

**FACTORS INFLUENCING THE VALUE OF INTRA-REGIONAL TRADE : A CASE OF  
KENYA'S EAST AFRICAN COMMUNITY EXPORTS**

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## **DECLARATION**

This Project is my original work and has not been presented for a Post Graduate Diploma in any other University.

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### **Declaration by the Supervisor**

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

Signature.....Date.....

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## **DEDICATION**

I wish to dedicate this paper to my loving parents, Aggrey Kidambale and Jane Kidambale, for their devoted support in my educational pursuits and their invaluable assistance in conducting this research.

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## LIST OF ACRONYMS

<b>AFTA</b>	ASEAN Free Trade Area
<b>ASEAN</b>	Association of East Asian Nations
<b>ATIGA</b>	Asean Trade in Goods Agreement
<b>CET</b>	Common External Tariff
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>CU</b>	Customs Union
<b>EAC</b>	East African Community
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investment
<b>FTA</b>	Free Trade Area
<b>IDF</b>	Import Declaration Form
<b>IMF</b>	International Monetary Fund
<b>KEBS</b>	Kenya Bureau of Standards
<b>KEPHIS</b>	Kenya Plant Health Inspectorate Services
<b>KPA</b>	Kenya Ports Authority
<b>KRA</b>	Kenya Revenue Authority
<b>NTBs</b>	Non Tariff Barriers
<b>NTMs</b>	Non Tariff Measures
<b>RECS</b>	Regional Economic Communities
<b>RTAs</b>	Regional Trade Agreements
<b>SADC</b>	Southern African Development Community
<b>TBT</b>	Technical Barriers to Trade
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>UNECA</b>	United Nations Economic Commission on Africa
<b>VAT</b>	Value Added Tax
<b>WCO</b>	World Customs Organization

## **DEFINITION OF OPERATIONAL TERMS**

Intra-Regional Trade- Trade in goods and services occurring inside a specific region of the world economy like sub-Saharan Africa or the member nations of the European Union (Dicken, 2012).

Non-Tariff Barriers- refers to restrictions that result from prohibitions, conditions, or specific market requirements that make importation or exportation of products difficult and costly. NTBs also include unjustified or improper application of Non-Tariff Measures (NTMs) such as sanitary and phytosanitary (SPS) measures and other technical barriers to Trade (TBT). They arise from different measures taken by governments and authorities in the form of government laws, regulations, policies, conditions, restrictions or specific requirements, and private sector business practices, or prohibitions that protect the domestic industries from foreign competition (Okumu, 2011).

Transport infrastructure- refers to transport networks (roads, railways, airports, seaports etc.) and the services provided by the transport and logistics sector (World bank, 2013).

Tariffs- A tariff is a tax on imports or exports. Money collected under a tariff is called a duty or customs duty. Tariffs are used by governments to generate revenue or to protect domestic industries from competition (Pedersen, 2011).

## **ABSTRACT**

The main objective of this research was to establish the factors influencing intra-regional trade in the EAC. The study used descriptive research design. The sample size of the study constituted four EAC countries. Data for the study was obtained from various sources such as the world bank, EAC secretariat, northern corridor authority. The results from the regression analysis indicated that only 90.3 percent of variations on the value of trade (Kenya's EAC exports )could be attributed to determinants such as Value Added Tax, transport cost, trucking time, number of licenses, permits, and border charges while 9.7% could be attributed to other factors not in the study. This implies that effective management of determinants such as Value Added Tax, transport cost, trucking time, number of licenses and permits, can be implemented to improve levels of trade in the EAC. Multiple correlation analysis was performed with each of the unique models to examine the significance of relationship amongst the various independent variables and the dependent variable. All the variables were incorporated in one model, multiple correlations co-efficient was observed. The raw data obtained from the various reports under study were analyzed using SPSS spreadsheets after which regression analysis was performed. Regression found that VAT had a minimal relationship with the value of trade in the EAC as the rate has been fairly constant over the years under study. The findings from the study confirmed that transport infrastructure has a huge impact on the value of goods traded, an increase in transport costs significantly reduces the value of goods traded. Non- tariff barriers had varying degrees of relationship with the value of trade in the EAC. This study therefore recommended that the EAC countries should employ strategies to harmonize and possibly eliminate all internal tariff, improve transport infrastructure as it significantly affects the value of goods traded in the region. Eliminate non-tariff barriers and strengthen the EAC non-tariff barrier monitoring committee to enable it carry out its mandate effectively. This will deter member countries of the EAC from rampantly coming up with trade hampering policies and measures.

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background

Intra-regional trade happens when trade in goods and services occurs inside a specific region of the world economy like sub-saharan Africa or the member nations of the European Union (Dicken, 2012). Seid (2013) contends that intra-regional trade refers to trade which focuses on economic exchange primarily between countries of the same region or economic zone. He further observes that intra-regional trade is an important pillar of trade and investment policy in the global economy. Mbekaini (2013) argues that intra-regional trade is the easiest way for countries to expand markets for their goods in the wake of competitive global markets.

The European Union is probably the most successful, most influential and most often copied model for Regional Integration. It started from very modest beginnings of a functional cooperation between six countries in Western Europe in the area of mining (Peters-Berries, 2016). He further observes that the European Union boasts of the highest intra-regional trade among its member states, with intra-EU trade at 66%. Cameron (2013) observes that there is free trading within the EU through the establishment of a customs union. There is free movement of people in 15 core countries; citizens can decide where they want to live, work, invest and/or travel to without restrictions and border controls. There is harmonization of laws and regulations regarding economic, environmental, health, social and transport and the transfers of parts of national sovereignty to supranational EU institutions.

According to Peters-Berries (2016), the major Regional Integration project in Asia is the Association of South East Asian Nations (ASEAN), with its headquarters in Jakarta / Indonesia. It was established in 1967 in Bangkok by Indonesia, Malaysia, the Philippines, Thailand and Singapore. The Association of South Eastern Nations (ASEAN) has been successful in achieving a substantial increase in intra-ASEAN trade which currently stands at around 25% (Ko, 2013). The ASEAN Free Trade Area (AFTA) established in 1992 was agreed upon in order to improve the region's international competitiveness by eliminating tariffs and non-tariff barriers internally.

Paulino (2017) argues that member countries of ASEAN have benefited from intra regional trade expansion that has led to diversification in the variety and quality of products. Exports of manufacturing goods represent more than half of ASEAN exports. Majority of ASEAN countries have upgraded their exports structures moving into higher value-added economic activities. In terms of manufacturing upgrading, particularly, amongst the less developed countries, Vietnam - hitherto a predominantly agricultural economy - now specializes in textiles and apparel. Singapore and Malaysia are leading exporters of electronics.

Africa's intra-regional trade remains low, making up only 10% of its total trade (Keane, 2012). Low trade flows between African countries can be attributed to historical trade patterns which is characterized by export of raw inputs to the production process (Pedersen, 2011). (Foroutan & Pritchett, 2011) attribute this low trade mainly to the existing barriers to trade Tariffs and Non-Tariff Barriers that have a direct impact on trade costs. Mbekeani (2013) points out that lack of investment in adequate trade infrastructure such as roads, ports, and overall high costs of transport are impediments to intra-African Trade. He also notes that overlapping membership in numerous

RTAs and slow implementation of trade agreements as contributing factors to the low volumes of trade.

Kaimenyi, et al. (2012) argues that Africa's intra-regional trade volumes could be increased by economic diversification. Many African countries specialize in the same products as their neighbors, especially commodities like oil and gas. With few complementary goods to exchange with each other, these countries cannot exploit the gains to be made via comparative advantage. Seid (2013) contends that productive capacity interventions are needed to ensure that firms and farmers are able to utilize market access opportunities in regional and international markets. African trade needs to address issues of value addition and define areas of specialization to support improved production. Ensuring that firms and farmers are able to utilize market access opportunities in regional and international markets is paramount.

Mbekaini (2013) points out that infrastructure investments need to be complemented with trade facilitation measures for intra-regional trade to easily move across borders. He further observes that African countries should support the acceleration of the rationalization of RECs and harmonizing their programs. These include the process of negotiating and implementing the COMESA- EAC-SADC FTA; Support development of RECs capacity for policy formulation, and support ongoing efforts to build capacity in countries and RECs to collect and disseminate information on non-tariff measures.

Mengesha (2012) draws attention to the fact that Africa is confronted with deep rooted level of poverty, minimal share of world trade, and low pace of development in infrastructure and faces excess challenges from external pressures. United Nations Conference on Trade & Development [UNCTAD] (2012) also points out that in terms of population, there were around 20 countries with

a population of 6 million or less in 2010. Such small and fragmented domestic markets do not support large number of firms. Consequently, policy makers, leaders and other stakeholders in Africa have long called for viable and strong regional integration arrangements to reap the benefits of economies of scale and expand intra-regional trade (Seid, 2013).

At sub-regional levels, countries have also committed themselves to various Regional Integration Arrangements, and COMESA, EAC and SADC are currently negotiating for the establishment of an expanded free trade agreement. The COMESA-EAC-SADC FTA also referred to as the Tripartite FTA (TFTA). Amongst the goals of the TFTA is to increase intra-regional trade and investment thereby maximizing economic growth and development (Ndomo, 2011). The EAC member states have also committed themselves to enhancing intra-regional trade by eliminating internal tariffs in the community (Grant, 2016).

### **1.1.1. East African Community**

Grant (2016) states that Kenya, Tanzania, Rwanda, Uganda, Burundi and South Sudan comprise the modern iteration of the East African Community, formed in 2000. He further observes that important steps towards establishing a community were taken in 1993 and 1997 at two summits of the heads of state. In 1993 the Permanent Tripartite Commission for Cooperation was set up: a coordinating institution that in 1998 produced a draft treaty for the later EAC. Cooperation on security matters was also initiated during this period. In November 1999, the Treaty for the Establishment of the East African Community was signed by the Ugandan, Kenyan, and Tanzanian heads of state. It entered into force on July 7, 2005, and two new members, Rwanda and Burundi, joined the Community in 2007. Southern Sudan joined the EAC in 2016.

Munyao (2016) observes that The East Africa Community Common Market protocol was signed in 2009 and came into force in 2010 following the ratification by the heads of states of the five member states. The EACCM protocol guarantees free movement of goods, people, capital, labor, services and the rights of establishment and residence. The protocol also elaborates other areas of cooperation by the partner states and rules on competition, public procurement and subsidies. Gichangi (2012) posits that the EAC trading bloc will create a market of over 133 million people and a combined Gross Domestic Product of \$80 billion, making it one of the largest trading blocs in Africa.

## **1.2. Statement of the Problem**

Studies show that intra-regional trade is of great significance in international trade. UNCTAD (2015) observes that it could make industries become more competitive by creating economies of scale and weeding out producers that are less productive in the market place. It can establish and strengthen product value chains and facilitate the transfer of technology and knowledge via spillover effects. It can incentivize and spur infrastructure development and attract foreign direct investment. Mbekaini (2013) argues that intra-regional trade is the easiest way for countries to expand markets for their goods in the wake of competitive global markets. Kaimenyi, et al. (2012) contend that expanding intra-African trade is a key to accelerating economic growth on the continent. It is especially important for the continent's many small, landlocked countries that face tremendous challenges trading internationally.

Many African countries have realized that intra –African trade has the potential to reduce vulnerability to global shocks, contribute to economic diversification, enhance export competitiveness and create employment (UNCTAD, 2013). Consequently, there is no country in

Africa that is not a member of at least one regional economic group (Alemayehu and Haile, 2013). Unfortunately, despite the proliferation of regional trading blocs and trade agreements, Africa's current internal trade is low—making up only about 10 percent of its total trade. Most of its exports go to the world's advanced economies, and most of its imports come from those same advanced economies (UNCTAD, 2016). Low level of intra-african trade has been attributed to trade Tariffs and Non-Tariff Barriers that have a direct impact on trade costs (Foroutan & Pritchett, 2011), lack of investment in adequate trade infrastructure such as roads, ports, and overall high costs of transport (Mbekaini, 2013) & exports of similar raw products (Pedersen, 2011). This is in sharp contrast to other regions of the world which enjoy significantly higher levels of internal trade. For the developing countries in Asia, intra-regional trade as a share of total trade was roughly 20 percent in 2016; for deeply integrated ASEAN it was 25 percent ; for the member countries of the European Union, the same figure was more than 60 percent (UNCTAD, 2016). At regional level, much like the continental level, intra-eac trade is at about 10 percent of the region's total trade, a low figure (EAC, 2018).

One of main objectives behind the formation of the EAC was to improve intra-regional trade. It is then of significance to note that more than a decade later after its formation, the value of intra-EAC trade is still low. There have been several studies on the EAC. Ogalo (2011) studied the implications of informal intra-regional trade on the EAC. He concluded that the region is missing out on trade revenues and trade statistics from the huge volumes of undocumented trade. This study seeks to establish the factors that influence intra-regional trade in the EAC.

### **1.3. Research Objectives**

#### **1.3.1. General Objective**

1. The general objective of the study is to establish the factors influencing Intra Regional Trade in the East African Community.

#### **1.3.2. Specific Objectives**

The following specific Objectives guide the study:

- (i) To establish the effects of Tariffs on intra- regional trade in the East African Community.
- (ii) To determine the effects of Transport infrastructure on intra-regional trade in the East African Community
- (iii) To find out the effects of Non-tariff barriers on intra-regional trade in the East African Community.

### **1.4. Research Questions**

The following are the research questions to the study:

- (i) How do Trade Tariffs affect intra-regional trade in the East African Community?
- (ii) How does Transport infrastructure affect intra-regional trade in the East African Community?
- (iii) How do Non-Tariff barriers affect intra-regional trade in the East African Community?

### **1.5. Justification of the study**

The findings of the study are of significance to the EAC members and other economic organizations because they can help them identify opportunities in implementation of the common

market protocol. It will be useful in the formulation of strategies to boost trade within the member states. The East African community common market is on paper and if well implemented has the potential of making the region an economic powerhouse in the region by leveraging consolidated markets, factors of production and natural sources such as oil and gas.

Scholars, students and researchers may also find the study helpful to identify further areas of research built on the findings of this research. Further research could explore specific rules and regulations to trade in the region, the documentation and restrictions on import and export. An analysis on more factors influencing trade in the region could also be undertaken. Studies on the effects of regional integration on intra-regional trade would also provide useful insight on the impact integration has had on trading patterns and volumes among the member states.

Government agencies and policy makers such as World Bank, WCO and EAC secretariat may use the results to formulate positive policies and a framework that is relevant and sensitive to challenges that influence regional trade. The policies could go a long way in helping to reduce and eliminate barriers to trade. The study will also benefit multinational corporations that would want to invest or trade within the East African Community Common Market. They will be able to know the opportunities that are present in the region. They could benefit from increased intra-regional trade that would provide more goods to trade in. The member states would benefit from the foreign direct investments, tax revenues and employment opportunities for their citizens.

### **1.6. Scope of the study**

The study focused on the EAC member states and secretariat. According to the EAC secretariat the member states are Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan.

Organizations such as the IMF, World Bank, Kenya Bureau of Statistics and Central Bank of the member states provided information on trade within the East African Community. These organizations are a source of reliable information relevant to the study. The study specifically was carried out in the years 2011- 2016, a period of six years.

### **1.7. Limitations of the study**

This study was not without limitations. In attaining its objective the study was limited to six years period starting from year 2011 to year 2016. The study was limited to secondary data collected from the world bank, northern corridor authority, EAC reports and gazette notices. While the data was verifiable since it came from reputable sources, it nonetheless could still be prone to shortcomings such as differences in methodology used as the years progress, the unpredictable nature of some of the variables such as non-tariff barriers that continuously evolve.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

This chapter presents a review of the related literature on the subject under study presented by various researchers, scholars, analysts and authors. This chapter reviews literature with respect to the research objective of factors influencing intra-regional trade in the East African Community. Literature Review refers to text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature review should describe, summarise, evaluate and clarify this literature. It also helps the researcher frame his/ her study in the context of existing knowledge and contribute to building this knowledge by identifying gaps and studying them (Orodho, 2012).

#### **2.2. Theoretical Framework**

This study was informed by relevant theories to the variables under this study. The focus was on tariffs, Transport infrastructure and non-tariff barriers. The following theories will be discussed; Customs Union Theory, New Trade theory and Free Trade Theory. Theoretical review refers to a study and review of relevant theories suitable for the study. Theoretical framework introduces and describes the theory that explains why the research problem under study exists.

##### **2.2.1. Customs Union Theory**

The Customs Union theory was advanced by Canadian Economist Jacob Viner. It has been assumed that a Regional Trade Agreement (RTA) would be welfare improving since tariffs, which are in general welfare reducing, would fall. In his works, Viner (1950), introduced concepts of

“trade diversion” and “trade creation” as purposes of custom unions. He investigated the question and found that the welfare impact of an RTA is ambiguous. Gains will occur if higher-cost domestic production is replaced by cheaper imports from a partner country (trade creation). On the contrary, if a partner-country production replaces lower-cost imports from the rest of the world; trade diversion occurs and this means there will be losses. Therefore, membership in an RTA will have positive and negative effects on an economy, and it is the net impact that will determine whether a member experiences welfare gains or losses. The theory is important to this study because tariffs have an impact on trade flows and volumes. UNCTAD (2015) observes that reductions in trade earnings from tariff cuts are compensated by increase in trade volumes. Countries should therefore strive to increase trade amongst themselves. Consequently, market liberalization and the increased welfare due to tariff reductions has formed part of the global trading environment under multi-lateral trading agreements.

### **2.2.2. New Trade Theory**

New Trade Theory (NTT) is an economic theory that was developed by Paul Krugman (1980) as a way to predict international trade patterns. NTT came about to help us understand why countries are trade partners when they are trading similar goods and services. In contrast to the neoclassical trade theory, the reasons why two countries trade do not depend on comparative advantage in new trade theory. Krugman developed a model in which countries trade even when there is no comparative advantage, but trade is still welfare-enhancing. Countries are able to leverage on economies of scale and their ability to reduce costs. Transport costs are a significant when it comes to trade costs. New trade theory started to develop because of the fact that a large part of international trade takes place between countries with similar factor endowments. Thus, where

neoclassical predicts inter-industry trade, the new classical theory predicts especially intra-industry trade. Since, it is often the case that countries with the same factor endowments are located in the same region, more intra-industry trade usually also leads to more intraregional trade. The theory is relevant to this study because Transport infrastructure influences transport costs which constitute a significant amount of trade costs. UNCTAD (2016) notes that Regional integration crucially depends on the movement of cross-border transit and trade. Distance, logistics performance, connectivity and border management are major determinants of trade costs, more so than tariffs. Transport infrastructure development boosts regional trade by reducing these costs, and enhancing the ability of these countries to compete effectively in global value chains

### **2.2.3. Free Trade Theory**

The free trade theory was first advanced by Adam Smith (1776). He argued that it was impossible for all nations to become rich simultaneously by following mercantilism because the export of one nation is another nation's import and instead stated that all nations would gain simultaneously if they practiced free trade and specialized in accordance with their absolute advantage. Free trade occurs when there are no artificial barriers put in place by the governments to restrict the flow of goods and services between trading nations (Seid, 2013). United Nations Economic Commission on Africa [UNECA] (2013) contends that free trade enables open market access. The results can be tangibly measured in terms of higher standards of living, higher innovation, stronger institutions, infrastructure and even promotion of peace. This theory is relevant to this study because UNCTAD (2016) notes that non-tariff barriers have a higher impact on trade costs more so than tariffs. They increase compliance and trade costs. They are deterrent to intra-regional trade by restricting

imports and exports. Non –tariff barriers are impediments to free trade and therefore reduce trade flows among member states in RECs.

## **2.3. Empirical Review**

### **2.3.1. Tariffs**

There are various studies that have identified tariffs, infrastructure and non-tariff barriers as determinants of intra-regional trade. Ade et, al. (2017) carried out an analysis of tax harmonization within SADC with an aim of identifying the optimum tax rates and their effect on FDI. The study concluded that SADC members should aim at of an optimum VAT rate by all member countries to improve efficiency and competitiveness. Munyao (2016) in his study on challenges and opportunities facing the implementation of the EAC common market observed that the EAC member countries had a potential to benefit further from trade through lowering of the common external tariffs & eliminating internal tariff like VAT and integrating further.

### **2.3.2. Transport Infrastructure**

Limão & Venables (2011) study the relationship between infrastructure and intra-regional trade. They primarily state that poor infrastructure accounts for 40% of the transport costs of coastal countries and 60% of the transport costs of landlocked countries. Thus improving their own and the transit country's infrastructure would overcome more than half of the disadvantage of being landlocked. Using a gravity model they find that poor infrastructure is damaging to trade. Dicken (2012) confirm these findings; he even adds that transport infrastructure policies are more important to trade costs than direct policy instruments such as tariffs and quotas. Moreover, he states that infrastructure is likely to have a considerable effect on the time costs of trade, and that therefore a better infrastructure would consequentially improve trade

### **2.3.3. Non-Tariff Barriers**

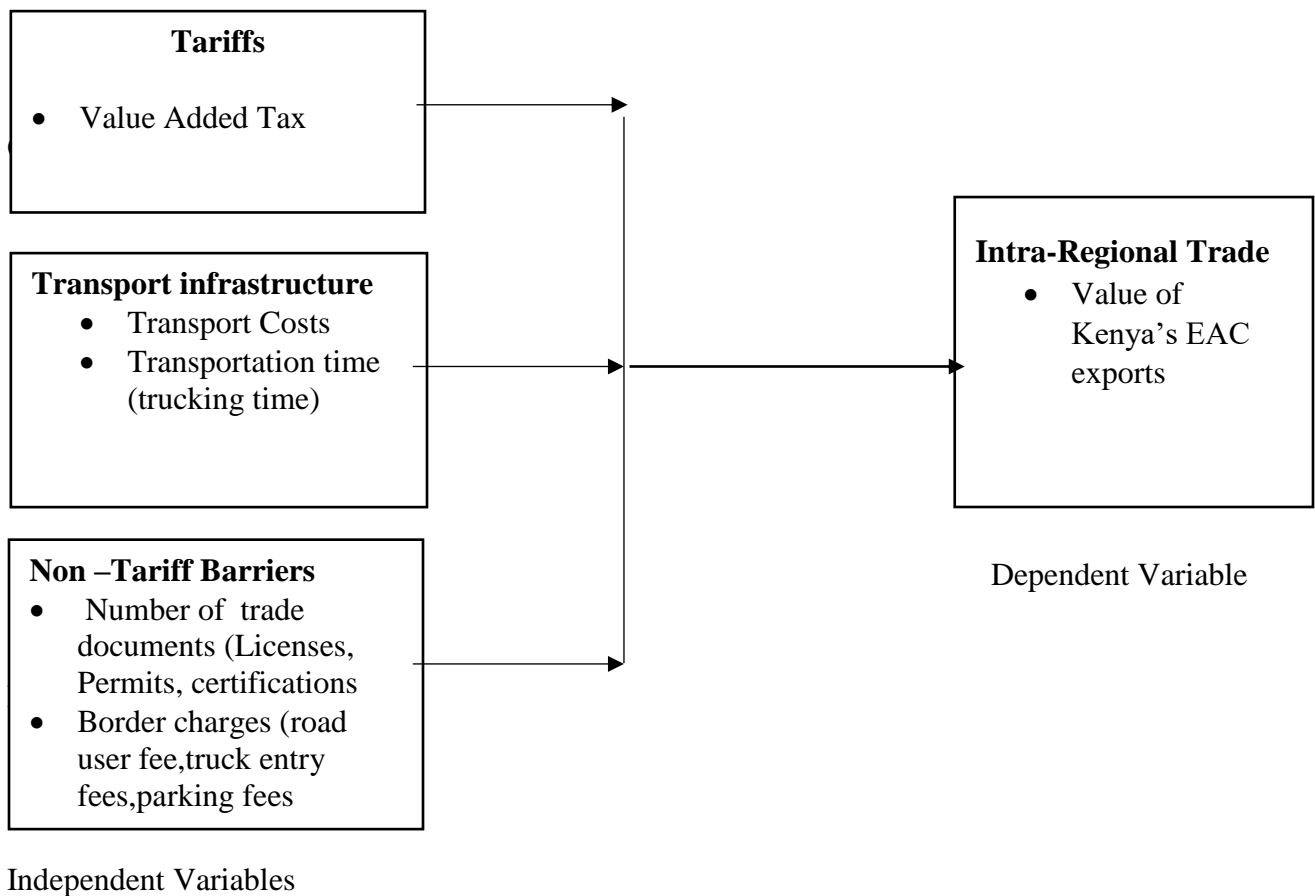
In his paper, Bose (2013) constructed a technical barrier to trade (TBT) database from 1998-2006 to examine the influence of TBT imposed by China on the country's imports. When using the frequency index, we find that TBT are trade restrictive: a one unit increase in TBT will decrease import value by about 0.8%. However, when the coverage ratio is used, we find that the negative effects of TBT are not statistically significant based on the entire period. However, if the focus is shifted to data from 1998- 2001, we find that TBT have trade promotion effects. A one unit increase in TBT will increase import value by about 0.2%. Finally, China's TBT (measured by both frequency index and coverage ratio) are trade restricting for agriculture goods but trade promoting for manufacturing goods.

In another study by Karugia et. al, (2010) on the effects of the impact of Non-tariff Barriers on maize and beef trade in East Africa, it was pointed out that the cost of NTBs for maize trade in Kenya accounted for approximately 35 % of the total maize transfer cost. The situation is much worse in Uganda where the NTBs accounted for over 50 % of 102 the total maize transfer cost. Karugia et. al, (2010) further noted that on average, the cost of maize NTBs in U.S. dollars per kilometer per tons was estimated at \$0.09, \$0.15, and \$0.11 in Kenya, Uganda, and Tanzania respectively. The cost of beef trade NTBs to beef trade in US dollars per kilometer per ton was estimated at \$0.17, \$0.31, and \$0.23 in Kenya, Uganda, and Tanzania respectively. The results of the welfare analysis varied across the three countries, but the net monetary gains were positive in all cases. A complete abolishment or a reduction of the existing NTBs in maize and beef trade increased 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 increased. As a result,

positive net welfare gains were attained for the maize and beef subsectors in the entire region. In all cases, those who gained from the proposed reductions in NTBs could potentially compensate the losers leading to potential improvements in welfare.

## 2.4. Conceptual Framework

Orodho (2012) states that a conceptual framework is a model representation where a researcher represents the relationships between variables in the study and shows the relationship graphically and diagrammatically. The dependent variable in this study is EAC intra-regional trade. The independent variables are Tariffs, Transport infrastructure and Non-Tariff barriers.



**Figure 2.4. Conceptual Framework.**

### **2.4.1. Tariffs**

Kotoski (2017) observes that more than 96 percent of tariffs in ASEAN have been eliminated. However, certain parts of the 10-nation economic bloc including Cambodia lag behind others in full implementation of the Asean Trade in Goods Agreement (ATIGA). It is said 99.2 percent of tariffs in the “Asean 6” – comprising Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand – have been eliminated. However, in the four countries that make up the CLMV region – Cambodia, Laos, Myanmar and Vietnam – tariff elimination sits at 90.9 percent, dragging down the bloc’s overall average. Kotoski (2017) further observes that these developments have significantly led to an increase in intra regional trade in the ASEAN bloc.

According to UNCTAD (2015), tariff cuts, *ceteris paribus*, may have negative repercussions on the trade tax earnings of countries. It possibly may also lead to the demise of uncompetitive industries and services. UNCTAD (2015) estimates show that despite cuts in applied tariffs by Sub-Saharan African countries in 1998–2013, a general increase in trade tax revenues took place over the same period due to an increase in the overall level of trade. Therefore, revenue losses resulting from further reductions in trade tariffs may also be compensated for by the expected high level of expansion in intra-African trade from the formation of the Continental Free Trade Area. (World Bank, 2013) indicates that 93 percent of the global welfare gains from removing distortions to agricultural trade globally would come from reducing import tariffs, while only 2 percent is due to export subsidies and 5 percent to domestic support measures .

Removal of internal tariffs under the EAC Customs Union has created an enabling business environment through increased intra- regional trade and enhancement of market access within the region. EAC countries are seeking to harmonise their tax regimes such as income, Excise, VAT

and withholding taxes in line with the EAC Treaty and the Common Market Protocol in order to boost investment and ensure free movement of goods, capital and labour in the region (Grant, 2016).

At present, Rwanda , Burundi, Uganda and Tanzania, charge VAT at the rate of 18 percent, Kenya charges 16 percent (EAC, 2018). In their annual investment report, Trade Mark East Africa (2015) contends that if the EAC is to sell its improving competitiveness to both local and foreign investors, then it must have a regional tax policy that is simple, transparent and fair. A policy that does not give undue advantages to companies in one country over those in another. Munyao (2016) affirms that harmonization of tariffs would eliminate price distortions for similar products, reduce compliance costs and provide uniform opportunities for investment based on efficiency and fair competition.

#### **2.4.2. Transport Infrastructure**

Infrastructure has been identified as crucial factor in promoting regional trading activities. High quality and efficient infrastructural capacity can foster regional integration. It will facilitate the movement of persons, goods and services across borders, making information easily accessible. At the same time allowing the region to develop a stronger base for trade negotiations with the international market (UNCTAD, 2016). Transport costs and the cost of delivery of goods are very important factors in the pattern of trade flows among countries. The mode of transport that trading partners settle on can influence the time goods take to arrive at their final destination. There is importance of multimodal transport services such as packaging, warehousing and transport from exporter's premises to that of the importer's. (UNCTAD, 2015).

Africa is a continent that is challenged in terms of adequate provision of infrastructure. The high cost of doing business can deter efforts to encourage intra-regional trade as countries will look for better options and partners with which they can trade at preferable terms (UNECA, 2013). Uncertainty about delivery time and the state in which products are delivered as a result of poor quality of infrastructure is also a contributing factor to the cost of trade in Africa. Furthermore, delays have been shown to have a greater impact on developing countries where most of their exports are perishable agricultural products (Mbekaini, 2013). In addition to this predicament, alternative means of transporting goods are also expensive with freight costs in developing countries about 70 percent higher on average than in developed nations, with Africa recording the highest, about twice the world average (UNCTAD, 2016).

Paulino (2017) contends that for developing economies like the EAC appropriate industrial and investment policies are needed. He further posits that diversification is closely related to structural transformation, improvement in Transport infrastructure, logistics and rapid developments in Information & Communications Technology. UNCTAD (2016) notes that intra-regional trade crucially depends on the movement of cross-border transit trade. Distance, logistics performance, connectivity and border management are major determinants of trade costs, more so than tariffs. (Munyao, 2016) contends that trade-related infrastructure within the EAC is highly inefficient and inadequate. Inability to transport goods and people efficiently, coupled with inadequate power supply to operate machinery and facilities smoothly, leads to micro as well as macroeconomic imbalances.

EAC member countries are undertaking various regional infrastructural projects, Kenya has already embarked on the construction of the Standard Gauge Railway (SGR) that is expected to

run all the way to Uganda and Rwanda -with a branch to Kisumu (Jumuiya, 2016). We have the Northern Transport Corridor road network which runs from Mombasa through Nairobi to Uganda, Rwanda and South Sudan. The Central Transport Corridor runs from Dar-es-Salaam to Bujumbura and Kigali. Railway networks which are part and parcel of these projects will revolutionize long distance transport in the region (Jumuiya, 2016). Rwanda and Tanzania are also working on their standard gauge railway -Isaka-Kigali standard gauge railway (SGR) that will run on the central corridor (Munyao, 2016).

### **2.4.3. Non-Tariff Barriers**

Non-Tariff and Technical Barriers have an effect of reducing the gains from trade liberalization arising from the reduction of tariffs. Due to their unpredictability and persistence, they continue to influence trade patterns and restricting market access to regional exporters thus denying consumers' welfare enhancing opportunities, which arise from access to, reasonably priced regional imports (COMESA, 2013). Economists generally agree that NTBs are detrimental to regional trade. These barriers diminish the potential benefits of trade preferences such as regional trading arrangements. Moreover, NTBs are a serious impediment to the growth of intraregional trade and their associated benefits. The existence of NTBs increases the cost of doing business, which ultimately leads to huge welfare losses (Munyao, 2016).

The Association of Southeast Asian Nations (ASEAN) represents a major example of regional integration and commitment to the removal of Non tariff barriers. The ASEAN strategy involved establishing a modality for eliminating NTBs including harmonizing product standards and developing mutual recognition of standards across member countries. The general features of the process for eliminating NTBs consists of verification of information on NTBs, prioritization of

products, developing specific work programme and obtaining a mandate from the ASEAN Economic Ministers to implement a work programme (ASEAN Secretariat, 2010).

EAC member countries apply numerous certification and conformity assessments to ensure technical quality standards in intra-EAC trade. However, there are differences in product standards and agencies that are accredited to undertake the standardization procedures. Some agencies accredited to conduct standardization in one country are not recognized by officers in another countries (Okumu, 2011). According to World Bank (2011), licenses required within the EAC include a business license, an import/export license, a road transportation license and a municipal council license. The procedures for obtaining these various licenses vary across countries. In addition, there is a lack of preferential treatment to EAC-originating businesses. This makes cross-border registration of businesses a difficult, cumbersome and expensive process. In most EAC countries, manual processes are used in business names searches, registration and the payment of relevant charges. Moreover, multiple licenses are required for the production, distribution and sale of goods, resulting in duplication and prohibitive costs of doing business in the region. (Okumu, 2011) observes that production subsidies tend to distort the prices of commodities as they would be without them. This leads to differing consumer prices and unfair competition. This leads to imposition of countervailing duties to allievate the impact of such subsidies further impeding trade.

Before the importing or exporting of commodities within the EAC, a trader must obtain an import declaration form (IDF) issued by an appointed government agency in the partner states. The issuance of IDFs involves numerous agencies ( the national bank, KEPHIS, KEBS, KPA and KRA), which conduct the procedures for the inspection, verification of dutiable value and certification of compliance. The result of having all these agencies partake in the issuance of IDFs

is often duplication of effort and wasted business time. Additionally, in some cases, inspection bodies have not established inspection posts at major entryways, thus forcing traders to travel long distances for customs clearance (Munyao, 2016).

## **2.5. Critique of Literature Review**

Vinner's works centered on the ambiguous welfare impact of RTAs. When barriers (tariffs) are dropped, markets become enlarged giving more efficient producers entry into countries where prices had artificially been high due to the duties and other trade barriers. (UNCTAD, 2015) argues that tariff cuts are meant to increase trade among countries and mitigate the losses in tax revenue. Grant (2016) notes that elimination of internal tariffs under the EAC has increased intra-regional trade by granting access to larger markets. Tariff elimination and trade liberalization has been a major policy in the global trading environment.

Richardo in the classical theory of trade argues that countries should produce based on their comparative advantage. Krugman's new trade theory advances the concept of countries trading similar goods based on welfare effect, aided by economies of scale and monopolistic competition. However, UNCTAD (2013) contends that it is important for countries to consider their comparative advantage. This way trade is based on effective and efficient allocation of resources.

Adam Smith's free trade theory advances government non-interference in trade and that supply and demand forces should be the main drivers of international trade. The proponents of free trade argue that open markets access spurs innovation, economic growth and employment (UNECA, 2013). Proponents of free trade welcome government involvement in enhancing or facilitating trade. This is achieved by reduction of bureaucracies, removal of duplicate and redundant processes, automation of services (Dicken, 2012). Drozd & Miskinis (2016) however point out

that government interference for protection of growing industries, protection of society, prevention of dumping and protection of employment is necessary at times.

## **2.6. Summary of Literature Review**

Internal tariff elimination in EAC has led to increased intra-regional trade due to increased market access (Grant, 2016). Tariff harmonization is crucial for competitiveness and improving intra-regional trade (EAC, 2018) & (Ade, et al.,2017). There is evidence that improved infrastructure would consequentially improve trade (Dicken, 2012; Limão & Venables, 2011). Non-tariff barriers continue to reducing the gains from trade liberalization arising from the reduction of tariffs (COMESA, 2013). ASEAN is tackling NTBs including harmonizing product standards and developing mutual recognition of standards across member countries (ASEAN, 2010) a framework that could be adopted by other RECs to improve intra-regional trade

## **2.7. Research Gaps**

Jordaan (2015) studied the impact of Regional Integration on the levels of intra-African trade. He concluded that what is needed in Africa is a process of deeper regional integration where resources are effectively pooled to form a single competitive market based on the correct comparative advantage and economies of scale to participate in the global market. Grant (2016) studied the role of trade integration in Development in the EAC. The study concluded that internal tariff elimination has increased intra-regional trade in the EAC through increased market access. None of these studies looked at factors influencing intra-regional trade. This study fills the gap by studying the factors influencing intra-regional trade in the East African Community.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Introduction**

This chapter explains the research methodology of the study and justifies the research methods used by the researcher in conducting the study. It covers the research design, population of the study, sampling procedure, data collection procedure, data analysis and research instruments. Kothari and Garg (2014) describe methodology as the science or logic behind the choices taken by the researcher in choosing certain methods and why others are not appropriate. It enables the researcher to scientifically solve his problem systematically and appropriately.

#### **3.2. Research Design**

This study adopted a descriptive research design methodology. Descriptive research examines a phenomenon occurring at a specific place and time. It is concerned with conditions, practices, structures, differences or relationships that exist (Kothari & Garg, 2014). Cooper and Schindler (2011) state that descriptive design descriptive study is concerned with finding out the what, where and how of a phenomenon. This study aimed at establishing the factors that influence intra regional trade within the EAC. Descriptive research was appropriate for this study, since the researcher collected detailed information through descriptions of the variables.

#### **3.3. Target Population**

According to Cooper and Schindler (2011), a population is a well-defined or set of people, events, or records that contain the desired information and can answer the measurement question. The target population for this study is the member states of the East African Community. According

to the East African Community secretariat, there are 6 member countries that constitute the EAC. These are Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan.

### **3.4. Sampling technique and sample size**

The study adopted convenience sampling for the five EAC Region Countries that were sampled. The countries are, Kenya, Uganda, Tanzania, Rwanda and Burundi. According to Cooper and Schindler (2011), convenience sampling involves drawing samples that are both easily accessible and willing to participate in a study. For this matter, the researcher selected the five countries due to availability of information and small number of member states in the EAC.

### **3.5. Data Collection Instruments**

The study employed secondary data. The data were drawn from different sources and compiled to suit the analysis. The secondary data collection instruments used were documentary sources and publications. Trade flow data was extracted from the Commodity Trade Statistics (COMTRADE), IMF data, World Bank, and EAC databases. Kenya's Economic surveys from the Kenya National Bureau of Statistics and the Central bank of the EAC partner states data was also used. The study used data for the period 2011 to 2016.

### **3.6. Data Collection Procedures**

Data was collected from secondary sources such as IMF and EAC databases. Upon completion of the data collection exercise, all completed research instruments were assembled, coded and analyzed using the statistical package for social science (SPSS). Secondary data was used in this study because in this context it was cost effective and less cumbersome than primary data.

### 3.7. Data presentation and analysis

Data was analyzed using descriptive statistics, the measures of central tendencies such as the mean, mode and standard deviation. Presentations was be done in tables. Further analysis namely the regression analysis was done to test the relationship between EAC intra-regional trade and tariffs, physical infrastructure and non-tariff barriers.

$$Y = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \varepsilon$$

Where:

**Y** = Intra-regional trade ; Measured by the value of Kenya's Exports to the East African Community per year

**$\beta_0$**  = constant (coefficient of intercept),

**X1**= Tariffs; Measured by Value Added Tax charged to all imports in the EAC

**X2**= Transport infrastructure; Measured by the cost of transport and time taken to transport cargo in the EAC

**X3**= Non-tariff Barriers; Measured by the number of permits, licenses and border fees charged on imports in the EAC

t = Time period

**$\varepsilon$**  = error term represents the deviations of the observed values Y, from their mean.

**$\beta_1, \dots, \beta_3$**  = regression coefficient of three variables.

# **CHAPTER FOUR**

## **RESEARCH FINDINGS AND ANALYSIS**

### **4.1. Introduction**

Intra-regional trade refers to trade which focuses on economic exchange primarily between countries of the same region or economic zone. Regional trade integration is an important pillar of trade and investment policy in the EAC countries. The objective of the study was therefore to determine the factors that influence regional trade within the East African Community customs union. Secondary data was employed as the data collection instrument in the study. This chapter is a presentation of results and findings obtained from the data. Descriptive and inferential statistics have been employed for analysis . Regression analysis and ANOVA specifically have been used to establish the significance and fitness of the model and to establish the link between the effect of tariff, transport infrastructure and non-tariff barriers on the value of Kenya's exports in the East African Community. Descriptive Statistics of the Population summarizes the population characteristics between tariff, transport infrastructure, non-tariff barriers and the value of Kenyan exports.

### **4.2. Descriptive Statistics**

Descriptive statistics was used to provide insights into the pattern of the trend of the data. The descriptive statistics techniques used in the study include mean, mode and standard deviations, variance, maximum and minimum.

**Table 4.2. Descriptive Statistics**

	N	Minimu m	Maximu m	Sum	Mean	Std. Deviation	Variance
IN %	24	18.00	20.00	438.00	18.2500	.67566	.457
TRANSPORT COST/ROAD FRIGHT(USD)	24	1600.00	7550.00	93387.0 0	3891.125 0	1895.7303 6	3593793.59 2
IN HOURS	24	76	240	3568	148.67	53.064	2815.797
NUMBER OF TRADE DOCUMENTS	24	9	11	237	9.88	.797	.636
IN USD	24	285.00	1300.00	15816.0 0	659.0000	303.82919	92312.174
VALUE OF KENYAN EXPORTS(USD )	24	62.7	855.2	8503.9	354.329	269.9914	72895.344
Valid N (listwise)	24						

Table 4.2. above shows the descriptive statistics for the variables under study with 24 observations each from the time series data and industry. As indicated in table, the value of Kenyan exports had a mean of 354.329, VAT had a mean of 18.25, transport costs had a mean of 3891.1250, trucking time had a mean of 148.67, number of permits and licenses had a mean of 9.88, border charges had a mean of 659.00

### 4.3. Inferential Statistics

#### 4.3.1. Correlation analysis

Pearson correlation was used to examine if there was correlation or degree of association between the tariff, transport infrastructure non-tariff barriers and the value of Kenyan exports in the EAC.

The correlation summary in the tables below indicate the associations between each of the independent variables and the dependent variable were all at the 95% confidence interval.

**Table 4.3. (a) Co-relation between value of exports and VAT**

		VALUE ADDED TAX %	VALUE OF KENYAN EXPORTS(USD)
VALUE ADDED TAX %	Pearson Correlation	1	-.178
	Sig. (2-tailed)		.405
	N	24	24
VALUE OF KENYAN EXPORTS(USD)	Pearson Correlation	-.178	1
	Sig. (2-tailed)	.405	
	N	24	24

The correlation analysis between VAT and value of exports is ( $r=-0.178, p<0.05$ ), implying that there is a weak negative correlation between VAT and value exports, indicating that an increase in VAT would have a negative effect on the value of exports. Higher value of taxes would reduce the value of exports.

**Table 4.3. (b) Correlation between value of exports and trucking time**

		VALUE OF KENYAN EXPORTS(USD )	TRUCKING TIME IN HOURS
VALUE OF KENYAN EXPORTS(USD)	Pearson Correlation	1	-.762**
	Sig. (2-tailed)		.000
	N	24	24
TRUCKING TIME IN HOURS	Pearson Correlation	-.762**	1
	Sig. (2-tailed)	.000	
	N	24	24

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation between trucking time in hours and value of exports indicates a strong negative correlation of (-0.762,  $p < 0.01$ ) This implies that the amount of time taken in moving cargo has an impact on value of goods traded. This implies that if the trucking hours are increased the value of exports will decrease.

**Table 4.3. (c) Correlation between transport costs and value of exports**

		VALUE OF KENYAN EXPORTS(USD)	TRANSPORT COST/ROAD FRIGHT(USD)
VALUE OF KENYAN EXPORTS(USD)	Pearson Correlation	1	-.726**
	Sig. (2-tailed)		.000
	N	24	24
TRANSPORT COST/ROAD FRIGHT(USD)	Pearson Correlation	-.726**	1
	Sig. (2-tailed)	.000	
	N	24	24

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis to determine the relationship between value of exports and transport costs indicates a strong negative correlation of ( $r=-0.726, p<0.01$ ). This shows that transport costs have an effect on value of goods. This implies that if the transport costs are increased the value of exports decreases and vice versa. This implies that if countries in the EAC can formulate policies that improve the infrastructure that would reduce transport costs then the value of goods traded in the region could increase.

**Table 4.3. (d) Correlation between value of exports and number of permits, licenses**

		VALUE OF KENYAN EXPORTS(USD )	NUMBER OF PERMITS,LICE NCES
VALUE OF KENYAN EXPORTS(USD)	Pearson Correlation	1	.562**
	Sig. (2-tailed)		.004
	N	24	24
NUMBER OF PERMITS,LICENCES	Pearson Correlation	.562**	1
	Sig. (2-tailed)	.004	
	N	24	24

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis between number of permits and licences and value of exports is ( $0.562, p<0.01$ ). This implies the value of exports would decrease as the number of licenses and permits increase. This implies the number permits and licences need to decreased for efficient trade to take place.

**Table 4.3. (e) Correlation between the value of exports and border charges**

		VALUE OF KENYAN EXPORTS(USD )	BORDER CHARGES (USD)
VALUE OF KENYAN EXPORTS(USD)	Pearson Correlation	1	.118
	Sig. (2-tailed)		.582
	N	24	24
BORDER CHARGES (USD)	Pearson Correlation	.118	1
	Sig. (2-tailed)	.582	
	N	24	24

Finally the correlation between border charges and value of exports is (0.118,  $p > 0.05$ ). This implies that border charges increases has a negative effect on the value of exports as it decrease the value of the exports . .

#### 4.4. Regression Analysis

**Table 4.4. (a) Regression Model Summary**

Model Summary Output				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.903 <sup>a</sup>	.816	.751	134.7495

a. Predictors: (Constant), BORDER CHARGES (USD), YEAR, VALUE ADDED TAX %, TRANSPORT COST/ROAD FRIGHT(USD), NUMBER OF PERMITS,LICENCES, TRUCKING TIME IN HOURS

The above table indicates that coefficient of determination that is the percentage variation determination in the dependent variable is supported by the independent variables. The R square is 0.903 meaning that the predictor variables in the study which are VAT, transport costs, trucking time in hours, number of permits and licences and border charges explain 90.3% change in the

dependent variable value of Kenyan exports . Adjusted R squared was 0.816 an indication that the variation is 81.6 changes in value of exports could be because of transport charges, trucking time in hours, number of permits and licences and border charges . R is the correlation coefficient which shows the relationship between study variables and 0.751 shows a strong positive correlation.

**Table 4.4(b) Distribution of co-efficient**

		<b>Co-efficients<sup>a</sup></b>				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	353.533	1127.151		.314	.758
	VALUE ADDED TAX %	31.997	47.933	.080	.668	.513
	TRANSPORT COST/ROAD FRIGHT(USD)	-.063	-.072	-.440	-3.869	.008
	TRUCKING TIME IN HOURS	-6.914	2.815	-1.359	-2.456	.025
	NUMBER OF PERMITS,LICENCES	48.585	67.615	.143	.719	.482
	BORDER CHARGES (USD)	-.443	.143	-.498	-3.092	.007

a. Dependent Variable: VALUE OF KENYAN EXPORTS(USD)

From the analysed data the regression equation is ;

$$Y = 353.533 + 0.080X_1 - 0.440X_2 - 1.359X_3 + 0.143X_4 - 0.498X_5 + e., \text{ where}$$

X1 is Value added tax , X2 is transport cost , X3 is trucking time in hours and X4 is number of licences and permits and X5 is the border charges. Regression results have indicated as  $\beta_1=0.080$ ,  $p=0.79=$ ,  $t=.668$  implies that as much as the VAT doesn't have much effect on the value of export. However, the individual traders in the region are the ones who feel the pinch when transacting as it is imposed on all imports traded in the region. The value of VAT has been consistently at about

18% implying that the changes in the value of exports are significantly explained by the other variables to a larger extent than the tariff.

Transport cost has indicated  $\beta_2 = -0.440$ ,  $p = 0.03$ ,  $t = -3.668$  implies that if the transport cost increases then the value of export decrease as it is 44% . The regression results revealed that  $\beta_3 = -1.359$ ,  $p = 0.025$ ,  $t = -2.456$  implies that the value of export is at is at 13.59% this implies that the trucking time needs to be improved. The above indicators show that transport has a very huge impact on the value of trade. It implies that an increase in transport costs and time taken in the movement of cargo has a significant negative effect on the value of trade. It implies that improvement in the transport infrastructure could greatly improve the value of intra-regional trade.

The regression analysis indicates that  $\beta_4 = 0.143$ ,  $p = 0.482$ ,  $t = -0.719$  that implies at 14.3% significance of the number of permits and licences. This is an indication that the number of licenses do not have a huge significance in the value of exports. Lastly the regression analysis results indicated that  $\beta_5 = -0.498$ ,  $p = 0.007$ ,  $t = -3.092$  implies the border charges is at 4.98% this implies that there is need to decrease the border charges to increase value of exports .

**Table 4.4.(c) ANOVA**

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1367916.711	6	227986.118	12.556	.000 <sup>b</sup>
	Residual	308676.199	17	18157.423		
	Total	1676592.910	23			

a. Dependent Variable: VALUE OF KENYAN EXPORTS(USD)

b. Predictors: (Constant), BORDER CHARGES (USD), YEAR, VALUE ADDED TAX %, TRANSPORT COST/ROAD FRIGHT(USD), NUMBER OF PERMITS,LICENCES, TRUCKING TIME IN HOURS

From the ANOVA table the study indicates that the regression model has a significance level of 0.01% which is an indication that the data was ideal for making conclusion on a population parameters as the value of significance was less than 0.05. F (12.556) statistics is the regression mean divided by the residual mean the significant value shown by 0.001 is smaller than estimated value of 0.05 which implies that the data was significant for making conclusion, that is the predictor variable; transport charges, trucking time in hours, number of permits and licences and border charges. The p value was 0.001 which is less than 0.05 indicates that the model term is significant at the 95% level of confidence. The regression model is fit for data analysis.

#### **4.5. Interpretation of findings**

The study found that the regression equations for the period 2011 to 2016 related the Value of Kenya's EAC exports(dependent variable) to Value Added Tax, transport costs, trucking time, number of permits and licenses and border charges ( independent variables). From the findings of the model summary from 2011 to 2016, 90.3 % of the value of Kenyan exports was explained by the independent variables investigated in the study while other factors not studied contributed to 9.7%. From the model, taking all factors (VAT, transport costs, trucking time, number of permits

and licenses and border charges ) constant at zero, value of Kenyan exports would have an autonomous value of 353.533. The effect of VAT as a tariff charged on imports is minimal as it has been fairly constant in the region in the years captured in the study. It is however charged on all imports in the EAC and therefore its burden is felt by the individual traders who would benefit from its elimination. This is in line with Munyao (2016) who in his study of the challenges facing the implementation of the EAC protocol observes that internal tariff of VAT and excise have had minimal impact on trade within the EAC.

The indicators of transport infrastructure have a huge impact on the value of exports. A unit increase in transport costs would lead to a decrease in the value of exports by 0.44. This means improving the transport infrastructure would go a long way in improving trade in the EAC. UNCTAD (2016) notes that intra-regional trade crucially depends on the movement of cross-border transit trade. Distance, logistics performance, connectivity and border management are major determinants of trade costs, more so than tariffs. The results are agreeable with (Munyao, 2016) who contends that trade-related infrastructure within the EAC is highly inefficient and inadequate. Inability to transport goods and people efficiently, coupled with inadequate power supply to operate machinery and facilities smoothly, leads to micro as well as macroeconomic imbalances.

Non tariff barriers in the form of permits, licenses have been constant in the EAC over time and therefore their impact is minimal. However, they need to be reduced in line with a competitive global trading environment. Border charges have a negative effect on the value of exports. They are impediments to trade. (COMESA, 2013) notes that, non tariff barriers , due to their unpredictability and persistence, continue to influence trade patterns and restricting market access

to regional exporters thus denying consumers' welfare enhancing opportunities, which arise from access to, reasonably priced regional imports.

These findings are in line with those of Munyao (2016) in his study on challenges and opportunities facing the implementation of the EAC common market. He observed that the EAC member countries had a potential to benefit further from trade through lowering of the common external tariffs & eliminating internal tariff like VAT and integrating further. He observes that the impacts of the internal tariff which in the EAC are not harmonized lead to price distortions for similar products and unfair competition. He argues that harmonization and eventual elimination of these tariffs would lead to increased efficiency as a result of fair competition in the markets. He further demonstrate that

The findings also agree with Limão & Venables (2011) who studied the relationship between infrastructure and intra-regional trade. They primarily state that poor infrastructure accounts for 40% of the transport costs of coastal countries and 60% of the transport costs of landlocked countries. Thus improving their own and the transit country's infrastructure would overcome more than half of the disadvantage of being landlocked. Using a gravity model they find that poor infrastructure is damaging to trade. Dicken (2012) in his study on the impact of transport an infrastructure on international trade avers that transport infrastructure policies are more important to trade costs than direct policy instruments such as tariffs and quotas. Moreover, he states that infrastructure is likely to have a considerable effect on the time costs of trade, and that therefore a better infrastructure would consequentially improve trade.

These findings agree with the position held by Bose (2013) who carried out a study on the effect of Non-Tariff Measures on Imports, by using bilateral trade data where ordinary least squares

Poisson Model, Negative Binomial Poisson Model, and Zero Inflated Negative Binomial Poisson Model were compared and applied on to the gravity equation. As control variables, common border and common language are used. The main conclusion is that there is evidence that Non Tariff Measures s have a negative and positive impact on imports and the probability to trade. The overall effect of NTMs on imports is negative.

## **CHAPTER FIVE**

### **SUMMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1. Summary of findings**

The study was guided by one major objective namely to examine the factors influencing intra-regional trade in the EAC. The findings were as follows. The dependent variable (value of Kenyan exports for the year 2011 to 2016) when all the five independent variables (VAT, transport costs, trucking time, number of permits and licenses and border charges ) are combined was measured. The study found out that 90.3 percent of the of the value of Kenyan exports in the study period of 201 to 2016 was attributed to the five independent variables investigated under this study. The findings from the study reveal that the influence of value added tax on the value of exports is minimal. Transport costs and trucking time as measures of transport infrastructure have a huge impact on the value of exports. It is evident from the study that high transport costs are impeding the vaue of intra-regional trade in the EAC. The number of permits and licenses charged on imports and border charges incurred on imports as a measure of non-tariff barriers also were proved to have a negative effect on trade in the EAC.

#### **5.2. Conclusions**

From the analysis it can be noted that:

1. Tariff in the form of VAT has a minimal negative effect on the value of goods traded in the EAC. There is need to harmonize and eventually eleimnate all internal tariif in the EAC. Kenya's exports are subjected to a VAT charge of 18% while Kenya charges a VAT rate of 16% on all imprts from other EAC member states. Complete elimination of all internal tariff in the EAC would

lead to increased trade as the prices of similar goods and investments will be based on fair competition.

2. Transport infrastructure as measured by the transport costs and trucking time are high in the EAC. Consequently, the value of goods traded reduces significantly. High transport costs has been identified as a major factor that contributes to the low value of intra-regional trade in the EAC. This implies that the region is grappling with poor transport infrastructure, that consequently leads to high transport costs. High transport costs leads to high cost of doing business, this could divert potential foreign direct investment from the region to more friendly investment destinations.

3. Non-tariff barriers- which is measured by the number of permits, licenses and border charges have a negative effect on the value of goods traded. They are impediments to trade as they increase the cost of business. Non-tariff barriers are unpredictable and inconsistent and therefore will arise at different times and are more rampant than tariff barriers. The occurrence of various permits and licenses is an implication of duplication of activities, inefficiencies, lack of co-ordination among agencies, high compliance costs all of which hamper trading activities. Border charges are also a trade barrier as they restrict movement by increasing cost of trading across borders, hence reducing the values of cross-border trade.

### **5.3. Recommendations**

1. Member states should hasten harmonization of tax regimes as this will reduce the trade imbalances, tax evasion schemes like smuggling as there will be no incentive to avoid official border points. The member states should also fast track the elimination of all internal tariffs in order to ensure there is fair competition in the trading environment based on effective allocation of resources.

2. The transport infrastructure in the EAC region needs to be greatly improved. This will go a long way in reducing the high transport costs in the region that negatively affect trade. We have the Northern Transport Corridor road network which runs from Mombasa through Nairobi to Uganda, Rwanda and South Sudan. The Central Transport Corridor runs from Dar-es-Salaam to Bujumbura and Kigali. These are the main road transport corridors in the region. Repairs and maintenance of these routes is critical in ensuring trade in the region is optimal. Railway networks which are part and parcel of these projects will revolutionize long distance transport in the region and offer alternative to road transport. Rwanda and Tanzania are also working on their standard gauge railway -Isaka-Kigali standard gauge railway (SGR) that will run on the central corridor, while Kenya has already embarked on the construction of the Standard Gauge Railway (SGR) that is expected to run all the way to Uganda and Rwanda -with a branch to Kisumu.

3. The member states should work towards complete elimination of non-tariff barriers so as to ease regional trade. Member states should realize that opening up the borders will eventually lead to balancing of industry concentration and thus there is no need to artificially protect domestic industries. There should be a mechanism of not only monitoring NTBs but also laws to deal with members who sustain them at the expense other member states. The EAC secretariat has a non-tariff barrier monitoring committee that should be strengthened in order to carry out its mandate more effectively.

#### **5.4. Areas for future Research**

The present study looked at the factors influencing intra-regional trade in the EAC. Due to unavailability of data we excluded other variables. Future study could focus on an in depth look on

other variables such as GDP, dependence on foreign aid, industry concentration, that may affect trade in the EAC. This study excluded other variables because of cost constraints.

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## APPENDICES

### Appendix 1: Data Collection sheet

<b>Uganda</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Value Added Tax (%)	18	18	18	18	18	18
Transport Cost/Road freight (USD)	3210	3070	2950	2867	2174	2200
Trucking Time (Hrs.)	130	120	115	112	110	100
Number of Trade Documents(permits ,licenses, certification	11	10	10	10	10	10
Border charges (truck entry fees, road user fees)(USD)	494	482	460	435	412	412
<b>Value of Kenyan Exports (USD Millions)</b>	<b>855.2</b>	<b>796.2</b>	<b>759.0</b>	<b>691.3</b>	<b>695.5</b>	<b>612.4</b>
<b>Tanzania</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Value Added Tax (%)	18	18	18	18	18	18
Transport Cost/Road freight charges (USD)	2200	2100	1900	1700	1650	1600
Trucking Time (Hrs.)	98	94	91	86	80	76
Number of Trade Documents(permits ,licenses	11	10	11	11	11	11
Border charges (truck entry fees, certification, road user fees	1,300	1,250	1,220	1,100	1,000	800

<b>Value of Kenyan Exports (USD Millions)</b>	<b>470.0</b>	<b>543.5</b>	<b>470.2</b>	<b>485.9</b>	<b>341.4</b>	<b>342.8</b>
<b>Rwanda</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Value Added Tax (%)	20	18	18	18	18	18
Transport Cost/Road freight charges (USD)	5600	4650	4900	4833	3550	3633
Trucking Time (Hrs.)	180	176	174	172	170	168
Number of Trade Documents(permits ,licenses	10	9	9	9	9	9
Border charges (truck entry fees, road user fees) (USD)	598	575	560	545	530	285
<b>Value of Kenyan Exports (USD Millions)</b>	<b>152.6</b>	<b>190.7</b>	<b>156.8</b>	<b>164.2</b>	<b>182.1</b>	<b>172.4</b>
<b>Burundi</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
Value Added Tax (%)	20	20	18	18	18	18
Transport Cost/Road freight charges (USD)	7,550	7,000	6,800	6,350	6,000	4,990
Trucking Time (Hrs.)	240	228	216	212	210	210
Number of Trade Documents(permits ,licenses,	10	10	10	9	9	9
Border charges (truck entry fees, road user fees) USD	650	600	510	490	444	444
<b>Value of Kenyan Exports (USD Millions)</b>	<b>66.5</b>	<b>62.7</b>	<b>65.0</b>	<b>89.3</b>	<b>66.9</b>	<b>71.3</b>

Source: World Bank Reports & IMF non tariff barrier report, EAC Trade and Investment Reports (2010-2016), Northern Corridor Transit and Transport Co-ordination Authority



