500-1000 works. There is an improvement in the textile and apparel sector growth in a year 2014/2015(ETIDI, 2015). Ethiopia has 2.6 million hectors that are suited for cotton cultivation which is a potential for successful industrial backward linkage. At the moment, of this total capacity, only 5.6% of the cotton is cultivated and used in the forward textile industry (ETIDI, 2015). There are only few studies that are conducted in the area of textile industries in Ethiopia. Those studies that are conducted so far are mainly on the issue of quality production and challenges to get access to international market through the help of international agreements made between countries of developed nations and third world countries. There are different preferential market access to African countries like AGOA, and Common Market for East and South Africa (COMESA), etc for African countries.

The textile and clothing industries are important in both social and economic terms. It provides jobs especially for women. It fetches foreign currency for the country and ensures sustained economic development by the application of appropriate development policies (Yudhi, 2013). The economic aspect could be expressed in terms of trade, GDP, employment, export diversification opportunities and expansion of manufactured goods exports for low income countries which can exploit labor cost advantages and fill emerging niches and meet buyer demands. The dynamic effects are greater the more linkages have been built up between the garment industry and local textile suppliers. At macro level the contribution of textile and clothing production to GDP differs country to country but is up to 5% in Sir Lanka, 12% in Cambodia and 15% in Pakistan. Low income and developing countries such as Cambodia, Bangladesh, Pakistan and Sri Lanka depend on textile and cloth exports for more than 50% of

total manufacturing exports; for example, 80% in Cambodia and 83.5% in Bangladesh. The share of total employment in manufacturing ranges from 35% in selected low income countries, 75% in Bangladesh and 90% in Lesotho and Cambodia (Yudhi, 2013).

The Ethiopian government initially has targeted turkey, India, and china as sources of FDI in manufacturing (ETIDI, 2015). Expanding domestic market and cheap labor were key attraction for those nations where labor costs went up. The current GTP2 shows an increase of possibilities for Dutch and European investors.

Textiles and clothing are a very important sector of international trade that has served as the engine of growth, particularly for developing and least-developed countries. Over the past two decades, the growth of the world textiles industry and trade has been influenced substantially by three major developments. The first two are directly related to the World Trade Organization (WTO).**First**, the return of the textiles and clothing sector to the "normal rules" of the GATT/WTO – in other words, phasing out the longstanding Multi-Fiber Arrangement (MFA) which, for almost 40 years, allowed countries to protect their domestic textile industry through quotas. This was a major departure from the normal GATT/WTO rules. **Second**, the accessions to the WTO by China in 2001 and Viet Nam in 2005 have allowed both China and Viet Nam to benefit from the phasing-out of the MFA quota system and enlarge their share in the global textile and clothing market. Based on these two developments, the world trading system became more open to trade in textiles and clothing. **Third,** the major development - which is the significant transformation of the world textile industry through increased outsourcing, and the proliferation of global value chains and global production networks.

These three major developments have had a substantial impact on the pattern of world trade, the distribution of market shares, as well as the global value chains in the textiles and clothing sector, including the adjustment to new emerging powers in the field of manufacturing and export. Since the return of normal trading rules in 2005, when the Multi-fiber Arrangement quota system ended, world trade in textiles and clothing has increased by more than 68 percent, more or less at the same pace as the world trade in manufactures. It has surged from US$454 billion in 2004 to US$766 billion in 2013. Even with the significant economic downturn in most countries during the period of 2008-2009, trade data points to the enormous success of export-oriented

textiles and clothing products. Today, developing economies and LDCs contribute to almost 70 percent of world exports of textiles and clothing.

In 2013, China alone accounted for 34.8 percent of world textile exports and 38.6 percent of world clothing exports. However, it is interesting to note that, with the rising production cost in China and the shifting into higher-value goods and services, in recent years China has started to import finished textiles and garments from other countries, such as Bangladesh and, perhaps, very soon Sri Lanka. In 2013, Viet Nam accounted for 1.6 percent of world textile exports (it was 0.2 percent in 2000) and 3.7 per cent of world clothing exports. Other developing and least developed countries have also strengthened their positioning in this sector - notably India, Turkey, Bangladesh, Pakistan and Cambodia. The increased share of these countries in the world textiles market has had a great impact in their poverty reduction and economic development. Although textile production is always an important first step towards industrialization, this sector continues to provide an alternative for workers in low-wage agriculture or service jobs even after other manufacturing sectors are established, especially for women and the less-skilled'' (*speech by Xiaozhun Y, in Beijing, China at International Trade Multi-Fiber(ITMF) 2014 annual conference*).

2.1.2   Imports and Taxes in Ethiopia

Import substitution industrialization policies in the early post-independence years were a boon to cotton growers, to the textile and apparel industries themselves and due to the imposition of a 100 percent duty on imported goods the print cloth for domestic consumption in Africa was pursued as both an economic policy generating jobs and revenue and as a cultural strategy wearing African garments (Tina, 2006). Accordingly items imported into Ethiopia are subject to a number of taxes except those items exempted by law. These taxes are customs duty, excise tax, VAT, surtax and withholding tax. These taxes are collected by Ethiopian Revenues and Customs Authority (ERCA, 2010).

2.1.3   Custom Duty and Its Rates

It is taxes imposed on goods entering or leaving the country. So far no tax on export is levied in order to encourage export. However, there is a 150 percent export tax particularly on certain hides and skins of animals. ERCA collects this taxes based on customs proclamation no

622/2009 and other regulation and directives. Its rate ranges from 0% to 35%. Raw materials semi finished goods, and import items for public use are 0% to 10% customs duty rate applied. Whereas consumer or finished goods imported full personal use or for a non productive purpose; the highest or 35 % customs duty rates are usually applied (ERCA, 2010).

2.1.4 Export Tax

This tax is introduced on January 1, 2010 by directive no 25/2009 issued by Ministry of Finance and Economic Development. It is 150 percent of the selling price of the items like hides and skins to be exported. The purpose is to curb the exportation of the raw items and to increase domestic leather products such as shoes, purses, ready-made garments, etc.

2.1.5 Preferential Tariffs

Ethiopia is a member of Common Market for Eastern and South Africa (COMESA). It administers preferential tariffs that favor trade with member countries of COMESA. It is applicable to goods produced in and imported from non member countries. Table 2.1 shows tariff comparison of some items under COMESA.

Table 2.1: **Preferential Tariffs**

No.	Regular customs tariff rate%	COMESA Tariff Rate%
1	5	4.5
2	10	9
3	20	18
4	30	27
5	35	31.5

Source: Ethiopian revenue and customs authority

2.1.6 Excise Tax

Excise Tax is a type of taxes levied on goods imported into Ethiopia and one of the most well known forms of tax. It is a tax levied on selected luxury goods. It also applied to goods that may cause social problem. The minimum excise tax rate applied to excisable goods is 10% while the maximum is 100%. Accordingly only 10 percent excise tax rate levied on textile of any type

partly or wholly made from cotton, which is grey, white, dyed or printed, in pieces of any length or width (except mosquito net and "Abudgedid") and including blankets, bed sheets, counterpanes, towels, table clothes and similar articles and garments.

2.1.7 Value Added Tax (VAT)

VAT is taxes to be levied on import items except those items that are exempted from VAT by the directive issued by the Ministry of Finance and Economic Development. VAT is levied on every imported item. Importers are liable to pay 15 percent of the sum of cost, insurance, freight, customs duty and excise tax(directive no 18/2009).

2.1.8 Surtax

It is first introduced in the Ethiopian tax system on April 9, 2007. The purpose was to build the financial capacity of the government. However, the imposition on surtax over the imported goods wouldn't result in a rise in the standards of living and in the cost of goods for investment. Fertilizers, petroleum, lubricants, and motor vehicles for freight and passengers are surtax free. Beginning in April 2007, the government levied 10 percent surtax on selected imported goods, with the proceeds designated for distribution of subsidized wheat in urban areas (Ethiopian Customs Tariff, Volume 1 and 2, 2007 Version).

2.1.9 Withholding Tax

Withholding tax was introduced in Ethiopian December 30, 2000. Proclamation No 227/2001 introduced withholding tax and later on this proclamation was replaced by income tax proclamation No 286/2002 and the Council of Ministers income tax regulation No78/2002. The latter proclamation made effective a withholding tax at 3 percent on import items and a 2 percent on payments made in return for the purchase of goods and services. Withholding tax is not a tax in the traditional sense; it is the amount of income tax collected on the imported goods which results in underpayment of business income tax due for the years as determined at the time of declaration of income tax. The tax payer is required to pay the difference with the declaration. If the amount represents an overpayment of income tax due for the year, the tax authority shall refund the tax payer the amount overpaid within three months.

2.2 Empirical Literature

In 2000 to 2009 the European Union textile and clothing imports, originating in China have increased strongly while the rest of the exports have to a varying degree remained in relatively stable position, with the most significant increase being from India, Bangladesh and Turkey (EU, 2011).

Second hand clothes markets are widespread in Africa urban centers (Andrew 2012). In addition, the growth of Chinese imports makes the total South African imports from China rise, so the demand for South African local product would fall (Zie Yang, 2014). Chinese imports have introduced competition in Ghanaian market which has resulted in marginalized value of authentic Ghanaian textile and it is a major contributing factor to the deplorable state of the industry (Adikorley, 2013). The local market in Ghana is facing stiff competition from finished imported textile prints usually from Côte d'Ivoire, Nigeria, China, and most recently from India and Pakistan (Peter, 2006). Consumers argue that although the locally produced finished fabrics are relatively better in terms of quality, the market for imported products has increased because the products have attractive colors, new designs, a softer and glossier finish (Peter, 2006).

Import competition negatively affects the number of workers and wages in the apparel industries. Similarly, to such correlation discovered in the textile industry each of these correlation consists of two regimes governed by the value of import completion beyond the three short values an upsurge of import competition severely affects both the number of workers and wages in Indonesia's apparel industry (Yudhi, 2013).Massive damping of used clothes in Africa significantly undermined competitiveness of the textile sectors.

Lawrence and Rhys, 2015, used econometric estimation to evaluate the impact of Chinese trade on production and employment in South Africa manufacturing from 1992 to 2010. Their finding shows that increased import penetration from china caused South African manufacturing out to be 5 percent lower in 2010 than it otherwise would have been. The estimated reduction of employment in manufacturing is larger as a result of trade with China. About 8 percent declines in output in 2010 were because the increase in imports raised labor productivity within industries as industries are labor intensive.

Morris and Einhorn, 2008, analyzed the Chinese rapid spread clothing exports globally, using a frame work of complementary or competitive relationship and direct or indirect impacts. The reason for the huge increase of Chinese clothing imports. The significant welfare benefit to cheap clothing imports for consumers. The impact on local manufacturers and the policy challenges this creates for local producers. The result showed that the direct and indirect and textile sector is complex. It reflects all stresses in industrial policy which seeks to balance the interests of producers and consumers over time in such a way that short term welfare costs in order to promote longer term production capability building. According to this study for many clothing firms the past few years have been a massive shock. Many have struggled and failed to make the required transition and have closed, restructured, downsized, or shifted from full package producers to outsourcing locally. The interviews they made suggested that the volume of sales has also increased by a factor greater than the value of sales. The competitiveness impacts have resulted in the industry having to radically hander goes a restructuring process.

Karan, 2014, was realized that there was a sequential increase in production and export of organic cotton to U.S.A and Europe and in the coming decade garment and textile industry is taking a serious turn towards the product and marketing of products. The Ethiopian garment and textile industry has to think about how to be inspired from the various marketing strategies and trade policies from the Europe and the U.S.A in order to support the building up of brands from within the country for domestic business. The need for mass marketing has to create where the consumer inside the country should be loyal to the clothing from the local manufacturers rather than buying imported textile goods. The researcher has recommended that more emphasis should be given on micro and macro level of economic factors, co temporization of the traditional Ethiopian design, brand development, fashion product lines, and accessories/look for co branding, research and development, and technology should be considered, improve the standards of labor as textile industry is labor intense.

Elena and Rigoberto, 1996, investigated the impact of imports on domestic price cost margin through the interaction of economies of scale, and demand elasticity's. They also argued that theoretically, the impact of imports on domestic price cost margins by separating this impact into three components: the direct effect of imports in depressing domestic prices, the further impact on prices caused by the reaction of domestic producers, the associated changes in costs. It was shown that overall imports can have a positive or negative impacts on domestic price cost

margins depending on the sign and strength of each these elements. A positive effect is theoretically is consistent with weak economies of scale and low elasticity's of demand. Imports can have a negative impact on price cost margins especially in markets characterized by strong economies of scale and high elasticity's of demand.

Tang, 2014, studied the impact of Asian investment on Africa's textile industry. The result of the study showed that the textile and apparel sector in southeast Africa keeps shrinking because of the challenge from Asian competition. These countries continue to lose market share in general as a result of the liberalization of international trade and rising labor costs at home. Exports are affected by changes in subsidy policies and by investor's movement within the region. The study also identified that Asian products are not only grapping a greater share of international market but also flooding into southeast Africa's domestic market, dealing further blow to the local textile and apparel sector. In Southeast Africa many of the companies have to depend on imported raw materials accessories and machinery as the local demand is low to encourage suppliers to invest locally. Conversely, the dependence on imported supply increases the cost of production in the region and hinders growth of the sector. Lack of scale was a major obstacle for the growth of textile and apparel sector in Southeast Africa. Smaller enterprises cannot compete with the immense Asian manufacturers in terms of price. They have less bargaining power with suppliers and have little support locally. Currently, a large amount of cotton is exported to China from Africa and a large amount of fabric is imported to Africa from China. The raw materials travels tens of thousands kilometers just for two or three steps of processing. So coordination of the upper stream and downstream producers will be help full. The payoff is potentially significant in building the missing link of textile processing could create jobs, boost the economy and put African on a path of sustainable growth in the cotton textile apparel value chain. In general Asian countries continue challenging Africa's indigenous enterprise. So, African countries need a clear vision and tailor policies to make the most their opportunities to ensure sustainable industrialization and comprehensive development.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1   Research Approach and Design

In this study both quantitative and qualitative research approached were used, in order to cover all aspects of this thesis. The researcher used both primary and secondary data sources.

3.2   Population, Sample Size, and Sampling Procedure

Currently, the textile and apparel sector consist of around 130 medium and large scale factories of which 37 are foreign owned (ETIDI, 2015). Because of distance and budget constraints, textile factories that are located in Addis Ababa and outside of Addis Ababa, those having long history, and good experience were selected through the application of purposive sampling technique. Accordingly, 2 privately owned and 4 governmental domestic textile factories were selected. Each factory manager was chosen as a key informant.

3.3   Data Source and Data Collection Method

The data sources are both primary and secondary. From the selected six textile industries, data was collected through open ended questionnaire from key informants, i.e. factory managers. The secondary data was obtained from Ethiopian Textile Industry Development Institute (ETIDI), National Bank of Ethiopia (NBE) and Ethiopian Revenue and Custom Authority.

3.4   Data Analysis Methods

Descriptive and inferential statistics were used to analyze the data. This was done by the application of Co-integration and Error Correction Mechanism model. They were employed to analyze a time series data of imported textile goods in terms of import price and volume, and domestic textile goods measured in price per year from 2000 -2015. The unit of analysis was at national level.

CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.1 Time Series Data Analysis

This chapter deals with data analysis, discussion, and findings. The secondary data obtained from ETIDI is a 16 years' time series data. That is from 2000 to 2015. The data were organized in tabular form. Table 4.1 presents the textile and garment imports to Ethiopia and growth value (GV) information in terms of values or price in ('000USD) and volume in ('000kg)

Table 4.1: Ethiopian Textile and Garment Import and GV Information
Import of Textile and Garment Products (2000 - 2015)

Year (G.C.)	Value (in'000USD)	Volume (In'000KG)
2000	68,175.90	31,827.50
2001	94,890.70	40,846.40
2002	107,745.40	44,466.90
2003	141,689.80	67,358.30
2004	145,376.50	60,211.10
2005	174,591.30	61,955.20
2006	219,323.00	61,190.90
2007	218,054.00	58,581.50
2008	206,683.80	59,620.80
2009	269,463.10	54,806.00
2010	314,192.60	61,502.90
2011	260,677.80	54,009.10
2012	406,042.11	90,056.00
2013	476,558.18	95,651.97
2014	557,193.85	197,551.45
2015	659,339.38	146,147.44

Source: Ethiopian Revenue and Custom Authority

Table 4.2 given below presents gross value of production by manufacturing of Textile and Garment products in terms of values in ('000USD).

Table 4.2: Gross Value of Production by Manufacturing of Textile & Garment Products   (Value in '000USD)

No	Industrial Group	Year														
		1992(1999 /00)	1993(2000 /01)	1994(2001 /02)	1995(2002 /03)	1996(2003 /04)	1997 (2004/05)	1998 (2005/06)	1999 (2006/07)	2000 (2007/08)	2001 (2008/09)	2002 (2009/10)	2003 (2010/11)	2004 (2011/12)	2005 (2012/13)	2006 (2013/14)
1	Manufacture of Textile	69428.43	80273.77	77555.57	86334.98	110251.75	103001.84	101756.63	122580.22	69420.84	117,866.17	162708.8	86728.03	400869.34	447072.3	294745.15
2	Manufacture of Wearing Apparel, except fur Apparel	7210.50	6390.68	6609.68	8395.70	9972.33	7187.69	8920.65	30506.75	40635.67	34658.94	53420.83	24523.75	113674.89	25655.9	48906.00
	Total	76471.74	86764.00	84166.22	94730.68	120224.09	110189.53	110677.28	153086.97	110056.50	152525.11	216129.63	111251.79	514544.23	472728.20	343651.15

Source: Central Statistical Agency of Ethiopia

4.1.1 Test for Stationary

The first step in the analysis of time series data is investigating whether a given time series data is stationary or not. There are different statistical methods that are used for this purpose. Among the existing statistical test that has become widely popular over time is the unit root test. To start with, consider Y_t to be a time series data. If Y_t is to be stationary the mean, variance, and auto-covariance of Y_t must be the same as those of Y_{t-1}. In other words, if a time series data is stationary, its means, variance and auto -covariance at various lags remain the same irrespective of the point at which we measure them; that is they are time invariant. If a time series is not stationary it is called non-stationary time series. A non-stationary time series will have a time varying mean or a time varying variance or both (Gujarati, 2004).

If a time series is non-stationary, we can study its behavior only for the time period under consideration. Each set of time series data will therefore be for a particular episode. As a result, it is not possible to generalize to other time period. So, it is important to test whether it is stationary or non-stationary through non-stationary stochastic processes.

Let Y_t be a time series data.

$$Y_t = pY_{t-1} + u_t - - - - - - - - - - -(1)$$

Where, $-1 \leq p \leq 1 \ and \ u_t(0.S^2)$.

Now let us subtract Y_{t-1} form each side to obtain:

$$Y_t - Y_{t-1} = PY_{t-1} - Y_{t-1} + u_t - - - -(2)$$

$$=(P - 1)Y_{t-1} + u_t$$

Alternatively it can be written as:

$$\Delta Y_t = \delta Y_{t-1} + u_t - - - - - - - - - -(3)$$

Where, $\delta = P - 1$, and Δ as usual is the firs difference operator.

Now, estimate (3) and test the null hypothesis, Ho: $\delta = 0, if \ \delta = 0$, then P = 1, that is we have a unit root, meaning the time series under consideration is non stationary. To test this null hypothesis the normal t value of the estimated coefficient of Y_{t-1} does not follow the t - distribution. Therefore, instead we use the τ (tau) statistics which is referred as Dickey-Fuller (DF) test. The DF test is estimated in three different forms, that is, fewer than three different null hypotheses.

1. Y_t is a random walk, $\quad \Delta Y_t = \delta Y_{t-1} + ut - - - - - - - - - -(4)$

2. Y_t is a random walk with drift, $\quad \Delta Y_t = \beta_1 + \delta Y_{t-1} + u_t - - - -(5)$

3. Y_t is a random walk with drift around stochastic time trend.

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + u_t - - - -(6)$$

Where, t is the time or trend variable. In each case the null hypothesis is that:

$H_0: \delta = 0,$ That is, there is a unit root and the time series is non stationary.

$H_1: \delta < 0,$ That is no unit root and hence the time series is stationary.

Now let us consider the textile import price (IP) to Ethiopia from year 2000 to 2015G.C.

$$\Delta IP_t = \beta_1 + \beta_2 t + Ip_{t-1} + ut - - - - - -(7)$$

For this series the result of the regression is as follows:

ΔIP_t =-10624.478+ 7546.031t -0.073IP$_{t-1}$ $- - -(8)$

$\quad\quad\quad\quad\quad\quad$ (28117.836) $\quad$ (7954.997) $\quad$ (0.250)

$\quad\quad\quad\quad\quad\quad$ t $\quad$ (-0.378) $\quad\quad$ (0.949) $\quad\quad$ (-0.293)

$R^2 = 0.244772,$ $\quad\quad$ Adjusted R Square =0.119 $\quad\quad$ d = 2.4110028

Here the τ (tau) value of the IP_{t-1} coefficient is -0.292. It is less than 5% critical value of -3.70in absolute value. Hence the null hypothesis is not rejected and the IP time series is non stationary. That is, a random walk with drift around stochastic time trend and the estimated p value is 0.927. Similarly, consider the result of regression of textile import Volume (IV) to Ethiopian as follows.

$$\Delta IV_t = \beta_0 + \beta_1 IV_{t-1} + u_t - - - - - -(9)$$

Output

$$\Delta IV_t = 24949.912 - 0.250 IV_{t-1} - - - - -(10)$$

$$(17058.569) \quad (0.216)$$

$$t \quad (1.463) \quad (-1.156)$$
$$R^2 = 0.093273, \quad \text{Adjusted R Square} = 0.024 \; d = 2.272909$$

The domestic textile, in terms of price,

$$\Delta DP_t = \beta_0 + \beta_1 DP_{t-1} + u_t - - - - - - - (11)$$

$$\Delta DP = -0.0341 \, DP_{t-1} \quad - - - - - - (12)$$
$$(0.135727)$$
$$t \quad (-0.2511)$$
$$R^2 = -0.029743 \qquad\qquad\qquad d = 2.575274$$

The τ (tau) value of IV_{t-1} coefficient is **-1.157** which in absolute value it is less than 5% critical value of -3.93 and for model (12) τ (tau) value of the coefficient of DP_{t-1} is -0.251, which in absolute value is less the 5% critical value of -3.93. Therefore, in both cases the null hypothesis is not rejected and hence they are non-stationary time series. ΔIV_t is a random walk with drift and DP is a random walk without drift. Hence, for DP and IV time series above the estimated p value are 0.750 and 0.966 respectively.

4.1.2 Co –Integration Method

The second step in the analysis of time series data is investigating whether the time series variables are co-integrated or not. Economically speaking two variables will be co-integrated if they have a long term or equilibrium relationship between them (Gujarati, 2004). There are a

number of methods for testing co-integration. The DF or ADF unit root test on the residuals estimated from the co-integrating regression and the co-integrating Durbin-Weston (CRDW) tests are most recommended. CRDW is the quicker and simpler method.

consider the following:

$$Dp_t = \beta_1 + \beta_2 IP_t + \beta_3 IV_t + u_t - - - - - - - (13)$$

Where u_t is normally distributed with zero mean and constant variance, $u_t(0, \delta^2)$

After estimating (13) becomes as follows:

$$DP_t = 13961.935 + 0.926 IP_t - 0.903 IV_t - - - - - - - - - (14)$$

$$\qquad\qquad (41364.281) \qquad\quad (0.242) \qquad\qquad\qquad (0.987)$$

$$t \qquad\quad (0.338) \qquad\qquad (3.822) \qquad\qquad\qquad\quad (-0.915)$$

AdjustedR^2= 0.708R Square=0.747 $\qquad$ d = 1.595>1.539

Since DP, IP and IV are individually non stationary, there is the possibility that the regression is spurious. Therefore it is important to perform a unit root test on the residual obtained from (14) and obtain the following result.

$$\Delta u_t = -0.839933\, u_{t-1}$$

R^2=0.3883t $\quad$ -3.011529 d = $\quad$ 1.81393>1.539

Adjusted R Square=0.342

Statistically, the equilibrium error term is zero suggesting that ΔDP adjusts to changes in IP and IV in the same period.

It can be clearly seen from (14) that DP, IP and IV are co-integrated; that is there is a long-term or equilibrium, relationship between them. However, in the short run there may be disequilibrium. So, it is important to tie the short run behavior of DP to its long run value. Error Correction Mechanism (ECM) method is used to find the short term equilibrium. Therefore, consider the following:

$$\Delta DP_t = \alpha_0 + \alpha_1 \Delta IP_t + \alpha_2 \Delta IV_t + \alpha_3 u_{t-1} + \epsilon_t - - - - - - - (15)$$

Where, ϵ_t is a random error termand $u_{t-1} = (DP_{t-1} - \beta_1 - \beta_2 IP_{t-1} - \beta_3 IV_{t-1})$, that is the one period lagged value of the error from the co integrating regression.

We can estimate, $u_{t-1} = DP_{t-1} - \beta_1 - \beta_2 IP_{t-1} - \beta_3 IV_{t-1} - - - - - - (16)$

$$\Delta D\hat{P}_t = \alpha_0 + \alpha_1 \Delta I\hat{P}_t + \alpha \Delta I\hat{V}_t + \alpha_3 \hat{u}_{t-1} + \epsilon_t - - - - - - - - (17)$$

$\Delta DP_t = \text{-34136.971} + 1.612\Delta IP_t - 0.267\Delta IV_t - 0.937 u_{t-1} - - - (18)$

(23714.597) (0.398) (0.632)   (0.270)

t (-1.439)   (4.052)   (-0.423) (-5.722)

R Square=0.724   Adjusted R Square=0.649

4.1.3   Error Correction Mechanism (ECM)

Error Correction Mechanism (ECM) states that ΔDP_t depends on $\Delta IP_t, \Delta IV_t$ and the equilibrium error term (Gujarati, 2004). If both ΔIP_t and ΔIV_t is non-zero, then the model is out of equilibrium. From equation (18) the coefficient of u_{t-1} is negative and it implies that DP is below its equilibrium value if u_{t-1} is negative and therefore ΔDP_t will be positive to restore the equilibrium that is, if ΔDP_t is above equilibrium value, it will start falling in the next period to correct the equilibrium error. Statistically, the equilibrium error term is zero, so that DP adjusts to changes in IP and IV in the same time period and IP has positive impact and IV has negative impact on short-run changes on domestic textile price. Hence, 1.612 and- 0.267 are short run equilibriums for IP and IV respectively. Similarly the long run equilibriums for IP and IV are 0.926 and - 0.903 respectively.

If a time series is a non-stationary, both with drift and without drift can be transformed into stationary time series by first difference or so on. In this study weak stationary assumption was taken into account. Accordingly, the first difference in ΔDP_t and ΔIV_t is stationary. The time series for IP is non-stationary with drift around time trend that can be transformed into stationary time series by trend stationary process. That is by regressing IP on time and the residuals from this regression will then be stationary. Hence consider the following regression.

$IP_t = \alpha_0 + \alpha_1 t + u_t -(19)$

$IP_t = \text{-16971.039} + 33761.280t + u_t - - - - - - - - - -(20)$

$u_t = (IP_t + 16971.039 - 33761.280t) - - - - -(21)$

Here u_t is called detrended time series.

Now it is reasonable to regress ΔDP_t on ΔIV_t and u_t to test the hypothesis that states both the import price and volume of imported textile and clothes affect domestic textile industry in Ethiopia in terms of price.

DP_1 = 33099.180 -0.578 IV_1 +1.155 u_1$- - - - - -$ (22)

      (11318.365) (0 .368)   (0.121)

t   (2.924)   (-1.572)   (9.513)

     Adjusted R Square   = 0.855   R Square=0.875

From equation (22) import price is statistically significant and it affect domestic industry positively that is the domestic textile industry is characterized by low economics of scale and their products are demand inelastic. According to the adjusted R squared, 85.5 percent of domestic price of locally manufactured textile goods are explained by the volume and price of imported textile goods jointly. The alternative hypothesis which states the price of imported textile goods affect the price of domestic textile goods in Ethiopia negatively must be rejected, and the null hypothesis must be accepted.

4.2 Forecasting

Forecasting is the important part in the analysis of time series. Once the given time series converted into stationary, it is possible to apply Box-Jenkins methodology to identify the appropriate **Autocorrelations** integrated moving average (ARIMA). **Autocorrelations** is the process in which a given time series is affected by its lag but moving average is the process in which a series is affected by previous error term. Therefore, ARIMA is the combination of both the process that gives better forecasting result. Here a very important question is that how to identify the appropriate ARIMA for a given time series. So, to identify the right model the correlograms of DP is given as follows.
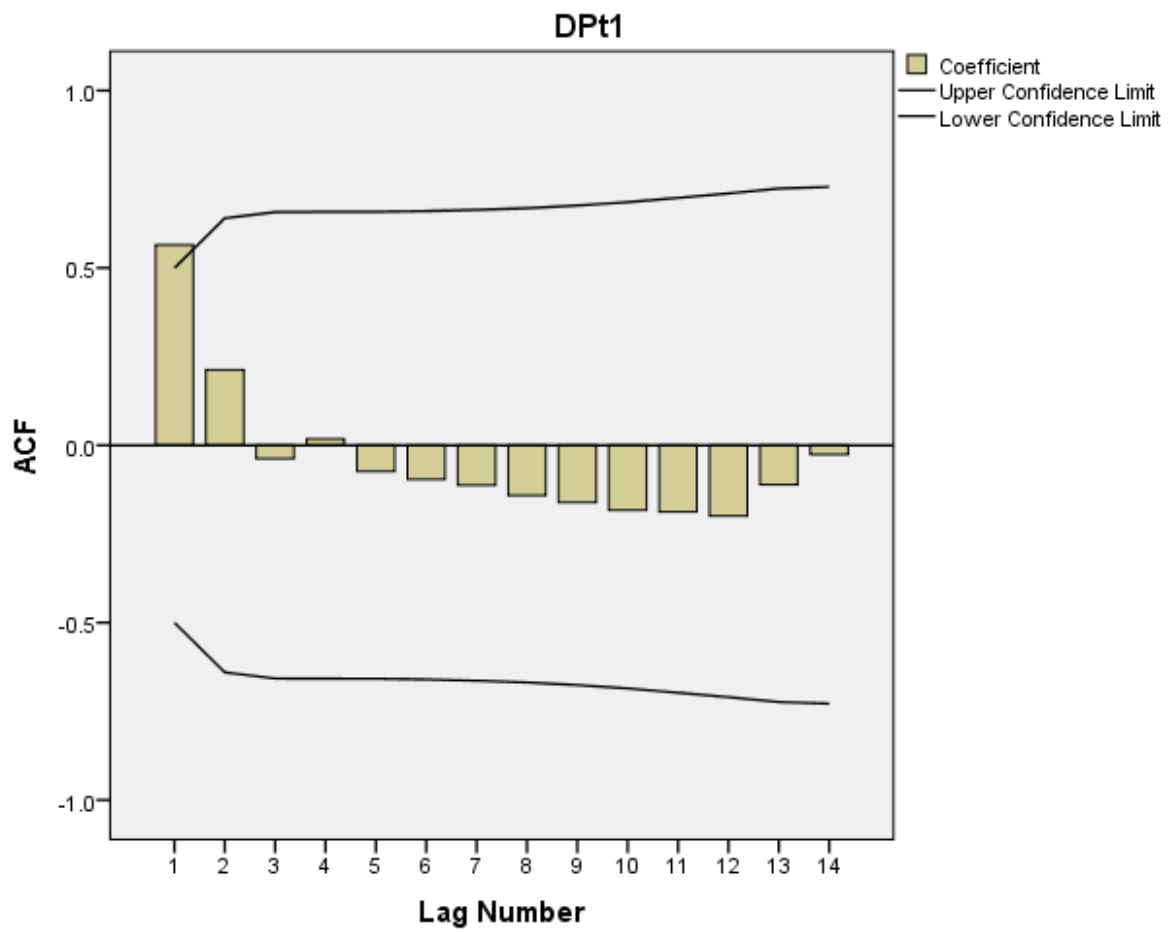
Table 4.3: Autocorrelation and Partial Autocorrelation function

Lag	Autocorrelation	Partial Autocorrelation	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	0.565	0.565	6.132	1	0.013
2	0.213	-0.157	7.061	2	0.029
3	-0.038	-0.132	7.093	3	0.069
4	0.018	0.202	7.100	4	0.131
5	-0.073	-0.233	7.242	5	0.203
6	-0.096	0.006	7.508	6	0.276
7	-0.113	0.020	7.914	7	0.340
8	-0.142	-0.200	8.635	8	0.374
9	-0.161	0.017	9.704	9	0.375
10	-0.183	-0.103	11.308	10	0.334
11	-0.188	-0.135	13.344	11	0.271
12	-0.199	-0.038	16.201	12	0.182
13	-0.111	0.014	17.383	13	0.182
14	-0.026	-0.022	17.478	14	0.232

Source: survey data analysis by SPSSS.vr 20

a. The underlying process assumed is MA with the order equal to the lag number minus one. The Bartlett approximation is used.
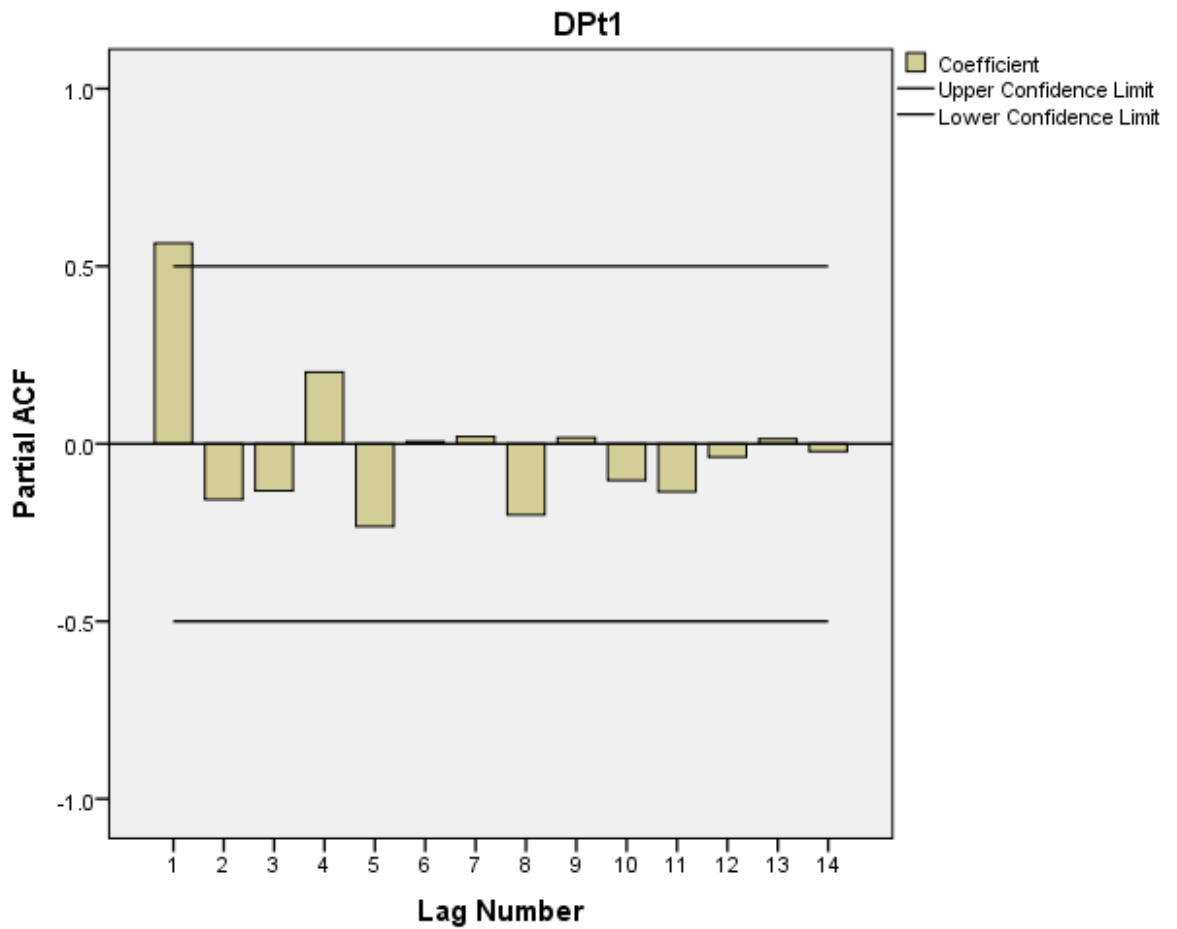
b. Based on the asymptotic chi-square approximation.

Source SPSSvr.20 output

Figure 4.1: Autocorrelation function correlogram for import textile price.

 The autocorrelation correlogram shown above declines up to lag 2 and cuts off.

Source: survey data analysis

Figure 4.2: partial autocorrelation function correlograms for domestic textile price.

The solid line in this figure 4.2, give the approximate 95 percent confidence limit. The partial autocorrelation correlograms shows that at lag 1 the spike is out of this limit and hence, the coefficient is significantly different from zero but the rest are not. As a result it is an AR (1) model. In addition to this, after lag 1 the spikes cut off and assume MA (1) model. Therefore, the model for DP is ARIMA (1,1), given as follows.

$$DP_t = \alpha_0 + \alpha_1 u_t + \alpha_2 u_{t-1} + \alpha_3 DP_1 - - - - - - - (23)$$

$$DP_t = 1496.716 + 0.998u_t - 0.038u_{t-1} + 0.998DPt\_1 - -(24)$$

(1804.149)   (0.009)   (0.010)   (0.008)

t   (0.830)   (105.682)   (-3.779)   (120.998)

27

Adjusted R Square = 0.999

For example, the forecast value of DP for the year 2015 is about 343937.3294 thousand dollars. The actual value of DP for the year 2015 was 343651.15 thousand dollars; the forecast error was an over estimate of 286.17940 thousand dollars.

In similar manner, the model for IP is given below.

Table 4.4: Autocorrelation and Partial Autocorrelation function for import price

Lag	Autocorrelation	Partial Autocorrelation	Box-Ljung Statistic		
			Value	df	Sig.[b]
1	0.523	0.523	5.243	1	0.022
2	0.234	-0.054	6.366	2	0.041
3	0.045	-0.077	6.410	3	0.093
4	-0.276	-0.358	8.240	4	0.083
5	-0.217	0.137	9.476	5	0.092
6	-0.279	-0.228	11.711	6	0.069
7	-0.342	-0.147	15.462	7	0.031
8	-0.264	-0.162	17.964	8	0.021
9	-0.150	0.110	18.886	9	0.026
10	-0.165	-0.336	20.191	10	0.027
11	-0.105	-0.066	20.820	11	0.035
12	0.085	0.102	21.339	12	0.046
13	0.126	0.014	22.855	13	0.043
14	0.165	-0.229	26.754	14	0.021

Source: survey data analysis

a. The underlying process assumed is independence (white noise).

b. Based on the asymptotic chi-square approximation.
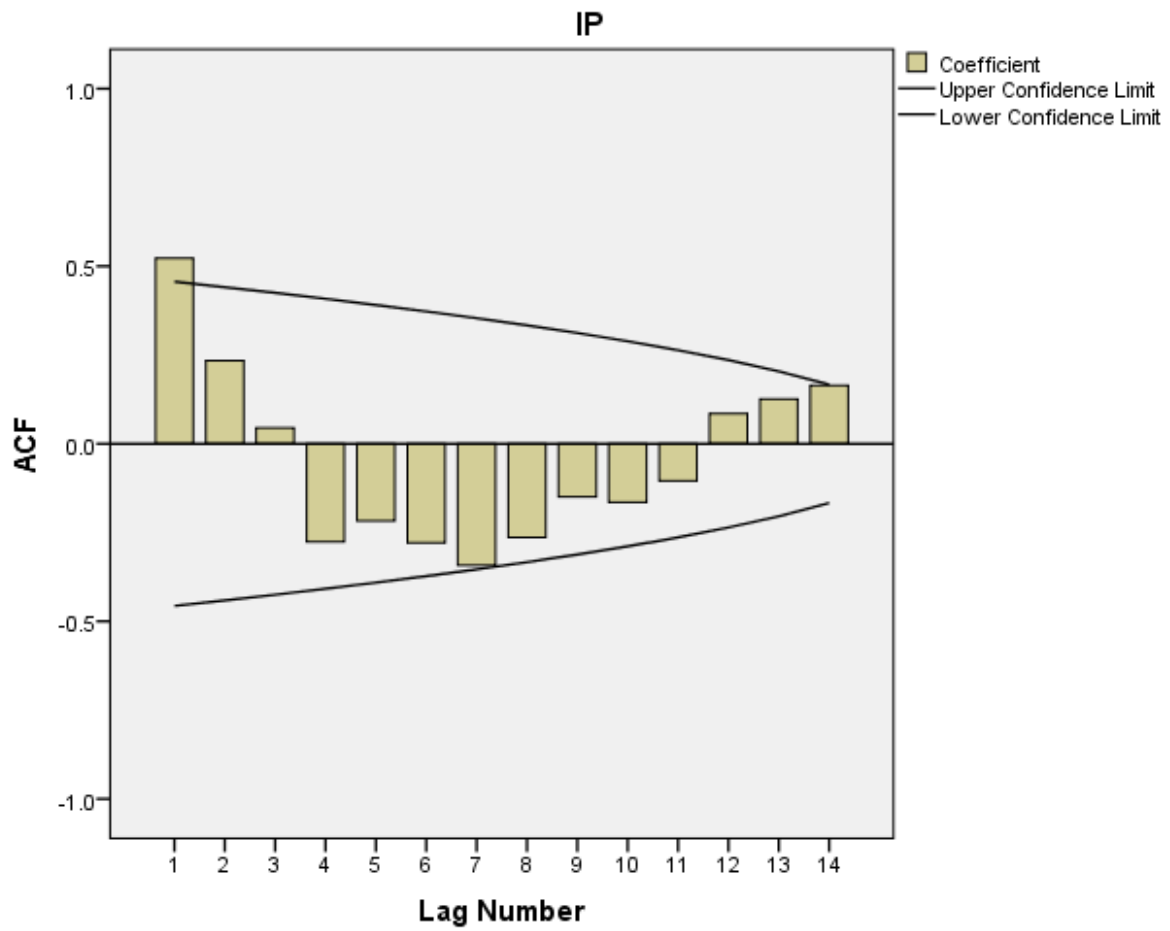
Source: survey data analysis

Figure 4.3: Autocorrelation function correlogram
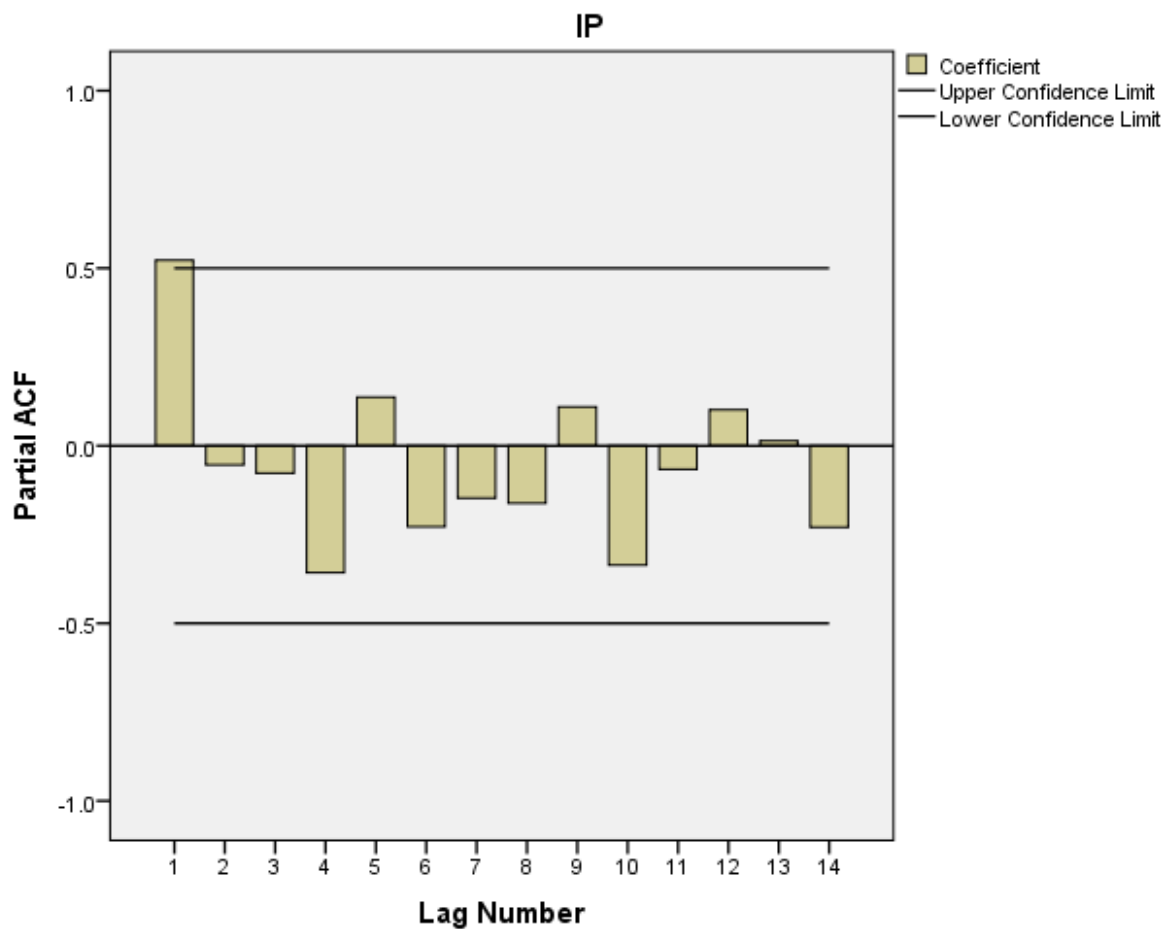
Figure 4.4:partial autocorrelation correlograms

The autocorrelation function and partial autocorrelation correlograms and table 4.4, show that at lag 1 the coefficient is significantly different from zero and after lag l it cuts off. Therefore, the model for IP is also ARIMA (1, 1) and given as follows;

$$IP_t = \alpha_0 + \alpha_1 u_t + \alpha_2 u_{t-1} + \alpha_3 IPt_1 - - - - - - - - - -(25)$$

$$IP_t = -813.549 - 0.098\ u_t + 0.994 u_{t-1} + 1.168 IPt\_1 - - - -(26)$$

     (6857.115)   (0.067)   (0.076)   (0.026)

t   (-0.119)   (-1.451)   (13.115)   (44.975)

Adjusted R Square = 0.995

For instance, the forecast value of IP for the year 2014 is about 477276.1219 thousand dollars. The actual value of IP for the year 2014 was 476558.18 thousand dollars; the forecast error was an overestimate of 717.94190 thousand dollars.

4.3 Open-Ended Questionnaire, a Qualitative Aspect

In Ethiopia there are both government and private owned textile factories. Among them, Dire Dawa textile factory is government owned factory. It is located at Dire Dawa city Administration. It has a total number of 1200 workforces. The manager of this factory is Mr. Fekade G/Hiwot   who provided this general information about the factory. As per the information obtained through an open ended questionnaire, Dire Dawa Textile Factory is a medium scale factory that mainly manufactures cloth like abujedid, flannel, and bed sheets. Although cloth made in this factory is of low quality, the factory has a capacity of producing a total of 963,218m^2 clothes per year and makes 662,400 USD total revenue on average including VAT.

The performance of this factory is mostly affected by imported textiles and clothes, budget constraints (shortage of working capital), lack of skilled workers, lack of technology and immigration of trained manpower. Moreover, manager has commented, imported textile and clothing in Ethiopia affect domestic textile production in general and reduces its market share locally. This is due to old technology and high production costs in the country. He also believes that the price pressure of imported textile goods could affect the price of domestic textile and clothes in the local market as the products of this factory are available only at local market.

Dire Dawa Textile Factory does not own cotton farmland. As a result they buy raw materials from middle Awash, Humera and Omo Valley cotton production firms. To solve thesesevere problems the technology must be changed; all concerned bodies must follow the performance of this factory and identify the problems of the sector. In addition to this the government must help the factories to purchase new technology; must evaluate the performance of the sector and revise the existing policy.

According to the manager the products of Dire Dawa Textile Factory are of low quality and price inelastic; they do not compete in the international market. They never used the opportunity of free market to Ethiopia internationally. As a result our country is not benefiting from AGOA or

COMESA to sell the textile products abroad. Therefore, to solve this problem in the future, further study must be conducted in this sector in order to improve the quality of domestic products. In addition to this the Ethiopian export and import policy does not help to promote the sector of textile industry. This is because the tax levied on imported textile goods is very low, and as a result the local market in Ethiopia gets saturated with import goods and leaving little space to domestic products.

Bahirdar Textile Factory is a large scale factory found in Amhara regional state of Ethiopia. It has got 1445 workers. It is a government owned company which is currently managed by Mr. Yared Birhane. Quilt covers, Red sheets, pillow cases, abujedid, and *shamma* are its main products. In 2015 budget year, the company manufactured a total of 5,018,000 metric square tones of cloth and earned total revenue 8,867,100 USD. According to the manager of this company, their products are made from cotton and are conformable and found on international markets, though not in abundance.

Just like Dire Dawa Textile Factory, Bahirdar Textile Factory does not own cotton farmland and it gets the raw materials from Awash, Afar, Gondar, Metema, and others places. The company's management believes that competing in international market, making quality products, involving skilled workers in export market research will greatly improve the current poor performance of the company in general.

The company didn't make use of the existing preferential free market like AGOA and COMESA so far. This is because the company has no capacity to produce quality product with enough quantity consistently. In addition to this, at international market the customer prefers clothes with new design and style that cannot be produced by old and backward machines at this factory and unskilled workers. To improve this condition, the government must assist the adoption of new technology, train more workers and replace obsolete machinery with modern digital machinery so as to meet the needs of international society in general. The government must also create awareness in the society so that they can purchase locally manufactured clothes even though the main focus of the factory is exporting.

Another textile factory that this research has touched upon is Debre Birhan Textile Factory. It is located at Debre Birhan town. It has got 443 active workers. It is a private company managed by

Mr. S.K Goel. Debre Birhan Textile Factory is a large scale factory which manufactures mainly blankets, bed covers and *shammas /*small *Gabis/* with relatively high quality products.

The performance of this factory is mainly affected by imported textile and clothes from different parts of the world by inability to compete in international market, by lack of skilled workers or trained manpower and by foreign currency shortage. Most importantly, imported textile and clothes to Ethiopia affect production and reduce their market share locally. Most Ethiopian customers opt for low-priced items as their incomes do not allow them to go for expensive ones. It is because of low quality imported blankets available at local market and their customers turned their face for this low price products .The imported blankets are of low price because of their low quality and yet Ethiopian customers prefer to buy them mainly because they can afford to do so. Hence, to some extent it is affecting their products price at local market as they sell their products at local market only. The factory does not own cotton farmland; they get the raw materials from Europe, India and China.

It is very important for the sector to work with higher educational institutions to bolster the capacity of their manpower and produce export oriented products in order to solve currency problem. The government must also protect this sector by encouraging the society to use local products, and by taking action against the importation of low-priced products. The factory has not yet made use of the preferential free market at international market as the products of this sector is of low quality, high cost of logistics to transport factories products to the port of Djibouti. Even though the export and import policies of Ethiopia help to promote domestic textile production, it needs revision.

Almeda Textile plc. is located at Adwa, Tigrai, Ethiopia. It is a privately owned company and theproperty of EEFFORT that holds around 6000 workers. It is a large scale company run by Mr. T/Mariam Tesfu and manufactures clothes like T-shirts (Knitwear) trousers, hospital wears, military, policies and student uniforms relatively with high quality, according to the manager. The company manufactures large tones of clothes per year, and earns a total of 25 million USD incomes. Imported textiles and clothes, lack of international markets, lack of skilled workers, and shortage of technology, hard currency shortage and proximity to local market are factors that affect the total annual income.

The manager of the company believes that imported textile and clothes affect their products and reduce their local market share. These imported textile goods and clothes could affect the price of domestic clothes at local market as there is competition between newly made clothes at this factory and that of re-used import garments. The extent of the impact of these import textile goods and clothes is relatively high. Almeda sells its products at local and international markets. The factory does not own its own cotton farmland but there are sister companies or firms from which they get the raw material. These are Afar, Humera, Metema, and Gambella cotton production companies.

According to the manager of the company, the most serious problem to their factory is shortage of hard currency, lack of skilled manpower, poor infrastructure, power interruption, poor network and poor market linkage. As far as the power interruption is concerned, the manager said that they are ready to prepare power storage plant to have sustained power in the factory. But they don't have any idea how to mitigate the other problems stated above. The manager has also explained that they are not fully utilizing the free market opportunity in AGOA and COMESA. However, about 5% of their capacity is used to send their products abroad through these agencies. The manager also added that poor quality products, late delivery and price pressure are a real challenge in competitions at international market. According to him the export and import policies of Ethiopia help to promote their factory except customers delay.

4.4 Findings

The result from co-integration methods shows that there is a long-term equilibrium or relationship between the dependent variable domestic textile price and the volume and price of imported textile goods at local market. Form the output of regression by the application of SPSS.ver 20, the long-term equilibrium of DP with that of IP is 0.926 and 0.903 with that of IV. Accordingly IP has positive impact and IV has negative impact on short run changes on domestic textile price. Hence 1.612 and -0.267 are short run equilibrium.

Imports can have a negative impact on price cost margins especially in markets characterized by strong economies of scale and high elasticity's of demand (Elena and Rigoberto, 1996). The output of repressor model shows that the import price affect the domestic price positively and hence it is consistent with weak economies of scale and low elasticity's of demand for domestic

products. The volume of imported textile goods affects the domestic industry negatively both on short and long run period but is non-significant.

The model for DP and IP time series is ARIMA (1, 1).The ARIMA (1, 1) model, forecast value of DP for the year 2015 is about 343937.3294 thousand dollars where the actual value for this year was 343651.15 thousand dollars; and the forecast error is an overestimate of 286.17940 thousand dollars. Again from the ARIMA (1, 1) model, the forecast value of IP for the year 2014 was about 477276.1219 thousand dollars where the actual value was 476558.18 thousand dollars; the forecast error was an overestimate of 717.94190 thousand dollars.

From the analysis of qualitative data, the activities of domestic textile industries is also affected by imported textile goods, by budget constraints, by lock of skilled workers, by poor technology, by heavy turnover of trained manpower, by price pressure due to extensive imports of textile goods, by inability to compete in international market, by foreign currency shortage, by being farther away from local market, by poor infrastructure, by power interruption, by poor net-work, and by poor market linkage.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

According to the analysis made in this research, domestic textile industries are highly affected by mass textile import from all corners of the world.

The time series data analysis shows that there is short and long term equilibrium between the domestic textile price and volume and value of imported textile goods at local market. Accordingly, the changes in domestic textile price depend on the changes in imported textile goods volume and price. The equilibrium point at which the domestic textile price adjusts itself in the short run with the volume and price of imported textile goods is -0.267 and 1.612 respectively. Similarly the long run equilibrium for DP to change with volume and price of imported textile goods is -0.903 and 0.926 respectively.

The time series for DP and IP are generated by autocorrelation and moving average of order 1. That is autocorrelation regression integrated moving average model or ARIMA (1.1).The value of these series can be forecasted using this ARIMA (1, 1) model. In addition to this, the analysis of response to the open-ended part of the questionnaire is that all domestic textile industries do not own cotton farmland. As a result some import cotton from China, India and Europe and others purchase cotton from local cotton production firms like Omo valley, Awash, Humera, Metema , Gambela, Afar, etc.

Almost all the domestic textile factories sell their products at local market and they faced stronger challenge from the imported textile goods which monopolize the market. The activity of domestic textile industries in Ethiopia are affected by poor technology, lack of skilled workers, poor infrastructure, lack of international market, old machinery, shortage of hard currency and shortage of working capital.

5.2   Policy Implications /Recommendations

The government should do the following in order to help the textile industry in Ethiopia.

- Reduce the volume of the textile goods imported to Ethiopia per year.
- Conduct through studies on textile sector in order to improve the quality of domestic products and expand market access locally and internationally.
- Change the technology and assist the adoption of new textile and garment technology.
- Identify the problems of the sector and evaluate the performance of the sector.
- Give training to workers on export market research which will greatly improve the current poor performance of the domestic textile industries in general. .
- Replace obsolete machinery with modern digital machinery so as to meet the requirements of the international market.
- Work with higher educational institutions to strengthen skilled manpower in the area of textile industry.
- Produce export products in order to solve hard currency problem.
- Encourage the society to use local products by discouraging the importation of low quality clothes.
- Improve the infrastructure and power supply to textile industry.
- Arrange bazaar and exhibitions at international level.

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Appendices

The first difference of time series data for import volume

NO.	ΔIP_t	IP_{t-1}	ΔV_t	V_{t-1}
1	12854.70	68,175.90	3620.50	31,827.50
2	33944.40	94,890.70	22891.40	40,846.40
3	3686.70	107,745.40	-7147.20	44,466.90
4	29214.80	141,689.80	1744.10	67,358.30
5	44731.70	145,376.50	-764.30	60,211.10
6	-1269.00	174,591.30	-2609.40	61,955.20
7	-11370.20	219,323.00	1039.30	61,190.90
8	62779.30	218,054.00	-4814.80	58,581.50
9	44729.50	206,683.80	6696.90	59,620.80
10	-53514.80	269,463.10	-7493.80	54,806.00
11	145364.31	314,192.60	36046.90	61,502.90
12	70516.07	260,677.80	5595.97	54,009.10
13	80635.67	406,042.11	101899.48	90,056.00
14	102145.53	476,558.18	-51404.01	95,651.97
15	0.00	557,193.85	0.00	197,551.45
16		659,339.38		146,147.44

Table representing the time series for domestic price in terms of dollar

No.	ΔDP_t	DP_{t-1}	In '000USD(DPt1)	Exchange rate
1	10292.26	666000	76471.74	1999/00-8.6901
2	-2597.78	755636	86764.00	2000/01-8.7191
3	10564.46	733012	84166.22	2001/02-8.7092
4	25493.41	825019	94730.68	2002/03-8.7091
5	-10034.56	1042956	120224.09	2003/04-8.6751
6	487.75	959861	110189.53	2004/05-8.7110
7	42409.69	998951	110677.28	2005/06-9.0258
8	-43030.47	1371200	153086.97	2006/07-8.9570
9	42468.61	1051799	110056.50	2007/08-9.5569
10	63604.52	1801352	152525.11	2008/09-11.8102
11	-104877.84	2956783	216129.63	2009/10-13.6806
12	403292.44	1838903	111251.79	2010/11-16.5292
13	-14816.03	9255776	514544.23	2011/12-17.9883
14	-129077.05	9124836	472728.20	2012/13-19.3025
15	1148828.00	6827180	343651.15	2013/14-19.8666
16		7976008	396412.02	2014/15-20.1205

Table representing a time series data of domestic price, import price and import volume.

DP	IP	IV	TIME	DP_1	IP_1	IV_1	DPT_1	IPT_1	IVT_1
76471.74	68175.9	31827.5	1						
86764	94890.7	40846.4	2	10292.26	26714.8	9018.9	76471.74	68,175.90	31,827.50
84166.22	107745.4	44466.9	3	-2597.78	12854.7	3620.5	86764	94,890.70	40,846.40
94730.68	141689.8	67358.3	4	10564.46	33944.4	22891.4	84166.22	107,745.40	44,466.90
120224.09	145376.5	60211.1	5	25493.41	3686.7	-7147.2	94730.68	141,689.80	67,358.30
110189.53	174591.3	61955.2	6	-10034.6	29214.8	1744.1	120224.1	145,376.50	60,211.10
110677.28	219323	61190.9	7	487.75	44731.7	-764.3	110189.5	174,591.30	61,955.20
153086.97	218054	58581.5	8	42409.69	-1269	-2609.4	110677.3	219,323.00	61,190.90
110056.5	206683.8	59620.8	9	-43030.5	-11370.2	1039.3	153087	218,054.00	58,581.50
152525.11	269463.1	54806	10	42468.61	62779.3	-4814.8	110056.5	206,683.80	59,620.80
216129.63	314192.6	61502.9	11	63604.52	44729.5	6696.9	152525.1	269,463.10	54,806.00
111251.79	260677.8	54009.1	12	-104878	-53514.8	-7493.8	216129.6	314,192.60	61,502.90
514544.23	406042.1	90056	13	403292.4	145364.3	36046.9	111251.8	260,677.80	54,009.10
472728.2	476558.2	95651.97	14	-41816	70516.07	5595.97	514544.2	406,042.11	90,056.00
343651.15	557193.9	197551.5	15	-129077	80635.67	101899.5	472728.2	476,558.18	95,651.97
396412.02	659339.4	146147.4	16	52760.87	102145.5	-51404	343651.2	557,193.85	197,551.45

St. Mary's University

School of Graduate Studies

Institute of Agriculture and Development Studies

Department of Development Economics

Dear respondent

This questionnaire is prepared to assess the impacts of imported textile goods on domestic textile industry in Ethiopia. The research output is mainly to fulfill the partial requirement of masters of Art in Development Economics. The information gathered will be used fully and due attention for academic purpose only. Its confidentiality that the data collected will not be misused in any way. Therefore, your genuine, honest and prompt response is a valuable input for the quality and successful completion of the paper.

Thank you in advance for your sincere cooperation

Questionnaire to selected domestic textile factory

General instruction

Don't hesitate to ask questions for clarification

Part I: General information

1. Name of the factory _____

2. Location of the factory _____

3. Manager Name _____

4. Total Number of workers _____

5. Ownership _____

Part II: Instruction: please put √ mark for the questions with alternatives and write your idea for open ended question on the space provided.

1. What is the scale of the factory?

   Small scale ☐   medium scale ☐   large scale ☐

2. What types of clothes manufactured?

   a. _____

   b. _____

   c. _____

   d. _____

   e. _____

3. The quality of clothes made is:-

   Low ☐   medium ☐   high ☐

4. How many tones of clothes made per year in total _____

5. What is the total revenue earned per year on average _____

6. Which affects annual textile and cloth production(more than one choice is possible)

   a. Scarcity of raw material ☐

   b. Imported textiles and clothes ☐

   c. Lack of domestic market ☐

   d. Lack of international market ☐

   e. Budget constraints ☐

   f. Lack of skilled workers ☐

   g. Lack of technology ☐

   h. Currency shortage ☐

   i. Proximity to market ☐

   j. Others (specify)_____
   _____

7. Do you think that imported textile and clothing to Ethiopia affects domestic production and reduces its market share locally?

   _____
   _____

8. If your answer is yes to Q.7, how and to what extent it affects production and market share? _____

9. Do you think that the imported textile goods could affect the price of domestic clothes in local market? _____

10. If your answer is yes to Q.9, how and to what extent? _____

11. Where do you sell your products?

    At local market ☐

    At international market ☐

    Both local and international market ☐

12. Does the factory owe cotton farm land? If yes haw many hectors and how many tones of cotton harvested per year_____

13. If your answer is No to Q. 12, where do you get the raw materials for textile production? _____

14. What are the chronic problems to your factory? _____

    _____

15. What do you think the possible solution to avoid these problems in order to achieve the intended goals as a nation? _____

    _____

16. What should government do to boost the sector._____

    _____

17. How often do you use the free market access abroad for example AGOA,COMESA, etc._____

    _____

18. What are the challenges to use the available free markets for Ethiopia abroad?

    _____

19. Do the textile goods export and import policy of Ethiopia helps to promote domestic textile Production? _____

20. If your answer is No to Q. 19, what must be done._____?

    _____

21. What is the effort made so far, to create awareness so that people purchase locally made textile goods?_____