The Impact of Non-Tariff Barriers on Performance of the Textile Manufacturing Industry in Kenya

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DECLARATION

This project is my original work and has not been presented for a Post Graduate Diploma in any other academic or non-institution.

Signature _____ Date _____

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HDB-C016-335-2471/19

This project has been submitted for examination with my approval as the University Supervisor

Signature _____ Date _____

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DEDICATION

To my beloved mother, Consolata Amenya and late father George Amenya, for having been my sole support system in my quest for further education. My sisters, Terry and Betty, for unknowingly contributing to my completion of this course. But above all, I give thanks to the Almighty Father for giving me the wit and health to complete this project.

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ABSTRACT

The study sought to investigate why Kenya has been losing in terms of exports of its textile products. The study further intended to identify the impact of non-tariff barriers on performance of textile manufacturing industries. The general objective of the study was to assess the impacts that the various non-tariff measures have on textile industries' performance. The specific objectives of this study were to establish the impact of import quotas, licenses, and subsidies on the performance of Textile Manufacturing Industry in Nairobi, Kenya. The descriptive research design was used to conduct this study. The target population for this study was 144 employees drawn from 29 textile industries in export processing zone Athi River. The primary data was collected through a structured questionnaire by use of a pick and drop procedure. The collected data was edited, coded, classified and tabulated then entered into a spreadsheet and analyzed using frequencies and percentages. The data was presented in tables, pie charts, graphs, and histograms. To enable answering of the research questions and objectives, the researcher employed descriptive analysis, multiple linear regression, and correlation analysis methods. All the concepts of stability, equivalence homogeneity, construct validity, content validity and criterion validity were put into consideration to ensure reliability and validity of the research instruments. The descriptive findings showed that the government has not put import quotas on importation of the raw materials to encourage consumption of local textile raw material. Also, the findings show that import quotas has helped in price level stabilization for locally manufactured textile products. Further, it has shown that for a person to participate in importation of textile raw material and products, the business person must obtain a business license. Lastly, the descriptive statistics shows that the governments meet the production cost of raw materials used in textile industry. The correlation analysis established a strong positive and significant correlation between import quotas and performance of textile manufacturing industries ($R=0.552$, $p=0.002<0.05$). Also, it was established that trade licenses had a strong and significant positive association with performance of textile manufacturing industries ($R=0.521$, $p=0.009<0.05$). Lastly, subsidies had a strong positive and significant correlation coefficient with performance of textile manufacturing industries ($R=0.512$, $p=0.005<0.05$). Import quotas had a positive beta coefficient which was statistically significant at ($\beta_1=0.097$, $p=0.000<0.050$) while trade licenses had a positive beta coefficient ($\beta_2=0.081$, $p=0.040<0.050$). Lastly, subsidies had a significant beta coefficient ($\beta_3=0.076$, $p=0.000<0.050$). A conclusion is therefore made that imposing import quotas on importation of both raw materials and finished textile products is likely to lead to improved performance of textile manufacturing industry. Also, increased trade licenses requirements for importers of textile raw material and products is likely to lead to improved performance of local textile manufacturing industry while increased subsidies by government would lead to improved performance of local textile manufacturing industry. The current study therefore recommends that the government through KRA impose quotas on the importation of the raw materials used in the textile manufacturing industry so as to encourage consumption of local raw materials.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS AND ACRONYMS

AGOA	African Growth and Opportunity Act
ASEAN	Association of South – East Asian Nations
ASYCUDA	Automated System for Customs Data
COMESA	Common Market for East and South Africa
CU	Custom Union
EABC	East African Business Council
EAC	East African Community
ECOWAS	Economic Community of West African States
EPZ	Export Processing Zone
GDP	Gross Domestic Product
IDF	Import Declaration Form
KEBS	Kenya Bureau of Standards
KEPHIS	Kenya Plant Health Inspectorate Service
KESRA	Kenya School of Revenue Administration
KNBS	Kenya National Bureau of Statistics
KPA	Kenya Port Authority
KRA	Kenya Revenue Authority
NTBs	Non-Tariff Barriers
NTM	Non-Tariff Measures
SADC	South African Development Community
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Non-Tariff Barriers is defined as an import targeted public policy intervention intended to protect domestic industries, national health, safety and security, as well as revenue sources (Okumu, and Nyankori, 2010). These non-tariff barriers could be used in different forms depending on the wish of the trading country in line with the World Trade Organization (WTO) requirements. The incidences of non-tariff barriers are said to be on the increase in recent time (Martinez and Poole, 2004; Carrere and De Melo, 2009). However, the frequency of the incidences of these barriers would greatly influence the flow of goods and services to the country.

It is well acclaimed that over four billion people, approximately two-thirds of the world's population, have joined the world economy over the past twenty-five years as part of the increasing integration of ever more countries into the world trading system (Milner, and Kubota, 2004). Over the years the world has been struggling to stamp out the Non-Tariff Barriers (NTBs) for the aim of trade development consequently increasing peoples' welfare. In this regard, the effort calls for the specialization in goods and services tapping the advantages of comparative advantage. Several trade policy measures were put in place during the global economic crisis (GEC) in order to protect, discriminate and at times enhance trade among the trading countries. The Global Trade Alert Statistics (2012) shows that there are three categories of this trade policy measures: the measures that encourage trade, known as green code measures; measures that could discriminate trade against foreign interest if implemented; and measures that have been implemented and almost certainly will restrict trade against foreign trade partners, are coded in amber and red, respectively.

Significantly, the developed world has moved from depending tariffs to NTBs as their economies are of good sound. According to World Bank, (2012), all continents have created regional integration policies that enable them in bargaining with other trading blocs from other continents. Examples of the most effective economic trading blocs include the European Union, the African Union, Economic Community of West African States (ECOWAS), Common Market for East and South Africa (COMESA), Association of Southeast Asian Nations (ASEAN), South African Development Community (SADC) and the East African Community (EAC).

1.1.1 Global Perspective of Non-Tariff Barriers

Economic activities integration has been facilitated by the fast-dynamic changes in free trade. Countries that have adopted regional trading blocs have registered increased global competitiveness (Kareem, 2010). Continents have followed suit to form continental and regional trading blocs to increase their bargaining power with other continents and regional blocs. A number of trading blocs worldwide have been turning into customs unions to fully acknowledge the advantages of monetary incorporation and facilitate commerce territory with basic external taxes that allow member states to utilize distinctive import portions. The primary instrument for liberalization of trade under the customs unions entails ending NTBs including countries partnering to improve efficiency of the economy and make political and socio-cultural connections among other unions.

The incidences of non-tariff barriers, especially the use of anti-dumping measures by the USA has been declining over time. Anti-dumping investigations initiated and imposed in their domestic economic from 1980 to 1990 were 418, while from 1991 to 2001, they rose to 492. The use of anti-dumping measures on products to the USA reduced from 35 in 2002 to 26 in

2004 and later dropped to 7 in 2006 (WTO, 2008). However, by 2007 the anti-dumping investigations and measures have increased to 29 due to USA protection of its economy.

1.1.2 Regional Perspective of Non-Tariff Barriers

The aspiration of developing countries, especially those from Africa to attain economic development through sustainable growth, employment generation, reduction in income inequality and poverty is linked to their interaction and integration to the global economy. Integration of poorer countries into global market offers the opportunity and potential for rapid growth and reduction in poverty (Martinez and Poole, 2004). From the 1970s until 2000, most of the countries of Sub-Saharan Africa (SSA) faced a politically motivated trade embargo – experienced decades of stagnation. The tightening of internal agricultural policies that subsidized farming in the United States and the expanding European Union undermined Africa's comparative advantage in agricultural products in these regions of the world.

The WTO (2012) report gave credence and enunciated the significance of the issue of non-tariff barriers in trade relations in most of Africa's exports do not meet the required standards set by these countries for any product coming to their markets. This is because Africa does not have sufficient technical wherewithal in terms of advanced technology and sciences to produce products of quality standards that will meet international product standard requirements. Also, the use of safeguard measures and rule of origin have restricted the extent to which countries in Africa can utilize the preferences granted to them in the developed economies. The incidences of these non – tariff measures in these trade relations have consequences on exports, especially those that Africa has comparative advantage and thereby have impact on the extent to which export sector contribute to overall income growth in the rural areas, stimulate growth in other sectors of the economy through the expansion of goods and services demanded from

these sectors. Also, it has effects on the magnitude of earnings and degree with which it could be used to reduce poverty, hunger, and overall malnutrition levels in the continent.

In East Africa, regional economic integration started back in 1990 when Mombasa was made a custom assortment for Uganda. In order to realize the full benefits of economic integration in 2005 East African Community (EAC) created a custom union that consisted of Common External Tariffs to encourage free trade while each member country was allowed to have different imports on quotas (EAC Secretariat, 2005). The key tool applied in trade liberalization given under the Custom Union is doing away with NTB that lie within the partnering states to enhance economic effectiveness amongst other political relationships amongst the partners. The EAC economic block has an objective of obtaining economic, social, political integration in their inter-governmental regional body in those countries with a total population of 141.1 million as at 2013 and a combined GDP of over US $99.8 billion. This has offered a big market opportunity for the EAC members to trade their goods and services which enables them to scale up regional development and in improving poverty. Though, trading in the common market is affected by NTBs imposed by each trading country.

1.1.3 Local Perspective of Non-Tariff Barriers

The Kenyan textile and apparel sector has the potential to play a key role in anchoring Kenya's deeper movement into middle income status and being a source of gainful employment for its fast growing, young population. The industry offers opportunities for increased value capture and streamlined trade logistics, for skill and experience building from the factory floor to the management level. Based on these foundations, the industry serves as a potential gateway to other Kenyan manufactured goods, offering opportunities to be captured by Kenya in terms of increasing global trade share and advancement of economic diversification.

Kenya falls in the generalized picture of Sub-Saharan Apparel trade progress. The Kenyan apparel exports to the United States, with the inception of African Growth and Opportunity Act (AGOA, have increased from $8.5 million to $332 million in 2014(African Growth and Opportunity Act, 2015). To produce this export figure, close to forty thousand workers were employed in the Export Processing Zones (EPZ). Furthermore, the sector pales for comparison with other developing economies making headway in apparel. The Kenyan apparel exports, in 2014, mounted between 0.7 and 1.4 per cent of Bangladesh's exports for non- and knit apparel respectively. Despite the small size, Kenya's exports have grown quite considerably; 42 per cent and 18 per cent year over year for knit for the past ten and five years, respectively. Put in the context of Bangladesh and Vietnam, ten-year growth grew 20 per cent per year starting from a larger base.

Despite making headway in the global apparel market, Kenya still remains behind many competitor nations. The Kenyan Government has been making efforts to direct its focus towards addressing the bottlenecks to competitiveness of the country's apparel sector. Kenyan Textile-apparel manufactures face a number of competitive disadvantages in comparison with firms in competitor countries. Some of these disadvantages relate to non-tariff barriers which impede intentional competition.

1.1.4 Textile Industry in Kenya

The Kenyan apparel industry historical roots date back to the 1900s when cotton farming was introduced in the country. The Independent Kenyan government of 1963 put concerted efforts into growing the sector by recognizing the potential it offers to the economy and affiliate companies. The new independent Government adopted the import submission policy to encourage the integration of cotton mills with cotton producers while also investing in textile mills and controlling the margins throughout the value chain. The Kenyan Government also acted to protect the domestic textile sector by applying the onerous tariffs, and as a result, the

industry expanded that by the 1980s it was the most important manufacturing sector in the Country. The industry accounted for 30% of employment in the manufacturing sector and relied on over 200,000 household farms.

The sector, however, began to decline in the late 1980s when large-scale second-hand clothing (mitumba) was introduced in the country. These clothes were sold cheaply undercutting domestic goods. The influx of cheap imports furthered the decline when the sector was liberalized in the 1990s.The average capacity utilization at textile mills fell to only 50%. However, the prospects of the industry changed at the turn of the century. The fortune change of the industry was attributed to the two trade agreements, AGOA and the African, Caribbean and pacific-EU Cotonou Agreement in 2000.These opened new markets that spurred an interest in the Kenyan Textile and Clothing sector improving investment and employment in the sector.

The past decade has seen a significant market expansion demanding Kenya's apparel products. The exports of the industry accounted for 7% of the total imports in 2013 as compared to 2003's 3%. This is a CAGR growth of 48% between 2003 and 2013.The growth has been majorly contributed to by the expansion of exports through the performance of the Export Processing Zone (EPZ) firms. According to the report published in 2016 for the Kenya apparel and textile industry, it is estimated that Kenya has about 52 textile mills in Kenya, with only 15 that are currently operational at 45 percent of total capacity**.** Textile exports were declining while the home textile exports were declining by 5% yearly. Despite the growth witnessed in the past two decades, the Kenyan textile industry remains relatively small, calling for measures to improve exports. The NTBs are cited as one of the many reasons the exports are relatively meager. This study seeks to help find ways to close the gap.

1.2 Statement of the Problem

In USA, there was approximately 0.6 million workers depends on textile business. The USA textile market is the fourth largest textile industry in world. United States exports of textiles products increased 39 percent, approximately valued near about 17.6 billion USD. According to World Bank (2020), the U.S. textile industry is a nearly $70 billion sector when measured by the value of industry shipments. It remains one of the biggest parts of the manufacturing industry and is one of the largest markets in the world by export value: $23 billion in 2018. Textile industry of US exports to more than 200 countries in the world. The American textile companies survived from global textile competition where the government USA helped to survived them.

In Kenya, the textile and clothing industry developed into a leading manufacturing activity in Kenya, both in terms of size and employment. It employed about 30 percent of the labour force in the national manufacturing sector. The industry also supports the livelihoods of over 200,000 small-scale farmers by providing markets for cotton. Between the time of Kenya's independence and the end of 1990, the government systematically introduced controls in the sector: The government protected the local industry by imposing a 100 percent duty on imported goods. This ensured rapid growth of the local textile industry hitting an average production capacity of over 70 percent.

Between 2000 and 2004, Kenya's textile and apparel exports increased slowly, from US$8.6 million to US$17 million. With the end of the MFA in 2004, apparel exports rose steeply, hitting a high of US$283 million in 2008. According to KNBS (2015), Kenya's textile and apparel exports within the EPZ under AGOA grew at a 17 percent CAGR between 2010 and 2014 to reach US$332 million. Over the same period, investment grew at a 21 percent CAGR while employment grew at a 12 percent CAGR to reach 37,758 people. Also, exports, employment and investment grew by 24 percent, 14.7 percent, and 10.3 percent, respectively.

However, uncertainties over the continuation of AGOA's relaxed rules of origin led Kenyan apparel, like the rest of the African apparel sector, to suffer. While exports never collapsed, they dropped and stagnated through the second half of the decade. Data from KNBS (2020), shows that the value of textile and apparel exports 2015 US$306 million, a decline compared to 2014. In 2016, the value improved to US$319 million, followed by a declined in 2017 to US$307 million. In 2018, the value improved to US$321 million followed by an improvement to US$328 million in 2019. The current study sought to establish the the impact of non-tariff barriers on performance of textile manufacturing industries.

1.3 Research Objectives

The current research had both general objective and the specific objectives. The general objective was derived from the research topic while the specific objectives were derived from the independent variables.

1.3.1 General Objective

The objective of the study was to determine the impact of non-tariff barriers on performance of textile manufacturing industries.

1.3.2 Specific Objectives

The study was based on the following specific objectives;

i. To establish the impact of import quotas on the performance of Textile Manufacturing Industry in Kenya.
ii. To establish the impact of trade licenses on performance of Textile Manufacturing Industry in Kenya.
iii. To identify the impact of subsidies on the performance of Textile Manufacturing Industry in Kenya.

1.4 Research Questions

The study sought to answer the following study questions derived from the specific objectives;

i. What is the impact of import quotas on performance of Textile Manufacturing Industry in Kenya?
ii. What is the impact of trade licenses on performance of Textile Manufacturing Industry in Kenya?
iii. What is the impact of subsidies on performance of Textile Manufacturing Industry in Kenya?

1.5 Justification of the Study

The study may be of benefit to a number of stakeholders. These include: Policy makers, the Manufacturing Industry and the scholars.

1.5.1 Manufacturing Industry

Kenyan exporters of manufactured goods may be in a position to understand the trade barriers affecting their trade and are in a position to devise ways to counter the issues affecting their business. They may also be able to understand what measures they can undertake to help the situation. Upcoming Kenyan exporters may be able to understand the export business within the East African Community and know what to expect even before they indulge in the same. They may be enlightened on the trade barriers they should expect as they embark on exportation.

1.5.2 Policy Makers

The solutions may be of benefit to the Kenyan government as it may be able to formulate well informed policies aimed at addressing the trade challenges faced by manufacturing industries. Also, the EAC may be well informed and thus able to create an actionable institutional legal framework to implement the custom union and the common market protocol. Further, EABC

can use the results to improve the business environment and subsidize the cost of operating in business.

1.5.3 Academia and Scholars

Additionally, the academic sector can apply the research in investigating more on the implementation of CU and the common market protocols. Therefore, this may enhance improvement of consumer welfare as a result of the reduced cost of goods and services. The future researchers may be able to assess how the past research would have dealt with the problem and be able to come up with new dimensions that they can research on.

1.5.4 Kenyan Government

The Kenyan Government and respective policy makers may be enlightened on the existing trade barriers that have contributed to the minimal performance of Kenyan textile industries and may be in a position to get the solution to the issues raised in this report. The Kenyan Government may also be in a position to understand and deploy measures suggested in this report to facilitate exportation regionally. This may enable them to formulate policies aimed at increasing trade and improving Kenya's textile manufacturing sector.

1.6 Scope of the Study

This study was limited to impact of non-tariff barriers on performance of textile manufacturing industries in Kenya. Specifically, the study sought to: establish the impact of import quotas on the performance of textile manufacturing industry in Kenya; establish impact of trade licenses on performance of textile manufacturing industry in Kenya; and to identify the impact of subsidies on the performance of textile manufacturing industry in Kenya. The research covered the period between the years 2015 to 2019.

1.7 Limitations of the Study

The unique population of sample size might not have brought answers honestly to the questionnaire. Thus, the findings might perhaps not reflect the opinion of all respondents to

generalize other industries across the country. Further, the local empirical studies on non-tariff barriers is scarce, thus the study borrowed a lot from international studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discussed literature review, theoretical review, the theories, conceptual framework, variables, empirical review, critique of existing literature, summary of the literature review and the research gaps. The literature review involves the systematic identification, location and analysis of documents containing information related to the research being investigated (Creswell & Daly, 2015). The literature review identifies research gaps recommended for further research. Literature review should be extensive and thorough because it aims at obtaining knowledge of the topic being studied (Leavy, 2017).

2.2 Theoretical Review

Theoretical review is a coherent group of tested general propositions, commonly regarded as correct and can be used as principles of explanation and prediction of a certain class phenomena (Denzin, 2017. Thus, this study will be anchored on the relevant theories of Free Trade Theory, Heckscher-Ohlin Theory and Porter's National Competitive Advantage Theory.

2.2.1 Theory of Customs Union

The theory of customs unions was postulated by Lipsey (1960). It is branch of tariff theory which deals with the effects of geographically discriminatory changes in trade barriers. The General Agreement on Tariffs and Trade (GATT), part of the World Trade Organization framework defines a customs union to mean the substitution of a single customs territory for two or more customs territories, so that the duties and other restrictive regulations of commerce (except, where necessary, those permitted under Articles XI, XII, XIII, XIV, XV and XX) are eliminated with respect to substantially all the trade between the constituent territories of the union or at least with respect to substantially all the trade in products

originating in such territories, and, subject to the provisions of paragraph 9, substantially the same duties and other regulations of commerce are applied by each of the members of the union to the trade of territories not included in the union (WTO 1986). Common competition policy is also helpful to avoid competition deficiency (Winters 1991).

The main feature of the Customs Union is that the member countries have not only eliminated trade barriers and implemented free trade, but also established a common external tariff. In other words, in addition to agreeing to eliminate each other 's trade barriers, members of the Customs Union also adopt common external tariff and trade policies. GATT stipulates that if the customs union is not established immediately, but is gradually completed over a period of time, it should be completed within a reasonable period, which generally does not exceed 10 years (Flaherty 2018).

The customs union theory is based on the trade creation and trade diversion terms by Viner (1950) which describes the redirection of trade flows due to formation of a customs union. Viner compared the effect of trade between countries before integration and after integration and concluded that economic integration resulted in trade creation and trade diversion. Customs union which eliminates customs tariffs lead to the decrease in cost of goods this reduces the price of the goods and increase in efficiency thus contributing to economic growth. Trade diversion occurs when a partner country's production displaces lower cost imports from outside the regional trade area thanks to the high level of protection enjoyed by producers within the regional trade area. Obviously, the level of protection erected against outside competition is a key determinant of the extent of trade dispersion (Yang, and Gupta, 2005). If the external tariff is set in such a way that a more expensive internal source of an input or a consumer good replaces the cheaper source from outside the regional trade area, consumers are penalized because they pay higher prices after integration. That is referred to as "trade diversion". The creation of a customs union, with common external tariffs, was further alter the existing pattern

of trade flows. The assumption is that before the union, partner states imposed differential tariffs on different countries to protect their own industries. Therefore, we can see that the whole customs union issue can be disentangled in the free trade-protection argument. As Salera (1951) points out that the main purpose of any customs union is to shift sources of supply.

Hence, if this shift is from a high-cost to a low-cost source, then customs unions are considered a movement towards free trade. If the shift is in the other direction, then customs union may become a device for making tariff protection more effective. Viner (1950) claimed that trade creation raises the home country's welfare, while trade diversion lowers it. Viner (1950) has also made the case that size does matter. He identified economies of scale, where the larger the economic area of the customs union, the more likely is a customs union to operate in the free trade direction.

2.2.2 Heckscher-Ohlin Theory

The Heckscher–Ohlin theory is a general equilibrium mathematical theory of international trade, developed by Heckscher and Ohlin in 1929. The theory makes such assumptions as factors of products are internationally comparable, production functions are technical relationships which are the same but not necessarily known, and commodities use factors in different proportions. The conclusion of this theory is that, under the free trade, countries export goods that use the abundant factors of production of the country. This forms the basis of competitive advantage. The theory also foresees a tendency of free trade among countries equalizing their factor returns on the basis of the above assumptions. The theory also states that protectionism through non-tariff barriers systematically opposes the forces that compel a country to take part in trade.

The theory demands that countries export what they can produce efficiently and plentifully and setting a trade identity and specialties. As such, the government should issue licenses and allow

businesses to freely import goods into the country to promote and reduce retaliatory restrictions by other countries (Mold, 2015). The theory also discourages placing of trade quotas on certain goods through licensing. On the other hand, placing trade quotas on textile products will help reduce imports on the same and help domestic suppliers despite the downsides such as reduced economic welfare, retaliatory restrictions by other countries placing tariffs on Kenya's imports.

Through distortion and reduction of flows of trade, non-tariff barriers prevent a country from producing and trading as per their comparative advantage. Consequently, they are not able to balance the surpluses of factors of production of one another and this result in the existence of differences in factors of production earnings and the living standards of countries. According to the theory, protection results in distortion of patterns of trade from those which the Heckscher-Ohlin theory predicts in a situation of free trade. The outlined theories above were relevant to this research as they help explain the rationale behind the imposition of non-tariff trade barriers and their implications on the textile manufacturing industry in Kenya. They also help to explain the most appropriate policy options that Kenya and its trade partner countries may adopt to obliterate the non-tariff trade barriers encountered by exporters of textile products.

2.2.3 Theory of Comparative Advantage

The theory of comparative advantage is attributed to political economist Ricardo, who wrote the book Principles of Political Economy and Taxation (1817). Ricardo used the theory of comparative advantage to argue against Great Britain's protectionist Corn Laws, which restricted the import of wheat from 1815 to 1846. In arguing for free trade, the political economist stated that countries were better off specializing in what they enjoy a comparative advantage in and importing the goods in which they lack a comparative advantage. He demonstrated that if two countries capable of producing two commodities engage in the free

market then each country will increase its overall consumption by exporting the good for which it has a comparative advantage while importing the other good, provided that there exist differences in labor productivity between both countries (O'Sullivan, & Sheffrin, 2003).

The theory is based on the assumption that the capital and labour do not move internationally (Schumacher, 2012). Assessing the validity of comparative advantage on a global scale with the examples of contemporary economies is analytically challenging because of the multiple factors driving globalization: indeed, investment, migration, and technological change play a role in addition to trade. Even if we could isolate the workings of open trade from other processes, establishing its causal impact also remains complicated: it would require a comparison with a counterfactual world without open trade. Considering the durability of different aspects of globalization, it is hard to assess the sole impact of open trade on a particular economy. Bernhofen and Brown (2005) attempted to address this issue, by using a natural experiment of a sudden transition to open trade in a market economy. Golub and Hsieh (2000) presents modern statistical analysis of the relationship between relative productivity and trade patterns, which finds reasonably strong correlations, and Nunn (2007) finds that countries that have greater enforcement of contracts specialize in goods that require relationship-specific investments. Taking a broader perspective, there has been work about the benefits of international trade. Zimring & Etkes (2014) finds that the Blockade of the Gaza Strip, which substantially restricted the availability of imports to Gaza, saw labor productivity fall by 20% in three years. Markusen et al. (1994) reports the effects of moving away from autarky to free trade during the Meiji Restoration, with the result that national income increased by up to 65% in 15 years.

Several arguments have been advanced against using comparative advantage as a justification for advocating free trade, and they have gained an audience among economists. James Brander

and Barbara Spencer demonstrated how, in a strategic setting where a few firms compete for the world market, export subsidies and import restrictions can keep foreign firms from competing with national firms, increasing welfare in the country implementing these so-called strategic trade policies (Krugman, 1987). There are some economists who dispute the claims of the benefit of comparative advantage. James K. Galbraith has stated that "free trade has attained the status of a god" and that " ... none of the world's most successful trading regions, including Japan, Korea, Taiwan, and now mainland China, reached their current status by adopting neoliberal trading rules." He argues that comparative advantage relies on the assumption of constant returns, which he states is not generally the case. According to Galbraith, nations trapped into specializing in agriculture are condemned to perpetual poverty, as agriculture is dependent on land, a finite non-increasing natural resource.

2.2.4 Theory of Performance

Theory of Performance (ToP) is relevant in understanding the impact of non-trade barriers on performance of textile industries in Kenya and provides the theoretical background for this study. Performance theory originated from a variety of fields, but it is mostly associated with the work of Schechner (1985) and Turner (1988). They highlighted how performances are central to human understanding. Performance theory suggests that every one of us puts on a performance in our society. Performance can entail observance to a rigid structure of operating but it can also be a means of resisting. The concept of performance enables an assessment of the ways in which individuals act and react in the world. It is a means of understanding how people situate themselves in the world, for themselves and for others (Butler, 1997). Performance offers modern perspectives in multiple environments (Shepherd 2016).

According to Agami, Saleh and Rasmy (2012), ToP develops and relates six foundational concepts (perform, performer, level of performance, performer’s mindset, immersion and reflective practice) to form a framework that can be used to explain performance as well as

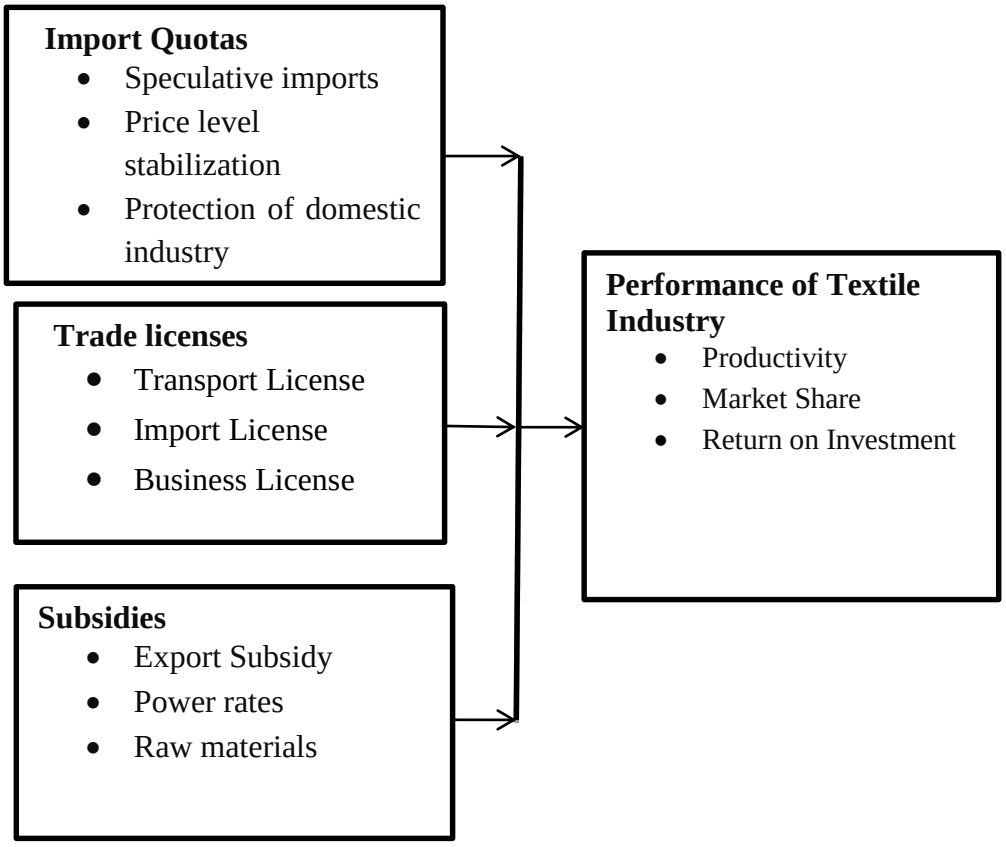
performance improvements. To perform is to produce valued results. A performer can be an individual or a group of people engaging in a collaborative effort. Developing performance is a journey and level of performance describes location in the journey. The current level of performance depends holistically on six components of context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors. Three axioms proposed for effective performance improvements. These involve a performer's mindset, immersion in an enriching environment, and engagement in reflective practice. Performer's mindset includes actions that engage positive emotions. Immersion in a physical, social, and intellectual environment can elevate performance and stimulate personal as well as professional development. Reflective practice involves actions that help people pay attention to and learn from experiences (Nielsen, 2013).

According to Schrettle, Hinz, Rathje and Friedli (2013), the performance theory calls for greater awareness of attention to formal elements of textual representation (structural concerns) and greater focus on context. ToP situates stories to a particular event and credits a narrator who assumes responsibility for the performance. Each performance is key and relies on a performer's assumption of responsibility for the emergent event. Folklore is not to be conceived any longer as disembodied "text" but rather a rich convergence of performer, situation, setting, audience, and society (Addy, 2012; Osoro, Muturi & Ngugi, 2016). There is need to established how ToP can help in discussing, appreciating and understanding the role played by agro processing sector in the economy. ToP links well with the performance of textile manufacturing industry in Kenya.

2.3 Conceptual Framework

The conceptual framework refers to the conceptualization of the relationship between variables in the research study (Creswell & Creswell, 2017). It is a diagrammatic presentation of the

relationship between independent and dependent variables of the study. Robson & McCartan (2016) defined a conceptual framework as a system of concepts, assumptions, expectations that supports and directs research. Conceptual framework helps the researcher to understand the proposed relationship between variables; to establish the significance of the proposed relationship; and to test the conceptual model (Kothari & Garg, 2014). The dependent variable of the study was performance of textile firms, while the independent variables were import quotas, trade licenses and subsidies. Figure 2.1 presents the conceptual framework for this study.



Independent variable **Dependent variable**

Figure 2.1 Conceptual Framework.

2.3.1 Import Quotas

Import quotas are government restrictions on the quantities of a particular commodity that may be imported within a specific period, usually with the goal of protecting domestic producers of

that commodity from foreign competition (O'Sullivan and Sheffrin 2003). These refers to trade restrictions and agreement contracts filled with technical needs, unpaid standards, and conformism evaluation procedures unless the agreements are guaranteed by the SPS agreements making sure no unnecessary barriers are created to trade (Kee, Looi, Nicita and Olarreaga 2006). The technical barriers are divided into two categories; institutional barriers and regulatory barriers to Kenya. Institutional barriers are played by different Kenyan ministries, department and parastatals that aid in controlling and supporting the trade within EAC region block. For instance, Ministry of Trade, Finance, Justice and Constitutional Affairs, Public Health, and Immigration. Additionally, there are other agencies involved like KEPHIS, KPA, KEBS amongst others. When these institutions and agencies play their roles fully, they prevent the free flow of goods across countries. Barriers are created due to the kind of standards set on goods to be traded, technical regulations required in transporting the goods and adherence to regulations required. For example, KRA being one of the technical agencies required for inter-regional trade. It is required for implementation of laws and management of custom laws, and in the administering of external tariffs.

2.3.2 Trade Licenses

An import license is a document issued by a national government authorizing the importation of certain goods into its territory. Import licenses are considered to be non-tariff barriers to trade when used as a way to discriminate against another country's goods in order to protect a domestic industry from foreign competition. Trade license is a document that gives permission to the applicant to commence a particular trade or business in a specific location. According to World Bank (2007) there are a number of licenses required in EAC compliance rules which include transport license, import/export license, business license amongst others. The manner in which the licenses are obtained differ from country to another. The EAC originating business countries are not specially treated making it difficult to register the businesses across the

borders, at times very expensive and tiring. Amongst many member countries the use of manual processes like name search is used as well as payment of charges and registration which calls for additional time in accomplishment of the process. Therefore, different licenses are required for manufacturing, distribution and sale of goods.

Karugia et al, 2010 posit that this is used in most member countries. For example, the licenses issued to trucks by the revenue authorities of those countries only permit the trucks to operate within the licensed countries Rwanda/Kenya but do not transport goods locally. The trucks are prohibited from transporting goods locally produced in Kenya and Rwanda exports and transportation from other EAC member countries into Kenya/Rwanda as imports. The restrictions are applied mostly for returning trucks which make transport costs to be high, as empty trucks are returned without being loaded anything.

2.3.3 Subsidies

Subsidies are direct payments made by the government to domestic producers in terms of cash payments, low interest loans and government participation in ownership and tax incentives, directly influence the price of textile goods imported. Karugia et al (2010) argue that the subsidies issued by the Kenyan Government to its textile manufacturers helps them reduce prices and enhance their competitive advantage as they lower production costs making their products cheaper even in the international markets. The World Trade Organization treats export subsidies as unfair trade practices countered by levying countervailing duties on the goods to offset the subsidy impacts.

Research by World Bank, (2008) presented a synthesized report on the NTBs that affect textile manufactures in Kenya. These findings are based on the broad categories organized by the World Trade Organization. NTBs refer to various ranges of policy interventions apart from boarder tariffs that impact the exchange of goods and services amongst other factors of

production. Most production subsidies include the tax exemption and financial help to improve market-specific trade and domestic policies that impact the exchange of goods in the market. On the other hand, extended taxonomies consist of macro-economic strategies that impact the exchange of goods. With a decrease in tariffs around the globe, production subsidies have gained importance with common measures being tariff-equivalents of the NTB strategies. Further, the production subsidies are consequently used in various trade models which include equations on gravity and the welfare impacts on the evaluated NTBs (Beghin, 2006).

2.3.4 Performance of Textile Industry

The performance of an industry is a multi-dimensional construct divided into financial and non-financial models (Selvam, Gayathri, Vasanth, Lingaraja & Marxiaoli, 2016). The financial models are productivity, return on assets, profitability, sales growth, cash flow and other financial performance measures. The non-financial models are market shares, market position, product quality and customer satisfaction. Thus, there is no universal unit of analysis for describing or measuring performance, competitiveness and success in firms (Berginc, 2014). Productivity describes various measures of the efficiency of production and expressed as the ratio of an aggregate output to a single input or an aggregate input used in a production process over a specific period. Productivity is a crucial factor in production performance of firms and its growth can help businesses to be profitable (Sickles & Zelenyuk, 2019).

The firms generate financial returns when they invest in assets, otherwise called return on assets (Lee and Roh, 2012). According to Ross, Westerfield and Jaffe (2012), return on assets measures how effectively a firm uses its assets to create profits and how much it generates by the firm from investing any amount in one individual employee. The performance prism is a performance measurement framework that suggests performance measures should include employees, suppliers, alliance partners or intermediaries, stakeholder satisfaction, strategies, processes, capabilities and stakeholder contributions (Kurien & Qureshi, 2011). Profitability is

ability of a company to use its resources to generate revenues in excess of its expenses. The two key aspects of profitability are revenues and expenses. Profitability, efficiency, solvency and market prospects building blocks for analyzing financial statements and company performance as a whole (Zelenyuk, 2018).

2.4 Empirical Review

The empirical review will touch on various researches done by other researches concerning the topic on NTBs affecting the textile industry. The effects of NTBs are analyzed using disaggregated data to allow for separation of tariff and non-tariff barriers effects into diversion, reduction, and compression effects. Multilateral tariffs reduce trade flows whereas trade preferences act to divert the effects. Higher multilateral tariffs shift trade towards larger importers calling for minimized fixed costs associated with trading dominating variety preferences. In the NTBs case, imposing an NTB results in an increase in trade value, low import industries demand elasticity and the influence of rising prices outweighs the quantity decline. A number of studies presented herein have been conducted on the area of performance of Kenyan manufacturing firms in relation to non-tariff barriers.

2.4.1 Import Quotas

A study by Okumu and Okuk (2010) on implications of non-tariff barriers in EAC customs union for trade between Uganda and other EAC countries established that several NTBs continue to exist, and some have persisted. The NTBs that have persisted for more than three years include a long list of customs documentation requirements, import quotas, cumbersome formalities, and limited testing and certification arrangements. Other NTBs that still exist include: un-standardized weighbridges; several road blocks; lack of recognition of individual country's standards; and the existence of several un-harmonised standards. The simulation results of spatial equilibrium model of maize trade with and without NTBs show that at the

EAC level there are positive production, trade and welfare implications attributable to elimination of NTBs in intra-regional maize trade.

Ms Mmasi and Ihiga (2007) did a survey of non-tariff barriers that affect Tanzanian imports and exports within EAC, SADC and COMESA countries. The analysis of imports from EAC countries show that while Kenya was a major import source during the period, Uganda contributed a mere 1.1% of Tanzania s imports from the region, despite the preferential import tariffs that exist under the EAC Customs Union. During the 2005/06 EAC and 2004 SADC NTBs consultations, it was found out that a number of NTBs exist on Tanzania s exports to EAC and SADC countries. The EAC categorised the NTBs under Cumbersome inspection requirements; Varying trade regulations and licences among the three EAC and SADC countries and Varying, cumbersome and costly transiting procedures in the three EAC countries. The survey had also identified a number of NTBs that directly affect imports, categorised Customs and administrative documentation procedures; Cumbersome inspection requirements; import quotas; Police road blocks; and Congestion at Dar es Salaam Port.

2.4.2 Trade Licenses

Silla, (2016) studied the Non-Tariff Barriers and Impacts on Trade Performance in Tanzania. The study was conducted in Dar es Salaam City. This study collected secondary data from the selected sources from books, journals and other publication like EAC statistical database, World Bank and trade related data and research observation. The secondary data was analyzed through the aid of Computer software- Microsoft Excel. The study findings showed the possibility of reducing road blocks and transport licences in Tanzania would favour the landlocked countries of Rwanda and Burundi, as the roadblocks hinders trade performance.

Okute (2017) investigated the effects of non-tariff and technical barriers to trade on the Kenyan exporters within the East African Community. The study adopted an explanatory research

design to explain the various technical and non-tariff trade barriers that hinder trade within EAC within particular emphasis on barriers that hindered Kenyan exporters in EAC. The population of the study included all exporters in Kenya who were 9,585. The Yamane ‘s formula was used to determine the sample size from population within each stratum and this brought the sample size to 121 respondents. Questionnaires were the main data collection instrument that were used by the researcher. Descriptive analysis was used in the data analysis and reporting of results. Measures of central tendencies, such as means, standard deviation, and percentages were used. Correlation analysis was used to describe the degree of relationship between the study variable.

The study showed that documentation and procedures, too many agencies involved in overall export inspection and certification in the region, escort of all sensitive and hazardous products through the territory of each East Africa Community (EAC) transit country, and verification of transit cargo were a challenge. It also showed that lack of harmonization in working hours at the border posts, delays at weighbridges, multiple police road blocks and mobile control, prohibition on transportation of locally produced goods, and EAC transit licenses for goods were a challenge for exporters. The study showed that truck entrance fees and grace period, business licence, use of immigration and visa procedures, poor information dissemination across the East Africa community, language barrier, and insecurity/ highway crimes/loss of goods at the container freight stations were all non-tariff barriers to trade in EAC. Through the NTBs, it was established that the local industries were protected from cheap imports from the region.

Nzuma, (2007) sought to identify the existing NTBs on maize and beef trade in East Africa and quantifies their impact on trade and the welfare of EAC citizens using a Spatial Equilibrium Model (SEM). Data on NTBs were collected from traders and transporters of maize and beef cattle in East Africa. In addition, the study found that the main types of NTBs within the three

founding members of the EAC (Kenya, Tanzania and Uganda) are similar. They include administrative requirements (mainly licenses, municipal and council permits), taxes/duties (mainly excise and cess duty), roadblocks, customs barriers, weighbridges, licensing, corruption and transiting. The results of the welfare analysis vary across the three countries, but the net monetary gains are positive in all cases. A complete abolishment or a reduction of the existing NTBs in maize and beef trade increases intra-EAC maize and beef trade flows, with Kenya importing more maize from both Uganda and Tanzania, while Uganda's beef exports to Kenya and Tanzania increase. However, the study found that the Kenyan maize farmers and the Ugandan beef farmers were the looser, as the prices of their products fetched lower prices in the market, leading to low profits.

2.4.3 Subsidies

Xiong, (2012) examined whether the harmonization and tightening of European Union (EU) regulations of aflatoxin maximum residue limits (MRLs) have impeded African groundnut exports. Using the state-of-the-art gravity equation approach, he revisited early ex-ante findings of a World Bank investigation predicting a dire adverse effect of the then forthcoming harmonization and tightening on African exports of groundnuts. It was established that these African exports are constrained by their own domestic supply limitations, but that the actual harmonization and tightening of EU's aflatoxin MRLs have had no significant impact on these groundnut exports. The essay stresses the importance of addressing Africa's under-trading issue from a development perspective, focusing on domestic supply constraints before the border rather than on the excessive stringency of EU MRLs. The study recommended that the African countries provide farmers with subsided farm input to reduce the cost of production of groundnuts.

Kahenu, (2014) sought to identify the non-tariff barriers (NTBs) affecting Kenyan exports in the EAC market, analyze their impact on Kenyan exports and suggest possible policy options

for EAC. The research used primary and secondary data collected using interview schedules and questionnaires. The respondents were selected from key informants involved in the negotiation and implementation of the EAC customs union, manufacturers and traders exporting to the EAC market. Data on prices of exports with and without NTBs costs were compiled and analysed. The study analysed the number of reported NTBs from 2007 – 2013 and compared the volume and value of trade of exports to EAC during the period 2007-2013 The data was analysed using qualitative and quantitative approaches. The results of the research indicated that the decline in Kenya's export to the EAC in 2012 and 2013 was a result of NTBs imposed by partner states. The rules of origin, the labelling law, anti-dumping and the technical barriers were the most popular of NTBs used against Kenyan products. Also, it was found that the cost of production in Kenya was too high compared to the neighbouring countries. The research concluded that NTBs have negative impact on Kenya's exports to the EAC market. Further, it was concluded that high cost of production negatively affects Kenya's export to the EAC market. The study recommended that the government provide subsidise the cost of power to manufacturers so as to reduce cost of production.

Mkuna (2014) assessed the East Africa Community (EAC) Non-Tariff Barriers (NTBs) and their effects on Tanzanian small and medium agro enterprises (SMAEs) engaged in EAC cross border trade. Both secondary and primary data were collected from Arusha, Mwanza, and Kagera. The number of respondents who comprised owners of SMAEs was 105 for those who were trading locally within the country, and 105 for those who were engaged in the EAC cross border trade. Agricultural goods selected were maize, beans and rice as major crops traded within the EAC region. Descriptive Statistics and Binary Logistic linear regression model were used to examine determinants and characteristics of Tanzania SMAEs engaged in EAC cross border trade. Costs and Benefit Analysis method was used to ascertain the projected Net Present Value between exporting agricultural products to EAC countries and trading similar

products within the country, and to analyze the effect of NTBs. The results indicate that SMAEs engaged in EAC cross border trade are affected by 26 % of additional transport costs resulting from NTBs. Maize was found to be the major crop among the three exported by Tanzania. Also, the study showed that the government was offering subsidised farm inputs to the maize farmers, reducing the production of maize compared to other two crops.

2.4.4 Performance of Textile Industry

Subhani and Sukaina (2008), did a correlation study of export performance determinants to investigate the interdependency between independent (Increase of pricing strategy adaptation, Increase of export intensity, Firm's commitment to exporting, Export market development, Export market competition, Past Pricing Strategy Adaptation, Past Export Performance Satisfaction, Past Export Intensity, Export market distance) and dependent variables (Expected Short-Term Export Performance improvement) of export performance. The framework is tested via a survey through questionnaire from industrial exporters of textile in Pakistan. Findings reveals that the past export performance satisfaction with r value reported is positive r=54.2% and p=0.002 < 0.01, which states the result is significant, therefore there is a positive correlation between two variables. Past export performance satisfaction is the only important determinant of short-term export performance improvement in textile sector of Pakistan.

Mboya and kanzungu (2018) explored the determinants of firm's competitiveness in the Textile and Apparel Industry in Tanzania. Data were collected from 204 respondents through cross-section survey design and non-probability sampling method from three regions; namely, Dar es salaam, Mwanza and Arusha. The Maximum Likelihood technique was used to estimate the Structural Equation Modelling (SEM) in order to compute the fit indices of both measurement and structural models. In doing so, Factor Analysis was used in the preliminary step before estimating SEM in order to filter out key variables that need to be embedded in gauging competitiveness of the textiles and apparel industry. Thereafter, the principle component

analysis (PCA) was used to extract the relevant constructs in the SEM. The estimated results show that value chain management, core competencies, competition, availability of alternative products and barriers to entry are statistically significant constructs in explaining the competitiveness of firms operating in the textile and apparel industry in Tanzania.

Sabah, et al (2012) investigated the relationship between core competence, competitive advantage and organizational performance of Paint Industry in the Kenya. Core competence was measured through three dimensions: shared vision, cooperation and empowerment. Competitive advantage was also measured through flexibility and responsiveness. The survey was administered electronically to a total of 77 managers. The empirical findings indicated that, while core competence has a strong and positive impact on competitive advantage and organizational performance, competitive advantage has also significant impact on organizational performance. It was also found that flexibility has higher impact on organizational performance than responsiveness

2.5 Critique of the Existing Literature

The above literature concurs that some NTBs serve important regulatory purposes and are legitimate under WTO rules under clearly defined conditions in spite of the fact that they restrict trade. For example, import licenses may be used to control the importation of products carrying potential health risks. Countries may ban imports of farm products for food safety reasons or impose labeling requirements in response to consumer demands for information. The key issue is whether governments in pursuing legitimate goals, are restricting imports more than is necessary to achieve those goals. Under multilateral rules, the objective is not to remove these measures but to ensure that they are set at an appropriate level to achieve legitimate objectives with minimum negative impact on trade.

NTBs are used to counteract the impact of General Agreement on Trade and Tariffs (GATT). Given the constraints, policy makers willing to respond to protectionists' demands are forced

to use NTBs devices. Thus, the studies agree that the NTBs are simply a substitute for tariffs. This is in the general agreement that NTBs have been used to reverse the effects of multilateral tariff reductions negotiated under General Agreement on trade and Tariffs (GATT). However, only Little (2007) believes that non-tariff barriers are preferred because policy makers and demanders of protection believe that effects of tariffs are less certain. This perception could be due to various reasons. For example, it may be much easier to see that a quota of 1 million limits motor vehicle imports by 1 million that to demonstrate conclusively that a tariff of say KES. 30,000 per vehicle would result in imports of only 1 million vehicles.

2.6 Summary of the Literature Review

From available literature, many Non-Tariff Barriers are often justified on four main reasons: safeguarding health, safety and security of human beings, animals and plants, and against environmental pollution; safeguarding national security; safeguarding revenue loss and protecting home industries and consumers. The precautionary principle, or foresight planning, has recently been proposed as a justification for government restrictions on trade in the context of environmental and health concerns, often regardless of cost or scientific evidence. These measures only become genuine NTBs when they are implemented in such a manner as not to unnecessarily add to costs of or inhibit trade, or are applied in an illegitimate manner.

2.7 Research Gaps

The fore-going literature is evidence that the non-trade barriers that affect the textile manufacturing industry have not been fully identified and addressed adequately. It is also evident that it has not been established why the non-trade barriers have negative impacts on Kenya's textile manufacturing. The literature review shows presence of literature on the trade and performance of Kenyan and East African firms as affected by different NTBs but fail to point out the impact of different NTBs on performance of Kenya's textile industries. This study aims to fill in the research gap by looking into the impacts of NTBs on the performance of

textile industries in Kenya. All these require policy interventions to save the textile manufacturing industry from further decline.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed research design, research philosophy, target population, sampling frame, sample and sampling technique, research instrument, data collection procedure, pilot testing, data analysis and presentation, and scientific research tests of this study. Research methodology refers to the process of collecting information for making business decisions (Shields & Nandhini, 2013). Methodology includes publication research, interviews, surveys and other research techniques, and could include both present and historical information (Anderson *et al.*, 2015). Methodology presents the overall framework or roadmap that achieves research results through data collection and analysis (Kothari & Garg, 2014). According to Creswell and Creswell (2017), a central part of research is to develop an efficient research strategy.

3.2 Research Design

According to Cooper and Schindler (2001), a research design refers to the structure and plan that a scientific investigation adopts so as to be able to answer the study's research questions and objectives. It outlines the methodical structure to be used in obtaining empirical evidence related to the phenomenon under study. Furthermore, it is stated as the framework of how the researcher intends to find a solution to a research problem and thus expand on the understanding and knowledge about the research phenomena (Maylor and Blackmon, 2005).

In this study, a descriptive research design was employed. This study design aims at accurately and systematically describing a phenomenon under study. It allows the researcher to get answers to when, where, what and how questions. Nevertheless, it isn't able to answer the why questions thus establishing cause and effect relationships becomes impossible. According to Saunders et al., (2016), this type of study design is best suited for collection of primary data as

it guarantees significant degree of accuracy. The method enables the researcher to contextualize the research participant's characteristics and enables a depiction of a situation as it occurs naturally (Parahoo, 2001). Therefore, this design was best suited to contextualize the performance of textile firms with respect to the non-tariff barriers to trade that have been put in place.

3.3 Target Population

Population is a complete set of individual's cases, objects or events with some common observable characteristics (Sekaran, 2015). A particular population has some characteristics that differentiate it from other populations (Babbie, 2013). The two types of populations are target population and accessible population. Target population refers to a large and scattered number of subjects over a wide geographical area, while accessible population refers to the representative sample selected from the target population with many comparable characteristics (Kothari & Garg, 2014). The current study had a target population of 144 employees drawn from 29 textile firms in export processing zone, Athi River-Kenya. The employees included the accountants, finance officers and managing directors.

Table 3.1: Target Population

Designation	**Industries**
Accountants	86
Finance officers	29
Managing directors	29
Total	**144**

3.4 Sampling Frame

Cooper & Schindler (2008) define a sampling frame as a list that consist of all the elements from which a representative sample is drawn and has relations to the study's target population. They further opine that the listed elements could be individuals, geographical locations,

institutions or organizations or other units as defined by the research phenomena under study. This study adopted a list of all accountants, finance officers and managing directors from the 29 textile industries in EPZ, Athi River.

3.5 Sample size and Sampling Technique

According to Jarrett (2016), sampling is a procedure or technique of selecting some elements from the population to be representatives of the whole group. Sampling is the process of obtaining information about an entire population by examining only a part of it or sample size. The study adopted census survey and the required data for this study was collected from all the 144 employees drawn from 29 textile manufacturing industries that forms the target population of this study. A census is a survey conducted on the full set of observation objects belonging to a given population or universe (Kothari & Garg, 2014). A census survey is the complete enumeration of a population or groups at a point in time with respect to well-defined characteristics as population (Creswell & Creswell, 2017).

3.6 Data Collection Instrument

Research instrument is a tool the researcher uses when collecting data from the sample selected (Creswell, 2014). Researcher should select the most appropriate instrument to the respondents, and can use one or a combination of instruments ((Leavy, 2017). The researcher should give details on what the respondents should do. The quality of a research study depends on the accuracy of the data collection instrument. The instruments used to collect data must yield data the researcher can use accurately to answer study questions (Shields, 2013). This study used structured and semi-structured questionnaire to collect primary data from the respondents. According to Sekaran (2015), questionnaire is a research instrument consisting of a series of questions and other prompts for gathering information from the respondents. Questionnaire is an easier method of collecting data because it is economical and convenient to administer in

terms of time and cost. Questionnaire had standardized questions and answers that make it simple to compile data. The questionnaire contained both open and close-ended questions.

3.7 Data Collection Procedure

The researcher commenced the process of data collection, by first taking the respondents through an introduction letter that was attached to the questionnaire. The letter sought to assure the respondents on their confidentiality throughout the research and also give an explanation on the reasons and significance of conducting the study. Research assistants were also trained prior to commencement of data collection so that they can properly understand all the parts of the questionnaire, the applicable standard protocols for interviewing respondents, and be sensitized on ethical concerns such as confidentiality. After the introduction, the researcher/research assistant then proceed to administer the questionnaire to the respondents and allow them to fill in the questionnaires at their own convenient time and pick the filled forms later. Hence, the drop and pick method of data collection will be used.

3.8 Pilot Testing

Pilot testing is conducted to ensure that the research instruments have capability to collect all the information and that all the respondents understand all questions in the same way (Creswell & Creswell, 2017). According to Sekaran (2015), the questionnaire is constructed and tried out in the field in order to remove any ambiguity and other deficiencies in the questionnaire. The two factors that influence research instruments are reliability and validity (Heale & Twycross 2015). Questionnaires was administered to a few firms with an intention of pre-testing the questions of the questionnaire. Pilot study help to test the feasibility of the study techniques in order to perfect the questionnaire concepts and wording. Pilot study was administered on 5 employees from Ken-Knit (K) Ltd in Eldoret, Kenya.

3.8.1 Reliability of Research Instrument

The term reliability refers to the consistency with which a measuring instrument yields a certain result when the entity measured has not changed (Eisinga, Grotenhuis & Pelzer, 2012; Leedy & Ormrod, 2010). Reliability is the characteristic of a set of test scores that relates to the amount of random error from the measurement process embedded in the scores (Ritter, 2010). The highly reliable scores are accurate, reproducible, and consistent from one testing occasion to another (Heale & Twycross, 2015). There are theories of testing reliability to estimate the effects of inconsistency on the accuracy of measurement. The basic starting point for almost all theories of test reliability is the idea that test scores reflect the influence of two sorts of factors (Creswell, 2014)

This study used the most common internal consistency measure known as Cronbach's alpha (α) to measure the reliability. It indicated the extent to which a set of test items can measure a single latent variable (Cronbach, 1951). Coefficient of 0.7 is commonly acceptable rule of thumb that indicates acceptable reliability. Cronbach's alpha is used to access internal consistency of an instrument based on split-half reliabilities of data from all possible halves of the instrument (Kothari, 2013). It reduces time required to compute a reliability coefficient in other methods (Ritter, 2010).

3.8.2 Validity of Research Instrument

The researcher ensured validity by ensuring that the instrument has construct validity, content validity and criterion validity. The idea is to ensure that the measures of the instrument items have strict adherence to the existing theory of the research phenomenon and ensuring that all the aspects of the phenomenon under study are exhaustively covered. The researcher achieved this mainly by; appropriately choosing methods of measurement of the research variables and

including appropriate number of participants in the study to enable the instrument produce results that are generalizable and representative of the entire population.

3.9 Data Analysis and Presentation

This study adopted quantitative data analysis techniques. The collected data was entered into excel and further wrangled and analyzed using R software. To enable answering of the research questions and objectives, the researcher will employ descriptive analysis, multiple linear regression and correlation analysis methods. As stated by Dhand (2015), descriptive analysis is a vital initial step in statistical analysis undertaken so as to enable the researcher gain an insight on how the data is distributed and assist in detection of outlying and influential points in a data. This process entail; Graphical inspection- Creation of histograms, box-plots, and line graphs that assisted in providing visual/graphical representation of the distribution of textile firms based on different variables; Generation of summary statistics of the performance of textile firms relative to different predictor variables- These are statistics that give a description of measures of central tendency and measures of dispersion/ variability. Measures of central tendency consisted of; mean, mode and median. Measures of variability assist in analyzing how the distribution of the textile industries' exports is spread-out. These measures consist of; calculation of range, quartiles, standard deviation and variance.

The Multiple Linear Regression technique enabled the researcher to evaluate the existing relationship between the response variable (Y): Performance of textile industries and predictor variables (X_1, X_2, X_3): Trade Licenses, Import Quotas, and Subsidies. However, this technique does not establish causal relationships between the dependent and independent variables (Tabachnick and Fidel, 2007). The method thus only points out variables that are considered to be significant in the regression model and hence have the ability to explain the variability in

the performance of textile industry. This analysis was therefore able to establish the influence and extent of the effect of Non-Tariff Barriers on performance of textile industry.

Gogtay *et al.,* (2017) defines correlation analysis as a statistical assessment method for studying the strength of the underlying relationship between two or more variables. The method is applied when a researcher seeks to establish whether there is a possible connection between variables. In this study, the researcher will employ the Pearson correlation coefficient method so as to determine the degree of connection and thus the nature and extent of linear relation between performance of textile industries relative to effects caused by trade licenses, import quotas, and subsidies. The correlation was measured over a range of between +1 and -1. A correlation coefficient value that tends to +1 will indicate an increase in strength of correlation while a value that tends to -1 will indicate a decrease in the strength of the correlation between the variables. A zero value will indicate no correlation between the values (Hu et al., 2017).

The following multiple linear regression model was used for analysis in this research. The model to be adopted is as follows:

$$\mathbf{Y= \alpha+ \beta X_1+ \beta X_2+ \beta X_3 + e}$$

Where, Y refers to the dependent/ response variable (Performance of textile industry)

α is the model constant, Y intercept

β is the coefficients of the predictor variables

X_1 is independent variable; Trade Licenses

X_2 is independent variable; Import Quotas

X_3 is independent variable; Subsidies

e is the error term

3.10 Diagnostic Tests

The purpose of diagnostic tests was to verify whether or not the researcher could proceed with regression model of the study. In order to achieve unbiased estimates of the study parameters, various assumptions of regression were tested. These included normality test and multi-collinearity test of the three independent variables.

3.10.1 Normality Test

According to Hair *et al.,* (2006), the most essential assumption to be evaluated in linear regression is the normality assumption which refers to the degree to which the data is distributed normally. In this study, this assumption will be assessed by use of box plots to visually inspect on skewness and kurtosis of the data. Further tests of skewness and kurtosis will be used to test on the normality of the data. Statistical techniques of transforming data were used in the event that the data is found not to be normally distributed. The Kolmogorov Smirnov test was also used to test for normality of the data. The aforementioned non-parametric test refers to the following hypothesis;

H_o: The data residuals are normally distributed and H_1: The data residuals are not normally distributed. The normality of the data was tested at a 5% significance level, where, a p-value of more than 5% (0.05) was suggest the data is normal and vice versa.

3.10.2 Multi-collinearity Test

This assumption seeks to assess if there exists correlation amongst the predictor variables (Daoud & J.I, 2017). A good regression model should have independent variables that are uncorrelated hence independent of each other. The researcher will detect multi-collinearity in this study by use of the Variance Inflation Factor (VIF). According to Lomax (1992), a VIF value of ten or more, is used as the common thumb rule to suggest existence of multi-

collinearity within the predictor variables of a linear regression model whereas a value of 1 suggested orthogonality of the independent variables hence no multi-collinearity.

3.11 Operationalization of Study Variables

The study used three independent variables including Import Quotas, Trade licenses, and Subsidies which are presumed to influence Performance of Textile Industry. These variables are qualitative in nature, and therefore the need to operationalize them by converting them into quantitative form.

Table 3.1: Operationalization of study variables

Variable	Indicators	Instrument	Measure	Model
Import Quotas	Speculative imports Price level stabilization Protection of domestic industry	Questionnaires	5-point Likert scale	Multiple regression analysis
Trade licenses	Transport License Import License Business License	Questionnaires	5-point Likert scale	Multiple regression analysis
Subsidies	Cost of production Comparison of prices Raw material	Questionnaires	5-point Likert scale	Multiple regression analysis
Performance of Textile Industry	Productivity Market Share Return on Investment	Questionnaires	5-point Likert scale	Multiple regression analysis

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter gives the results for the study whose objective was to establish the impact of non-tariff barriers on performance of the textile manufacturing industry in Kenya. Specifically, the chapter gives reliability test results, response rate, demographic analysis, diagnostic tests, descriptive statistics, correlation analysis, model summary, analysis of variance, regression coefficients and discussion of the findings.

4.2 Reliability test results

A pilot test was done using 5 employees randomly selected from Ken-Knit (K) Ltd. in Eldoret, to ascertain the dependability of the research instrument. The results are shown in table 4.1.

Table 4.1: Reliability of Research Instrument

Variable	Cronbach's Alpha	Number of Items
Import Quotas	.747	4
Trade Licenses	.735	4
Subsidies	.806	4
Performance of Textile Firms	.711	4

A Cronbach's alpha coefficient was used to assess the instrument's reliability. That is to ascertain the repeatability, stability or internal consistency of a questionnaire used in the research. Cronbach's alpha coefficient for the four items, which include import quotas, trade licenses, subsidies and performance was found to be 0.747, 0.735, 0.806 and 0.711 respectively. As a rule of thumb, Bryman (2008) suggested a Cronbach's alpha coefficient of at least 0.7 as the threshold for reliability of research instrument thus these results shows that

the questionnaire could be used to collect data for the four variables as each had a Cronbach's alpha coefficient greater than 0.7.

4.3 Response Rate

A total of 144 questionnaires were distributed to the employees of 29 textile companies in export processing zone, Athi River. After they were filled, the questionnaires were collected for subsequent analysis. The results are as shown in figure 4.1.

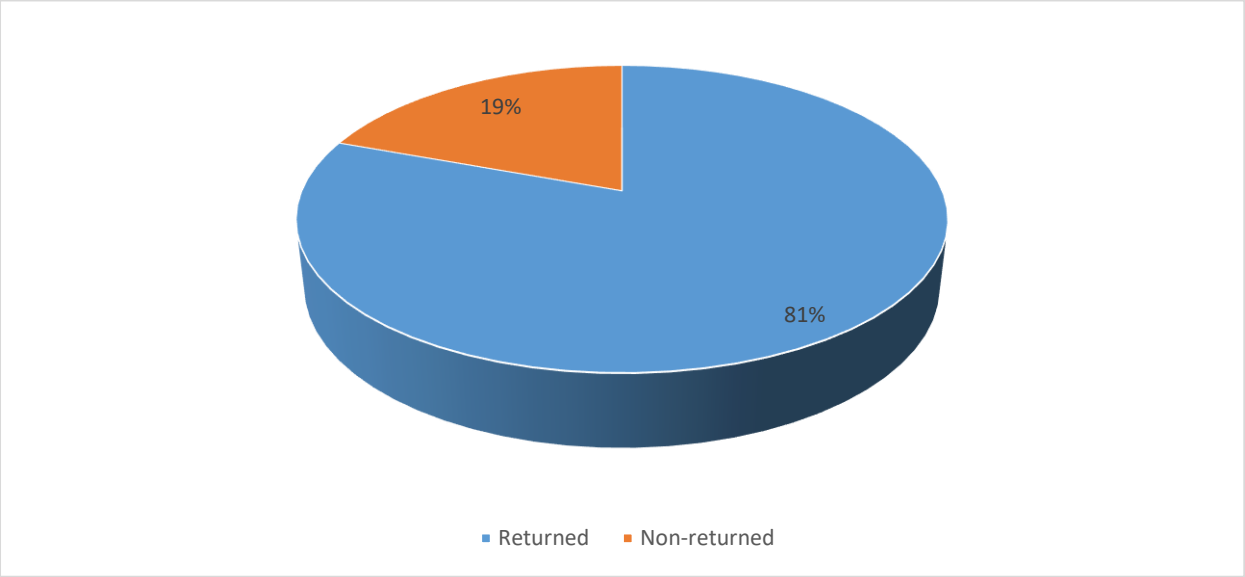


Figure 4.1: Response Rate

Out of 144 questionnaires distributed to the respondents, 116 questionnaires were fully filled and returned for subsequent analysis. This represented a response rate of 81%. The response rate is considered adequate for data analysis as suggested by Kothari (2014) who stated that response rate of 60% and above is good while over 70% was very good. Only 19% of the total respondents never responded or never filled their questionnaires.

4.4 Demographic analysis

Demographic analysis of the respondents and their companies were then done. The demographic analysis includes the gender of the respondent, the education level, the position held and the period their company have been in operation.

4.4.1 Gender distribution of the respondents

The respondents were required to state their gender. The responses from the 116 respondents were analyzed by use of statistical package for the social sciences and recorded in figure 4.2 as shown below.

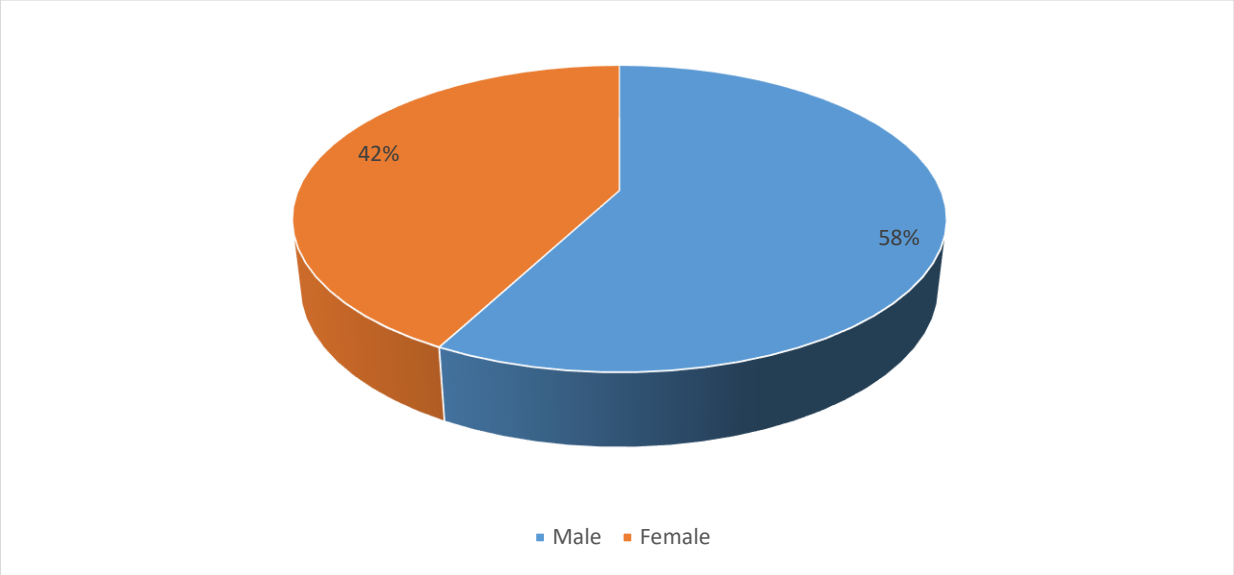


Figure 4.2: Gender of Respondent

From these results, 58% of the respondents were male while 42% were female. The indication of these results is that majority of employees in textile companies in EPZ are men. This depects the scenario in all sectors where men dominate every sector of the economy.

4.4.2 Education level

The respondents were also required to state their highest level of education. The results from 116 respondents who fully filled and returned their questionnaires were analyzed and presented in the table 4.2 as shown below.

Table 4.2: Education level

	Frequency	Percent
Certificate	6	5.2
Diploma	18	15.5
Undergraduate	84	72.4
Postgraduate	8	6.9
Total	**116**	**100.0**

The results presented in table 4.2 shows that out of 116 respondents, 5.2% had certificate as their highest academic level while 15.5% had their highest level of education as diploma. Majority (72.4%) stated that their highest level of education was undergraduate degree while 6.9% had postgraduate degree. Just like Gitaru (2017) showed that electronic taxpayer education, print media tax payer education, and stakeholder engagement, influences tax compliance among SMEs in Nairobi's CBD area, it is clear that the respondents had formal education and thus they could respond to the questionnaires on concerning the effect of non-tariff barriers on performance of textile industries without need for an interpreter.

4.4.3 Period in current designation

Period that an employee has been in current designation was also of importance. The respondents were required to state the range of time they have in current designation in the textile company. The results from 116 respondents were presented in table 4.3 below.

Table 4.3: Period in current designation

Age in Years	Frequency	Percent
<2 years	46	39.7
3-5 years	32	27.6
6-9 years	21	18.1
>10 years	17	14.6
Total	**116**	**100.0**

Based on the statistics in table 4.3, 39.7% of the respondents had worked in the current designation for less than two years while 27.6% of the respondents had worked in the current designation for between 3 and 5 years. Further, the results show that 18.1% of the respondents had worked in the current designation for between 6 and 9 years. Lastly, 14.6% of the respondents had worked in the current designation for over 10 years. From these findings, it can be deduced that majority of the employees had worked in their current designation for not more than 5 years, which is more than 4 years as recommended by Collings and Wood (2009) that remaining in same designation for 5 years in the same position is often too long for you to remain competitive for most careers.

4.5 Diagnostic Tests

In order to achieve unbiased estimates of the study parameters, various assumptions of regression were tested. These included normality test and multi-collinearity test of the three independent variables.

4.5.1 Normality test

To test whether the data was normally distributed, Shapiro Wilk test. This is because Shapiro–Wilk has the best power for a given significance, followed closely by Anderson–Darling when comparing the Shapiro–Wilk, Kolmogorov–Smirnov, Lilliefors, and Anderson–Darling tests

(Razali and Wah 2011). The null hypothesis that the data came from a normally distributed population is rejected if the p-value is less than the significant level (5%). The results of the normality test are presented in table 4.4.

Table 4.4: Normality test

Variable	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Import Quotas	.345	116	.29
Trade Licenses	.384	116	.28
Subsidies	.552	116	.17
Performance	.572	116	.15

The normality of data was tested using the Shapiro Wilk test. The p values for import quotas, trade licenses, subsidies and performance were found to be 0.29, 0.28, 0.17 and 0.15 respectively. Since the p value is greater than the chosen alpha level, then the null hypothesis that the data came from a normally distributed population cannot be rejected (Razali and Wah 2011).

4.5.2 Multi-Collinearity Test

Multi-collinearity test was carried out to determine if one or more independent variable in regression model are highly correlated. Tolerance value and Variance Inflation Factor (VIF) are used to test multi-collinearity. Tolerance value of less than 1 and VIF value of more than 10 suggest presence of multi-collinearity.

Table 4.5: Multi-Collinearity Test

Model	Collinearity statistics	
	Tolerance Value	**VIF**
Import Quotas	.356	2.809
Trade Licenses	.578	1.730
Subsidies	.464	2.155

The results table 4.5 established that import quotas, trade licenses and subsidies had VIF of 2.809, 1.730 and 2.155. All the three independent variables had their VIF less than 10, thus there is no multi-collinearity among the independent variables and thus regression analysis was conducted to determine the effect of the import quotas, trade licenses and subsidies on performance of the textile industries in EPZ.

4.6 Descriptive Statistics

The findings are derived from a Likert scale in the questionnaires where the respondents were supposed to indicate their level of agreement or otherwise with a given statement. The descriptive statistics was done based on each independent variable/objective.

4.6.1 Import quotas and performance of textile manufacturing industry

The first objective of the study was to establish the impact of import quotas on the performance of textile manufacturing industry in Kenya. The results from a 5 point Linkert scale questionnaire are shown in table 4.6. The results include the standard deviation and mean from responses given by 116 respondents.

Table 4.6: Import quotas

Statement	N	Mean	S.D
The government has put import quotas on raw materials to encourage consumption of local textile raw material	116	2.458	.495
Import quotas on finished textile products has helped in the protection of domestic industry	116	3.764	.571
Import quotas help in price level stabilization for locally manufactured textile products	116	3.846	.307
The government has put import quotas to reduce the speculative importation of textile products in anticipation increase in prices	116	3.598	1.032
Valid N (list wise)	**116**		

The descriptive findings in the above table 4.6, shows that the government has not put import quotas on importation of the raw materials to encourage consumption of local textile raw material as indicated by high mean of 2.458 accompanied by a low standard deviation of 0.495. The low standard deviation means that the respondents agreed among themselves. They therefore unanimously agreed with the statement. Concerning the protection of domestic industry, the respondents indicated that import quotas has helped in the protection of domestic industry (Mean=3.764; Standard Deviation =0.571). Also, the findings show that import quotas has helped in price level stabilization for locally manufactured textile products as indicated by a mean 3.846 accompanied by a low standard deviation of 0.307.the small standard deviation shows that the respondents agreed among themselves concerning the statement. They gave almost similar responses. Lastly it was established that, the government has put import quotas on finished textile products to reduce the speculative importation of textile products in anticipation increase in prices. This is shown by a low mean of 3.598 accompanied by high standard deviation of 1.132. The high standard deviation shows that the respondent disagreed among themselves. There was discrepancy on the responses obtained from the respondents.

Some disagreed with the statement, others were neutral and even significant number of respondents strongly agreed with the statement.

4.6.2 Trade Licenses and performance of textile manufacturing industry

The second objective of the study was to establish the impact of trade licenses on the performance of textile manufacturing industry in Kenya. The results from a 5 point Linkert scale questionnaire are shown in table 4.7. The results include the standard deviation and mean from responses given by 116 respondents.

Table 4.7: Trade Licenses

Statement	N	Mean	S.D
The import license are used to specify the quantity of certain textile product to be imported	116	2.385	.727
To deal with textile products, the business person must obtain a business license	116	4.564	.176
The requirements for obtaining import license on textile products hinder entry into to business of importation of such products	116	3.504	1.105
Textile products requires special transport license to transport them to port of entry or exits	116	3.103	.423
Valid N (list wise)	**116**		

The descriptive statistics shows that the import license do not specify the quantity of certain textile products to be imported as indicated by high mean of 2.385 accompanied by a low standard deviation of 0.727. Also, it was established that to deal with textile products, the business person must obtain a business license (Mean=4.564; Standard Deviation =0.176). The low standard deviation means that the respondents agreed among themselves. Further, the descriptive statistics show that the respondents agreed that the requirements for obtaining import license on textile products hinder entry into to business of importation of such products (Mean=3.504; Standard Deviation =1.105). The high standard deviation shows that the

respondents disagreed among themselves concerning the statement. They gave varying responses. Lastly, the descriptive statistics show that the respondents were in state of indecisiveness on whether textile products require special transport license to transport them to port of entry or exits (Mean=3.103; Standard Deviation =0.423). The small standard deviation is an indication that the respondents gave similar responses, there was no much discrepancy on the responses they gave. They agreed among themselves.

4.6.3 Subsidies and performance of textile manufacturing industry

The third objective of the study was to establish the impact of subsidies on the performance of textile manufacturing industry in Kenya. The results from a 5 point Linkert scale questionnaire are shown in table 4.8. The results include the standard deviation and mean from responses given by 116 respondents.

Table 4.8: Subsidies

Statement	N	Mean	S.D
The governments meet the production cost of raw materials used in textile industry	116	3.547	1.108
Firms in textile industry enjoy reduced power rates from the government.	116	2.241	.685
Government offers technical supports in technical fields which has helped in reducing Labor costs	116	3.527	1.039
Subsidies by the government may help in improving the performance of textile firms	116	4.531	.099
Valid N (list wise)	**116**		

The descriptive statistics shows that the government meet the production cost of raw materials used in textile industry (Mean=3.547; Standard Deviation =1.108). The high standard deviation shows that the respondents disagreed among themselves concerning the statement. They gave varying responses. There are some who feel that the government don't meet the cost of production of the raw material and maybe the reason for high cost of raw materials. Also, it

was established that firms in textile industry do not enjoy reduced power rates from the government (Mean=2.241; Standard Deviation =0.685). The low standard deviation means that the respondents agreed among themselves. Further, the descriptive statistics show that the government offers technical support in technical fields which has helped in reducing Labor costs (Mean=3.527; Standard Deviation =1.039). The high standard deviation shows that the respondents disagreed among themselves concerning the statement. They gave varying responses. Lastly, the respondents strongly agreed that subsidies by the government may help in improving the performance of textile industries (Mean=4.531; Standard Deviation =0.099). The small standard deviation is an indication that the respondents did not only agree with the statement, but also agreed among themselves.

4.6.4 Performance of Textile Industry

The dependent variable of the study was performance of textile industry. The results from a 5 point Linkert scale questionnaire are shown in table 4.9. The results include the standard deviation and mean from responses given by 116 respondents as indicated in the table below.

Table 4.9: Performance of textile industry

Statements	N	Mean	S. D
Annual productivity of textile products have increased in the past five years	116	3.712	1.094
There has been increase in net profits in our industries for the of the last five financial year	116	2.422	.601
The amount of textile products exported from our company has increased in the last five years	116	3.834	1.024
Some companies export unfished textile products to other countries	116	3.933	.440
Valid N (list wise)	**116**		

The results from table 4.9 shows that annual productivity of textile products have increased in the past five years (Mean=3.712). However, there was huge standard deviation (standard deviation=1.094) is an indication of variability of results from the respondents. Also, it was established that there has been no increase in net profits in our industries for the of the last five financial years (Mean=2.422, Standard Deviation=1.213). The high standard deviation shows that the respondents disagreed among themselves concerning the statement. These results clearly show that there are some industries which feel that they have significant improvement in profits as others strongly disagree with the statement. Further, the results show that the amount of textile products exported from our industry has increased in the last five years (Mean=3.834, Standard Deviation=1.024) and lastly, concerning the exportation of unrefined products, it was found that some industries export unfished textile products to other countries (Mean=3.933, Standard Deviation=0.440). the small Standard Deviation shows that the respondents agreed among themselves concerning the statement. They gave almost similar responses.

4.7 Correlation Analysis

After descriptive statistics, correlation analysis was done to determine the relationship between independent and dependent variables. The correlation coefficients values range from -1 for a perfect negative relationship to +1 for perfect positive relationship through zero for no relationship. These results are shown in table 4.10.

Table 4.10: Correlation Matrix

		Import Quotas	Trade Licenses	Subsidies	Performance
Import Quotas	Pearson Correlation	1	.201	.211	.552*
	Sig. (2-tailed)		.052	.093	.002
	N	116	116	116	116
Trade Licenses	Pearson Correlation	.201	1	.317	.521
	Sig. (2-tailed)	.052		.002	.009
	N	116	116	116	116
Subsidies	Pearson Correlation	.211	.317	1	.512
	Sig. (2-tailed)	.093	.002		.005
	N	116	116	116	116
Performance	Pearson Correlation	.552*	.521	.512	1
	Sig. (2-tailed)	.002	.009	.005	
	N	116	116	116	116

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis established a strong positive and significant correlation between import quotas and performance of textile manufacturing industries (R=0.552, p=0.002<0.05). Application of import quotas will lead to increased performance of textile manufacturing industries. Also, it was established that trade licenses had a strong and significant positive association with performance of textile manufacturing industries (R=0.521, p=0.009<0.05). When import trade licenses requirements increases, level of performance of textile manufacturing industries is likely to improve. Lastly, subsidies had strong positive had a strong positive and significant correlation coefficient with performance of textile manufacturing industries (R=0.512, p=0.005<0.05). The indication of these results is that increase in subsidies is likely to increase level of performance of textile manufacturing industries.

4.8 Model Summary

The model summary consists of R. value, R square value, Adjusted R Squared Value, and a standard error of the estimate. The values obtained were recorded in table 4.11 as shown below.

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.712[a]	.507	.481	.762

Predictors: (Constant), import quotas, trade licenses, subsidies

Regression model summary shows that the correlation coefficient of R was 0.712 and R square of 0.507. The adjusted R square value was 0.478. these results shows that import quotas, trade licenses and subsidies explain 50.7% of the total variations of the performance of textile manufacturing firms. The remaining 49.3% can be explained by other factors not in the current model.

4.9 Analysis of Variance

The analysis of variance was done to generate the f- statistic which is used to test significance of R in the model. That is, ANOVA was conducted to test goodness of fit in the model. The results are shown in table 4.12.

Table 4.12: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.065	3	5.355	13.093	.006[b]
	Residual	45.853	112	0.409		
	Total	**61.918**	**115**			

a. Dependent Variable: Performance

b. Predictors: (Constant), import quotas, trade licenses, subsidies

Table 4.12 showed the F value of 13.093. The f-statistics was statistically significant at p=0.006 <0.05 which implied that the model was statistically significant at 0.05 significant level. Thus import quotas, trade licenses and subsidies can significantly affect performance of textile manufacturing industries. The model summary was fit to predict the variations between the independent and the dependent variables.

4.10 Regression Coefficients

A regression analysis was done to test combined effect of the independent variables to the dependent variable. The results were then presented in table 4.13 below.

Table 4.13: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.108	.038		2.842	.001
Import Quotas	.097	.036	.071	2.694	.000
Trade Licenses	.081	.049	.069	1.653	.040
Subsidies	.076	.037	.112	2.054	.000

Dependent Variable: Performance

From table 4.13, specific regression equation becomes $Y= 0.108+ 0.097X_1+0.081X_2 + 0.076X_3$ The Constant term was found to be 0.108 and it was significant at 5% significant level (β_0=0.108, p=0.001<0.050). The meaning of these results is that in absence of all the other variables, the level of performance of textile manufacturing industries will be 10.8%. Import quotas had a positive beta coefficient (β_1) of 0.097 which was statistically significant at p=0.000<0.050). Imposing import quotas is likely to lead to improved performance of textile manufacturing industries by 9.7% keeping all the other factors constant. Further, trade licenses had a positive beta coefficient (β_2) of 0.081 which was statistically significant at

p=0.040<0.050). Increasing trade license requirements is likely to lead to improve performance of textile manufacturing industries by 8.1% keeping all the other factors constant. Lastly, subsidies have a significant beta coefficient (β_3) of 0.076 and a p value of 0.000 which is less than the 5% significant level chosen.

4.11 Discussion of Research Findings

The discussions of the findings were done based on the findings as per the objectives. The relationship between the current findings and the findings from the literature was clearly explained in the following subsections.

4.11.1 Import quotas and performance of textile manufacturing industry

The descriptive findings show that the government has not put import quotas on importation of the raw materials to encourage consumption of local textile raw materials. This is similar to findings in Uganda by Okumu and Okuk (2010) who established that several NTBs continue to exist, and some have persisted. Just like Uganda, Kenya has put in place several non-tariff barriers including quota as a way of protecting local industries. Concerning the protection of domestic industry, the respondents indicated that import quotas has helped in the protection of domestic industry. Also, the findings show that import quotas has helped in price level stabilization for locally manufactured textile products. These findings agree with earlier findings by Ms Mmasi and Ihiga (2007) who identified a number of NTBs that directly affect imports, categorised Customs and administrative documentation procedures; Cumbersome inspection requirements; import quotas; Police road blocks; and Congestion at Dar es Salaam Port. Lastly it was established that, the government has put import quotas on finished textile products to reduce the speculative importation of textile products in anticipation of increase in prices. The correlation analysis established a strong positive and significant Pearson correlation coefficient between import quotas and performance of textile manufacturing

industry. Further, the regression analysis showed Import quotas had a significant positive beta coefficient.

4.11.2 Trade Licenses and performance of textile manufacturing industry

The results established that the import license do not specify the quantity of certain textile product to be imported. Nzuma, (2007) found that administrative requirements (mainly licenses, municipal and council permits), taxes/duties (mainly excise and cess duty), roadblocks, customs barriers, weighbridges, licensing, corruption and transiting hinder international trade, though helpful in predestining local industry. Also, it was established that to deal with textile products, the business person must obtain a business license. Further, the descriptive statistics show that the respondents agreed that the requirements for obtaining import license on textile products hinder entry into to business of importation of such products. Lastly, the descriptive statistics show that the respondents were in state of undecidedness on whether textile products require special transport license to transport them to port of entry or exits.

The inferential statistics showed a strong positive and significant Pearson correlation coefficient between trade licenses and performance of textile manufacturing industry which then confirmed by the regression analysis where a significant positive relationship was established between the two variables. The findings are similar to earlier findings by Nzuma, (2007) who sought to identify the existing NTBs on maize and beef trade in East Africa and quantifies their impact on trade and the welfare of EAC citizens and found that a net monetary gains are positive in all cases. Also, the findings are similar to earlier findings by Okute (2017) who showed that documentation and procedures, too many agencies involved in overall export inspection and certification in the region, escort of all sensitive and hazardous products through the territory of each East Africa Community (EAC) transit country, and verification of transit cargo were a challenge.

4.11.3 Subsidies and performance of textile manufacturing industry

The descriptive statistics shows that the governments meet the production cost of raw materials used in textile industry. Earlier, Kahenu, (2014) had sought to identify the non-tariff barriers (NTBs) affecting Kenyan exports in the EAC market, and found that the cost of production in Kenya was too high compared to the neighbouring countries and recommended that the government provide subsidise the cost of power to manufacturers so as to reduce cost of production. Also, it was established that the firms in the textile industry do not enjoy reduced power rates from the government. The government should therefore meet part of energy cost as opined by Xiong, (2012) African countries should provide farmers with subsided farm input to reduce the cost of production of groundnuts. Further, the descriptive statistics show that the government offers technical supports in technical fields which has helped in reducing labor costs. Lastly, the respondents strongly agreed that subsidies by the government may help in improving the performance of textile industries. This agree with Mkuna (2014) who had earlier showed that the Tanzania government was offering subsidised farm inputs to the maize farmers, reducing the production of maize compared to other two crops.

A strong positive and significant Pearson correlation coefficient between subsidies and performance of textile manufacturing industry which then confirmed by the regression analysis where a significant positive relationship was established between the two variables. Similar findings were established by Kahenu, (2014) who found that high cost of production negatively affects Kenya's export to the EAC market.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers summary, conclusions and recommendations based on the objectives. The recommendations were done to policy makers, practitioners and also to the scholars. The summary shows how the dependent variable and independent variables relate and it is done per variable.

5.2 Summary of Findings

This sub-section gives the summary of the findings based on the objectives. The summary shows how the dependent variable was affected by change in each of the independent variable. The dependent variable was performance of textile manufacturing industry while the independent variables were: import quotas, trade licenses and subsidies.

5.2.1 Import quotas and performance of textile manufacturing industry

The descriptive findings show that the government has not put import quotas on importation of the raw materials to encourage consumption of local textile raw materials. Concerning the protection of domestic industry, the respondents indicated that import quotas has helped in the protection of domestic industry. Also, the findings show that import quotas has helped in price level stabilization for locally manufactured textile products. Lastly it was established that, the government has put import quotas on finished textile products to reduce the speculative importation of textile products in anticipation of increase in prices. The correlation analysis established a strong positive and significant Pearson correlation coefficient between import quotas and performance of textile manufacturing industry. Further, the regression analysis showed Import quotas had a significant positive beta coefficient.

5.2.2 Trade Licenses and performance of textile manufacturing industry

The results established that the import license do not specify the quantity of certain textile product to be imported. Also, it was established that to deal with textile products, the business person must obtain a business license. Further, the descriptive statistics show that the respondents agreed that the requirements for obtaining import license on textile products hinder entry into to business of importation of such products. Lastly, the descriptive statistics show that the respondents were in state of undecidedness on whether textile products require special transport license to transport them to port of entry or exits. The inferential statistics showed a strong positive and significant Pearson correlation coefficient between trade licenses and performance of textile manufacturing industry which then confirmed by the regression analysis where a significant positive relationship was established between the two variables.

5.2.3 Subsidies and performance of textile manufacturing industry

The descriptive statistics shows that the governments meet the production cost of raw materials used in textile industry. Also, it was established that the firms in the textile industry do not enjoy reduced power rates from the government. Further, the descriptive statistics show that the government offers technical supports in technical fields which has helped in reducing labor costs. Lastly, the respondents strongly agreed that subsidies by the government may help in improving the performance of textile industries. A strong positive and significant Pearson correlation coefficient between subsidies and performance of textile manufacturing industry which then confirmed by the regression analysis where a significant positive relationship was established between the two variables.

5.3 Conclusions of the study

The study made the conclusion that imposing subsidies and import quotas on importation of both raw materials and finished textile products, would significantly improve and stabilize the performance of textile manufacturing industry in Kenya.

5.3.1 Import quotas and performance of textile manufacturing industry

The Pearson correlation analysis shows a strong and significant positive correlation coefficient between import quotas and performance of textile manufacturing industry while the regression analysis shows a significant beta coefficient. A conclusion is therefore made that imposing import quotas on importation of both raw materials and finished textile products is likely to lead to improved performance of textile manufacturing industry.

5.3.2 Trade Licenses and performance of textile manufacturing industry

A strong, positive and significant Pearson correlation coefficient between trade licenses and performance of textile manufacturing industry was established. Further, the regression analysis proved those results by establishing a significant beta coefficient for trade licenses. The current study therefore concludes that increased trade licenses requirements for importers of textile raw material and products is likely to lead to improved performance of local textile manufacturing industry

5.3.3 Subsidies and performance of textile manufacturing industry

Both Pearson correlation and regression coefficients shows a significant positive relationship between Subsidies and performance of textile manufacturing industry. The current study concludes that increased subsidies by government would lead to improved performance of local textile manufacturing industry.

5.4 Recommendations

The study provided the following recommendations based on the study variables: the study variables used were import quotas, trade licenses and subsidies employed by Kenyan government to protect the textile manufacturing industry.

5.4.1 Import quotas and performance of textile manufacturing industry

The descriptive findings show that the government has not put import quotas on importation of the raw materials to encourage consumption of local textile raw material. Also, the findings show that the import quotas imposed on the importation of finished textile products has helped in stabilization of prices for locally manufactured textile products. The current study therefore recommends that the government through KRA impose quotas on the importation of the raw materials used in the textile manufacturing industry so as to encourage local producers of the raw materials.

5.4.2 Trade Licenses and performance of textile manufacturing industry

The results established that the import license do not specify the quantity of certain textile products to be imported. Specifying the quantity to be imported in the trade licence would be helpful in helping reduce over importation of the textile raw material and the products. The current study therefore recommends that the government indicate the quantity to be imported on the trade licence for every importer of textile products.

5.4.3 Subsidies and Performance of Textile Manufacturing Industry

Also, it was established that firms in textile industry do not enjoy reduced power rates from the government. The cost of power significantly contributes to the industries to have low profit margins. The current study recommends that the government through Kenya Power to subsidize the cost of power to the local textile manufacturing industry so as help them cut on their costs.

5.5 Suggestions for Further Studies.

The study focused only in textile manufacturing industry, Further studies should be carried on another industry to see if similar results will be observed. In addition, the study focused on three independent variables namely; import quotas, trade licenses and subsidies. Similar study

can be conducted using different independent variables so as to establish other factors affecting the performance of textile manufacturing industry.

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APPENDIX I: DATA COLLECTION TOOL

Introduction

Please read each question carefully and respond to it appropriately. Kindly answer all the questions to your utmost ability. All your responses will be kept confidential.

PART ONE: DEMOGRAPHICS

1. What's your gender?

   male ☐ female ☐

2. What is your highest academic level?

   Certificate ☐ Diploma ☐

   Undergraduate ☐ Postgraduate ☐

3. For how long have you been in the current designation?

   <2 years ☐ 3-5 years ☐

   6-9 years ☐ >10 years ☐

PART B: PERFORMANCE OF TEXTILE INDUSTRY

4. In a 5-point Likert scale where ***5=strongly agree, 4=agree, 3=Neutral, 2= disagree, 1=strongly disagree,*** what is your opinion on the following propositions regarding Performance of Textile Industry?

PERFORMANCE		**1**	**2**	**3**	**4**	**5**
i.	Annual productivity of textile products have increased in the past five years					
ii.	There has been increase in net profits in our firms for the of the last					

	five financial year					
iii.	The amount of textile products exported from our company has increased in the last five years					
iv.	Most of the raw materials the Company imported from other countries					

PART C: IMPORT QUOTAS AND PERFORMANCE OF TEXTILE INDUSTRY

5. In a 5-point Likert scale where **5=strongly agree, 4=agree, 3=Neutral, 2= disagree, 1=strongly disagree,** how much would you agree with the following propositions regarding the effect of online registration on Import Quotas?

	IMPORT QUOTAS	**1**	**2**	**3**	**4**	**5**
i.	The government has put import quotas on raw materials to encourage consumption of local textile raw material					
ii.	Import quotas has helped in the protection of domestic industry					
iii.	Import quotas help in price level stabilization for locally manufactured textile products					
iv.	The government has put import quotas to reduce the speculative importation of textile products in anticipation increase in prices					

PART D: TRADE LICENSES AND PERFORMANCE OF TEXTILE INDUSTRY

6. In a 5-point Likert scale where ***5=strongly agree, 4=agree, 3=Neutral, 2= disagree, 1=strongly disagree,*** how much would you agree with the following propositions regarding the effect of online payment on trade licenses?

TRADE LICENSES		**1**	**2**	**3**	**4**	**5**
i.	The import license are used to specify the quantity of certain textile product to be imported					
ii.	To deal with textile products, the business person must obtain a business license					
iii.	The requirements for obtaining import license on textile products hinder entry into to business of importation of such products					
iv.	Textile products requires special transport license to transport them to port of entry or exits					

SECTION E: SUBSIDIES AND PERFORMANCE OF TEXTILE INDUSTRY

7. In a 5-point Likert scale where ***5=strongly agree, 4=agree, 3=Neutral, 2= disagree, 1=strongly disagree,*** how much would you agree with the following propositions regarding effect of online returns on Subsidies?

8.

SUBSIDIES		**1**	**2**	**3**	**4**	**5**
i.	The governments meet the production cost of raw materials used in textile industry					

ii.	Firms in textile industry enjoy reduced power rates from the government.					
iii.	Government offers technical supports in technical fields which has helped in reducing Labor costs					
iv.	Importation of raw materials could make the production less costly					

THANK YOU FOR YOUR TIME!

Appendix II: List of textile manufacturing firms in EPZ-Athi River.

	Company
1	Blue Plus Ltd
2	Apparels Trading Co Ltd.
3	Binti Apparels Limited
4	Crown Fashions Ltd
5	Eagle Apparel Export Ltd
6	Equator Apparels Co. Ltd
7	Excel Clothing
8	Falcon Apparel Exporters Ltd
9	Upan Wasana EPZ Ltd
10	Garment label Manufacturers Ltd
11	Leena Apparel Ltd
12	Manchester Apparels Ltd
13	Maridadi Apparels Ltd
14	Mash Apparels Kenya Ltd
15	Res Apparels Ltd
16	Riziki Manufacturers Ltd
17	Sankam Textiles Ltd
18	Sethi Fabric ltd
19	Storm Apparel Manufacturers Ltd

***Source**: EPZA (2021)*

20	Tana Apparels Ltd
21	Teleworld Industries Ltd
22	Triaco Fine Textile Products
23	Zawadi Apparels Ltd
24	Apex Apparels EPZ Ltd
25	Ashton Apparel EPZ Ltd
26	Baraka Apparels EPZ Ltd
27	JAR Kenya EPZ Ltd
28	Sahara Stitch EPZ Ltd
29	United Arvan EPZ Ltd