THE EFFECT OF NON-TARIFF BARRIERS ON ECONOMIC PERFORMANCE OF COMESA COUNTRIES

BY

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DECLARATION

This research project is my original work and has not been submitted for examination to any other University.

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This research project has been submitted with my authority as the University Supervisor.

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DEDICATION

This project is dedicated to Reiner though it might not have a meaning to her at this time it will be drive to her in future when she identifies and acknowledges the best investment one can ever have in life.
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LIST OF ABBREVIATION AND ACRONYMS

CET: Common External Tariff
COMESA: Common Market for Eastern and Southern Africa
EAC: East African Community
GATT: General Agreement on Tariffs and Trade
GDP: Gross Domestic Product
IMF: International Monetary Funds
ISI: Import Substitution Industrialization
NTB: Non Tariff Barriers
NTM: Non-Tariff Measures
OECD: Organisation for Economic Co-operation and Development
PTA: Preferential Trade Agreement
SPS: Sanitary and Phytosanitary
TBT: Technical Barriers to Trade
TRI: Trade Restrictiveness Index
TRQ: Tariff Rate Quotas
UNCTAD: United Nations Conference on Trade and Development
UNECA: United Nations Economic Commission for Africa
WTO: World Trade Organisation
ABSTRACT

The main purpose of this research was to establish the effect of non-tariff barriers on economic performance of Comesa countries. The study used qualitative research design. The sample size of the study constituted nine Comesa countries. Data for the study was obtained from the IMF Annual country reports for countries involved in the study. The results from the regression analysis indicated that only 62.14 percent of variations on economic performance of the countries could be attributed to determinants such as import licenses, trade quotas, and production subsidies and the remaining portion being influenced by other factors. This study further revealed that the determinants such as such as import licenses, trade quotas, and production subsidies were directly related to the economic performance among Comesa countries as was measured. This implies that effective management of determinants such as import licenses, trade quotas, and production subsidies can be implemented to improve levels of economic development. 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 coefficient was observed. The raw data obtained from the IMF country reports under study were analyzed using Ms Excel spreadsheets after which regression analysis was performed. Ordinary Least Square (OLS) regression found that import licenses had a positive relationship with the economic performance of the various Comesa countries. The findings from the study confirmed that trade quotas and productions subsidies had varying degrees of relationship with the economic performance of the Comesa countries. The study revealed that import licenses positively influenced economic performance, trade quotas was positively correlated with the economic performance and Production subsidies negatively influenced the economic performance of the Comesa countries. This study therefore recommended that the Comesa countries should handle their import licenses and trade quotas appropriately as the changes in import licenses and trade quotas affect the economic performance of the Comesa countries.
CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Regional integration has been recognized to be an important means for economic advancement and development especially in the era of increased globalization. Regional economic integration through free trade and the mobility of production factors are the key drivers of this process. Global economic integration, however, is not a new phenomenon. Some communication and trade took place between distant civilizations even in ancient times. Since the travels of Marco Polo seven centuries ago, global economic integration through trade, factor movements and communication of economically useful knowledge and technology has been on a generally rising trend (Mussa, 2000). This process of globalization in the economic domain has not always proceeded smoothly due to occasional interruptions such as the collapse of the Roman Empire and during the interwar period. Despite these challenges, the degree of economic integration among different societies around the world has generally been rising. Indeed, during the past half century, the pace of global economic globalization including the reversal of the interwar decline has been particularly rapid (Mussa, 2000).

According to Limao and Venables (2001) regional economic communities may help countries adopt policies, build institutions, and develop the infrastructure needed to expand trade in goods and services. Jansen and Vennes (2006) stress that regional integration can help increase the benefits accruing from participation in international
trade and simultaneously reduce the associated costs. Regional integration will help the participating countries liberalise trade policy relatively cheaply, reduce the risk of possible protectionist measures on the part of trading partners, boost intra-regional trade, and overcome domestic political resistance to broader trade liberalisation.

Regional trade integration has also been argued to contribute to economic growth and development either by trade creation or trade diversion (Mindiye, 2012). Economic development is an effort by policy intervention that aims economic and social wellbeing of the people that is perceived from changes in terms of trade, while economic growth is a rise in GDP, that is, an increase in the volumes of goods and services produced and exchanged. After 1970’s closed world economy has been opened their border for the sake of free trade and comparative advantage which resulted to a world trade increase since 1975-2000 in the global market (Sawyer & Sprinkle, 2004).

Africans slower and stagnant stages of development for the past five centuries started to follow the suite developed countries. Africans won independence in the 1950s and 1960s that gradually created the idea of regional economic cooperation due to pan African solidarity. In 1965 UNECA convened a meeting to consider proposals for regional economic integration for independent states of eastern and southern African nations (COMESA website, 2015).

1.1.1 Non Tariff Barriers
The definitions of non tariff barriers (NTB) are varied and several scholars have attempted to explain this concept. Giermanski (1994) defines NTBs as barriers to trade that are not tariffs and include both trade-restricting measures like quotas and technical
barriers; and trade-promoting measures such as export subsidies this are Import quotas which are the quantitative limit on imports, Voluntary export restraint this are the quantitative limit on exports based on threat of import restriction, Tariff quota this is where imports are allowed to enter the country at allow or zero tariff up to a specified quantity then a higher tariff is imposed above this quantity, domestic content provision this is where there is discrimination against imports by writing or enforcing standards in a way that adversely affects imports more than domestic consumption and import license which requires importers to apply for and receive approval for intended imports.

NTBs refer 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. NTBs have also been referred to as Non-Tariff Measures in some literature. The term ‘Non-Tariff Barriers’ apparently originated in connection with the recognition that tariffs were being replaced by restrictive trade policy and other interventions, now widely called NTBs (Okumu and Nyankori, 2010). NTB is any measure that impedes international trade other than tariffs (SADC, 2006).

According to Giermanski (1994), NTBs can include items such as quotas which are numerical limits of how much of an imported product can be entered into a country, or health and safety barriers which take the form of standards which attempt to protect the

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end user from a potentially negative impact from an imported product. Wilson (2001) explains that while some NTBs address market failures such as externalities and information asymmetries between consumers and producers, there are concerns that many NTBs may exist as disguised protectionism. These NTBs may also be discriminatory and unjustified among World Trade Organisation (WTO) members who have made commitments to the Agreement on Technical Barriers to Trade.

There is the difference between the free world price of a product and the domestic price which is protected by NTBs. If world prices are genuinely free, they can be obtained from world commodity markets. They can then be compared directly with the domestic prices of identical products. It might also be possible to use an economic model of an industry, together with relevant supply and demand elasticities, to compute the price wedge based on observed changes in the volume of production and trade. Since no central records exist for non-tariff nominal equivalents, they must be independently estimated. As far as modeling disaggregated trade flows with a global scope is concerned, this approach is deemed impractical because it usually involves collecting data from various sources that not readily available (Mindiye, 2012).

1.1.2 Economic Performance

The concept of performance is a reference both in theoretical approaches and in practice due to the fact that the field of economic performance includes various terms, through the most important we can mention competitiveness, productivity, profitability, business growth. The concept of "performance" is a pluralistic and demonstrates the ability to migrate from one semantic register to another. The fact that this concept is a mobile one is also suggested by the new quantitative dimensions assigned by literature and practice (Beghin and Bureau, 2001).
Gradually, the concept of performance began to be used increasingly in other areas, especially in the economic field. Although it seems a paradox, however, regarding the performance a connection between sports and economic entity can be achieved. If an athlete in sport performance can be defined as exceeding targets units proposed by him or getting better results than his opponents in competition, for an economic entity performance can be defined by or reported to the objectives and competitive environment. Therefore performance is based on the notion of comparison (Mawson, 2002).

Economic field are known by variety of definitions given to the concept of performance due to the fact that this concept is defined differently depending on the user of the information about performance. Thus the current and potential investors perceive their performance in terms investment profitability, managers are oriented on the overall performance of the organization they lead, employees perceive performance through profitability and stability of their job and creditors manifest interest towards organization’s stability (Beghin and Bureau, 2001).

Gross domestic product the most comprehensive measure of economic activity is a key gauge for analysts evaluating an economy’s performance. Because GDP captures the market value of all final goods and services produced in a geographic area within a given period, it is often viewed as the most comprehensive measure of that area’s economic activity (Mawson, 2002).
1.1.3 Effect of Non-Tariff Barriers on Economic Performance

Ardakani et al. (2009) identifies four measures for identifying NTBs and for estimating their impact on economic performance: frequency and coverage type, price-comparison, quantity-impact and welfare-impact. Beghin and Bureau (2001) and Deb (2006) provide a comprehensive review of the approaches used to assess the implication of NTBs on agricultural trade. They categorize the approaches into eight groups: the price-wedge method, inventory-based approaches, survey-based approaches, gravity-based approaches, risk-assessment-based cost-benefit measures, stylized microeconomic approaches, and the use of sectorial or multimarket models. The authors note that a single analytical method may not be adequate to quantify the cost of the entire spectrum of NTBs. Given the heterogeneous nature of NTBs, the authors concluded that a unifying methodology does not exist. Quantification of the effects of such measures has therefore focused on a particular product and has relied on methods that belong to different fields of economic literature. Deb (2006) provides comprehensive review of the existing approaches to quantify the implications of NTBs. The approaches include those by Beghin and Bureau (2001) in addition to: frequency-type measures; quota-auction price measures; tariff equivalent; Trade Restrictiveness Index (TRI); effective protection; and measure of equivalent of nominal rates of assistance.

In assessment of NTMs on goods trade in EAC, and identifying priorities for practical steps to reduce and eliminate them, the World Bank (2008) uses survey-based and descriptive approaches to analyse its findings. The EABC identifies the nature and extent of NTBs applied within the EAC using descriptive measures. In the above reviewed methodologies, most of the approaches are for analysis of impact of NTBs/NTMs on
trade and welfare. Those focusing on identification of NTBs/NTMs are frequency and coverage type measures, frequency and coverage indexes, and the descriptive approach (Beghin and Bureau, 2001).

The phenomenal differences among the growth rates of the East Asian, the Latin American, and Sub-Saharan African countries over the last several decades have stimulated a renewed interest in the effects of trade policies on growth. During most of the 20th century, import substitution industrialization (ISI) strategies dominated most developing countries’ development strategies. While developing countries in Latin America that followed ISI strategies experienced relatively lower growth rates, East Asian countries, that employed export-promotion policies, consistently outperformed other countries. This probably explains why a growing body of empirical and theoretical research has shifted towards examining the relationship between trade liberalization and the economic performance of countries since the late 1970s (Deb, 2006).

1.1.4 Common Market for Eastern and Southern Africa

The Treaty establishing Common Market for Eastern and Southern Africa (COMESA) was signed on 5th November 1993 in Kampala, Uganda and was ratified in 1994 in Lilongwe, Malawi on 8th December 1994. Member countries are Angola, Burundi, Comoros, D.R. Congo, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. COMESA replaced the former Preferential Trade Area (PTA) which had existed from the earlier days of 1981. COMESA was established ‘as an organisation of free independent sovereign states which have agreed to co-operate in developing their
natural and human resources for the good of all their people’ (ACTRAV, 2012). Its main focus is on the formation of a large economic and trading unit that is capable of overcoming some of the barriers that are faced by individual states. COMESA is Africa’s largest economic community with a total population of around 430 million and an estimated combined GDP of US$ 447 billion. The main goals of COMESA are to eliminate the structural and institutional weaknesses of member states and to promote political stability and sustained economic development.

The Treaty establishing COMESA binds together free independent sovereign States which have agreed to co-operate in exploiting their natural and human resources for the common good of all their peoples. In attaining that goal, COMESA recognises that peace; security and stability are basic factors in providing investment, development, trade and regional economic integration (ACTRAV, 2012). The most common non-tariff barriers encountered within the bloc are cumbersome quality inspection procedures, prohibitive transit charges, and arbitrary application of rules of origin (The East African, 2010). Faced with these NTBs, the Common Market for Eastern and Southern Africa has drafted new rules to empower its Secretariat to penalise countries that introduce restrictive trade practices and other forms of non-tariff barriers within the trading bloc.

The Eastern and Southern Africa region presents numerous challenges to building trade capacity arising from deficient infrastructure, inefficient customs and ports, inadequate usage of information and communication technology, poor access to insurance and trade finance, and pervasive non-tariff barriers. However, the region also has to its credit, a number of achievements. COMESA has moved beyond a free trade area premised on
rules. It is about to launch a customs union. It has clear and streamlined rules of origin, a regional competition policy, a dispute settlement mechanism, and regulations relating to safeguards and unfair trade (Seetanah et al., 2013).

The non-tariff barriers (NTBs) to trade in COMESA included the COMESA protocol, NTBs means “laws, regulations, administrative and technical requirements other than tariffs imposed by a partner state whose effect is to impede trade (Seetanah et al., 2013).

As a customs union, the COMESA has succeeded in abolishing intra-COMESA tariffs and adopting a common external tariff (CET) towards imports from non-COMESA.

1.2 Research Problem

“Openness to trade increases poverty” is a statement made by anti-globalisation advocates. They argue that trade liberalisation is the systematic dismantling of trade barriers, which leads to high unemployment, less economic growth and high food prices. On the other hand, advocates of trade liberalisation have argued that it ensures availability of food and boosts rural incomes, thereby reducing poverty in the poorest countries (Manchine, 2005). According to the IMF (1997), policies toward foreign trade are among the more important factors promoting economic growth and convergence in developing countries. Krueger (1998), judges that it is straightforward to demonstrate empirically the superior growth performance of countries with "outer-oriented" trade strategies.

According to Stiglitz (1998), most specifications of empirical growth regressions find that some indicator of external openness—whether trade ratios or indices or price distortions or average tariff level—is strongly associated with per-capita income growth.
However, despite these assertions, the benefits of economic integration in Africa is yet to realized, despite having numerous economic integration across the continent. The continent continues experience trade imbalance as it imports more than it exports. The trade is in favour of other giants like the Europian Union and the USA. Others are China and other emerging economies. Out of 19 members of COMESA 10 countries are the poorest in the world and seven countries are the most distressing that cannot function as a modern nation. This is even after more than nine countries having removed trade policies by removing trade barriers to 0% (Mindiye, 2012). It is therefore necessary to carryout a study to determine the effect of non-tariff barriers in COMESA on the economic performance of member states.

Several studies have been done on the COMESA and its effect of trade in Kenya. Rahedi (2003) did a study on the effect of COMESA on the export of manufactured products from Kenya. Another study was by Masawi (2007) who looked at the influence of factors influencing Kenya’s full participation in COMESA by Kenya Manufacturing firms. Also, Wasilwa (2008) did a study on the Challenges posted by COMESA on sugar millers in Kenya. While these studies are of importance to the researcher, none was done on the effect of non-tariff barriers in COMESA on the economic development, hence a knowledge gap. This study seeks to fill this gap by answering the question as to what is the effect on non tariff barriers on the economic performance of the COMESA member countries?
1.3 Objective of the Study

To determine the effect of non-tariff barriers on economic performance COMESA countries.

1.4 Value of the Study

Elimination of trade impediments within the COMESA region is expected to promote regional economic integration and hence growth through increased investment levels, scaled up exchange of goods and services, and enhanced socio-economic cooperation which will directly contribute to the improved political and trade relations. This study will provide information that is important for policymakers in the region in their attempts to attain these goals. Additionally, the study will benefit the general COMESA members and trade stakeholders through provision of information on how the free trade will benefit the region. Review of existing work on non-tariff barriers indicates a bias towards their influence on trade and limited studies on their effect on the integration of nations. Academically therefore, this study examines non-tariff barriers and provides timely academic analysis on the link between trade factors and regional economic integration. Additionally, the study also provides an academic update on the non-tariff barriers situation in the COMESA.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter the researcher reviews the related literature. This is in the areas on overview of non-tariff barriers, economic integration in Africa, COMESA, the effect of non-tariff barriers on economic performance and theoretical framework.

2.2 Theoretical Review

This study is anchored on the classical theory of trade, complex interdependence theory, theory of economic integration and functionalism theory.

2.2.1 The Classical Theory of Trade

The classical theory of trade, which followed the mercantilist era, is concerned with explaining the causes and effects of trade itself. It advocates that different countries are likely to have certain advantages in some types of production and certain disadvantages in others. The classical economists, led by Smith and Ricardo (Smith, 1776; Hicks, & Hollander, 1977) argued that all countries would gain if each devoted resources to the production of the goods and services in which each held an advantage.

Czinkota, Rivoli, and Ronkainen (1989) put forward the idea that in his classic, "The Wealth of Nations", Smith directly challenged the mercantilist philosophy by arguing that the accumulation of treasure did little to enhance the welfare of a country's citizens. Smith believed that their welfare was based much more so on their capacity to consume and that this would be maximised under conditions of "free trade" i.e. that goods and services would be free from the distorting effects of subsidies and restrictions and each
country would specialize in the production of the goods and services in which it had an advantage. Higher income would result from this due to higher productivity and efficiency. In turn, this could be used to purchase imports from abroad. This is in direct contrast to the mercantilist philosophy which was aimed at self sufficiency.

David Ricardo extended Smith's analysis to show how two countries could benefit from the introduction of trade. He demonstrated the principle of comparative advantage in a model of exchange in wine and cloth between Portugal and England. He shewed that despite the fact that Portugal had an absolute advantage in the production of both wine and cloth, there would still be trade between the countries. According to the principle of comparative advantage, Portugal would gain through specialisation in the production of wine, because its absolute advantage in the production of wine was greater than its absolute advantage in the production of cloth. Hence as the resources of production in Portugal shifted into wine production, the quantity of cloth produced would fall, necessitating the importation of cloth from England (Seetanah et al., 2013). The Classical Theory of Trade is relevant to this study as the COMESA states which have specialized in a particular commodity/ies seeks to trade with other member states on the commodities they do not participate in their productions or do not satisfy the demand of their markets. From this trade all the member states benefit from it as they gain economically where there is surplus of trade and satisfy their demand side of the commodities they do not produce.

2.2.2 Complex Interdependence Theory

This study is anchored on the complex interdependence theory. Complex interdependence in international relations is the idea put forth by Keohane and Nye (1977) that states and their fortunes are inextricably tied together. The concept of
economic interdependence was popularized through the work of Cooper (1972). With the analytical construct of complex interdependence in their critique of political realism, Keohane and Nye (1977) go a step further and analyze how international politics is transformed by interdependence” (Crane & Amawi 1997). The theorists recognized that the various and complex transnational connections and interdependencies between states and societies were increasing, while the use of military force and power balancing are decreasing but remain important. In making use of the concept of interdependence, Keohane and Nye (1997) also importantly differentiated between interdependence and dependence in analyzing the role of power in politics and the relations between international actors.

Interdependence means mutual dependence, a condition in which countries are both highly sensitive and vulnerable to each other. Keohane and Nye’s (1977) understanding of interdependence and its implications for international relations is clarified thus: “Interdependence generates classic problems of political strategy, since it implies that the actions of the states, and significant non-state actors, will impose costs on other members of the system. These affected actors will respond politically, if they are able, in an attempt to avoid having the burdens of adjustment forced on them. From the foreign-policy standpoint, the problem facing individual governments is how to benefit from international exchange while maintaining as much autonomy as possible. From the perspective of the international system, the problem is how to generate and maintain a mutually beneficial pattern of cooperation” (Keohane & Nye, 1977).
This assumption closely fits the dilemma of NTBs in the EAC whereby member states have the costs of trade liberalisation imposed on them and consequently they resort to other policy and non-policy alternatives to avoid these costs as they seek to enhance gains. Ultimately, these alternatives translate into the plethora of NTBs that has been witnessed in the region and which eventually hinder trade and curtail cooperation in other economic, social and political spheres. According to Keohane (1984), cooperation "requires that the actions of separate individuals or organizations which are not in pre-existent harmony be brought into conformity with one another through a process of negotiation, which is often referred to as policy coordination" (Keohane, 1984). Moreover, Keohane (1984) argues, "cooperation is in a dialectical relationship with discord, and they must be understood together. Thus to understand cooperation, one must also understand the frequent absence of, or failure of, cooperation." This understanding of cooperation illustrates the importance of bargaining processes under complex interdependence. This theory is applicable to the study in that the members of the COMESA depend on each other for trade with one another. However, there exist barriers to this interdependence in the name of regulatory frameworks imposed by the member countries. This has complicated the interdependence.

2.2.3 Functionalism Theory

Functionalism as a theory was postulated for explaining or advocating the need for creation of regional organizations. This was advanced by Mitrany (1966) who argued that the link between authority and a definite territory can be broken. It seeks the attainment of a regional organization that would not be rooted on the territorial confines of the states forming it. In a world characterized by economic interdependence, functionalism assumes
that social, technical and humanitarian problems can be prioritized and solved. This is because in a world of economic interdependence common economic interests create the need for international institutions and rules (Anadi, 2005).

The application of functionalism to the COMESA recognizes that the regional integration takes place at an intersection of diverse interests of the multiple states which differ in political culture, ideology, economic, political and legal systems. These differences have to be managed in the right manner if any sustained relationship among the integrating states is to be realized. From a functionalist angle, it is not enough that the individual citizens of the countries have some welfare gains to be realized from the integration. There must be the will by the authorities at the leadership of these countries to work together towards a mutual good for all states. Should there be a feeling that one state or some states are deriving more benefit than the others, then the cooperation is in jeopardy (Oppong, 2007).

Mitrany (1966) in postulating the approach of functionalism saw regional organizations as likely to result in inter-regional conflict. This was due to the reluctance by states to cede their authority to a regional/supra-national body. In the case of the COMESA, there is need for sovereignty by the states to be transferred to the regional body. With properly crafted expectations and obligations, greater cooperation can be enhanced. It is this notion that leads to the functionalist principle that people can consequently be weaned away from loyalty to the nation-state by the experience of fruitful international cooperation (Schmitter, 2007). The theory is relevant to the study as the researcher seeks to explain how the non tariff barriers have hindered trade within the COMESA region. The removal of these tariffs will enhance the trade within the member state.
2.2.4 Theory of Regional Economic Integration

While many scholars tend to consider Bela Balassa (1961) as the first Economist who developed a well-structured theory about economic integration, others believe that the issue has been already addressed by Viner (1950) and Meade (1955) when considering their writing on the contributions of customs union. According to Kreinin and Plummer (2002), the Viner’s classic analysis enabled scholars to explain the economic implications of a regional integration areas through two theoretical notions: trade creation and trade diversion (Kreinin and Plummer, 2002).

Kreinin and Plummer (2002) contend that, in line with Viner, if there is an increase in trade among member countries of a regional grouping in goods and services of each country’s competitive advantage, a trade creation occurs. Consequently, formerly protected inefficient production in a country will be dislocated by imports from a partner country. However, when the most efficient imports from a non-member are replaced by less efficiently produced imports from a partner country because of discrimination against outsiders, a trade diversion occurs in line with Viner’s Model (Kreinin and Plummer, 2002). This implies that regional economic integration lead to further trade, but not always welfare enhancing (Velde, 2006). This theory will be beneficial to the study as it emphasizes the importance of regional economic integration and the economic performance. The theory is relevant to the study in that the non tariffs trade barriers will bring inefficiencies in trade among member countries.
2.3 Determinants of Economic Performance

A large variety of economic and social variables can be put forward as determinants of economic performance. Norman and Raimundo (2002) defined and categorised the economic performance as either cyclical reversion, structural policies and institutions, stabilisation policies, transitional convergence and external conditions. Economic performance and the impact of trade liberalisation on poverty reduction remains controversial among researchers (Daniel and Sunday, 2002). The basic rationale is that, if growth distribution is neutral among countries (regions), and both trade liberalisation and economic reforms favour more open trade, then it can be argued that trade liberalisation should be beneficial to poverty reduction. However, the evidence suggests that the issue is much more complex and controversial (Figini and Santarelli, 2006).

Rodriguez and Rodrik (2009) have criticised arguments that associate trade openness with more rapid economic development. They indicated that there is lack of control of the indicators of economic growth. Rodrik (2008) argues that trade policy on its own is also an unreliable instrument in generating successful economic performance, due to inefficiencies in delivering improved market access, geopolitical interests and other factors. Dollar and Kraay (2004) studied the impact of trade liberalisation by classifying countries into globalised and non-globalised economies according to the performance of GDP. Their study shows that trade liberalisation accelerates economic development, with the former group having experienced higher growth rates as a result of trade liberalisation. This study reviews literature on the effect of balance of trade, trade volumes and the product prices.
2.3.1 Balance of Trade

Arguably, the balance of trade constrained growth theory as pioneered by Thirlwall (1979) is Keynesian in that it focuses on the relative income (or growth rate) adjustments required to balance trade at given relative prices (real exchange rate), which is the exact converse of the neoclassical approach. In fact, it emphasizes the “non-price” or qualitative aspects of competitiveness that are reflected in income elasticities, rather than competition based on costs or prices. While in the neoclassical approach countries are treated as normally operating at resource-constrained growth or full-employment levels of output, at least in the long run, in such a Keynesian approach countries are not seen as generally resource-constrained in their long-run growth, which implies that aggregate demand matters in the long run as well as in the short run.

As to the causes of the problem of the trade balance between the two countries, many researchers think by common consent that different statistical techniques, the US trade protectionist policy, the adjustment of regional industry, structural adjustment and intra-company trans-actions are main causes of the problem of the trade balance. Zhang (2003) believes that the American national policies caused the huge amount of trade deficit in US. The empirical studies of Kang Meiling (2006), Wang Xuefeng (2004) have shown that the causes of the trade deficit in US are as follows: the imbalance between savings and investment in the macro-economic structures of China and US, the different statistical channels used by China-US, the transfer effect of the industry transfer in Asia and Pacific Rim that caused the American trade deficit with other countries transferred into China and the US export control systems etc.
Chen Zaishi (2004), based on the data of bilateral trade between China and US and Balance of Trade, studies the imbalance of trade between the two countries, and concludes that the under-lying cause of the imbalance of trade of the two countries is that China’s economy and the American economy are complements each of the other and the aggregate demand is over the aggregate supply in American economic structure. As to the statistical trade discrepancies, Song Yijun (2004) concludes that the root cause of the big statistical trade discrepancy is the problem of standard of the trade partner’s categories.

2.3.2 Trade Volumes

In our globalized world whether there is a relationship between trade openness (openness hereafter) and economic growth and openness is useful for the economy of the countries or not is still a matter in argument. On one hand by trying to decrease the quotas and tariffs through GATT (General Agreement on Tariffs and Trade), UNCTAD (United Nations Conference on Trade and Development) which was established to liberalize the trade between countries and WTO (World Trade Organization) which was established instead of GATT in 1995, increasing the openness of the countries to the world trade is aimed, on the other hand countries impose restrictions in the world trade by increasing the invisible barrier both to protect the domestic industries and to get income (Song Yijun, 2004).

With non-functioning of the national development thesis through the late 1970s and the collapse of the Eastern Block at the end of 1980s it was again started to argue that openness was necessary for the national economies. In this context some economists expressed that having a certain development level was a precondition for openness policies in order to support the growth while operating the growth models based on
openness and export. (Han and Kaya, 2006; Sun and Parikh, 2001). There are classical economists on the basis of the view that capital movement liberalization and openness will increase the economic growth and welfare after 1980s.

According to Classical and Neoclassical economists, foreign trade makes important contributions to the development and the foreign trade is not only an effective productivity instrument but also it is the engine of the growth. Since the sources are limited in developing countries, the production on the scale of a high and sustainable growth cannot be performed and new sources can be needed for production. With the openness, domestic markets will encounter with the competition, the domestic industries which cannot compete with international prices will transfer their production factor to the other productive factors and the welfare increase will happen as a result of more effective allocation of the sources. So, for this type of economies it will be useful to make production under free trade (Han and Kaya, 2006).

2.3.3 Product Prices

There are two broad measures of product market integration. One measure uses the volume of trade between national markets and is referred to as the quantity measure of product market integration. This measure is based on the degree to which countries trade with each other, conditional on several factors that are controlled within the standard trade models such as gravity models (Edwards and Rankin, 2012). The link between market integration and the volume of trade is argued to be rather problematic as changes in trade volumes can arise from factors that are not related to transaction costs, such as government expenditure patterns (Edwards and Rankin, 2012; Parsley and Wei, 2003).
Using trade flows, in well-integrated markets, once transaction costs and other relevant factors are accounted for, price differences should be arbitraged away through intra-regional trade (Edwards and Rankin, 2012). But even though we may see no trade, prices could be very similar since trade only occurs if the price gap is greater or equal to transaction costs. Therefore trade volume is not necessarily a good indicator of market integration. Given these limitations, an alternative and more direct approach is to measure product market integration through prices. Prices carry the important signals that are associated with increased market integration, which may lead to firms and consumers making new allocation decisions. The price metric is motivated by an insight from Heckscher (1916), who argued that the existence of positive arbitrage costs implies an equality constraint between prices in two locations. This argument was formalised recently by Obstfeld and Taylor (1997), Taylor (1999), O’Connell and Wei (2002) who looked at non-linear deviations from the LOP.

2.4 Empirical Review

The earliest empirical literature on the relationship between trade/trade policy reforms and economic performance in the 1970s and 1980s used trade dependency ratios and the rate of export growth as proxies for openness, Balassa, (2005). The problem with these indicators, nonetheless, is that they are not necessarily linked to trade policies since a country can distort trade and yet maintain the highest trade dependency ratio. Others authors employed tariff and non-tariff barriers as potential candidates for openness/trade liberalization (Litle et al, 2000; Balassa, 2005). Pritchett and Sethi, (2004); Krugman, (2004), however, argue that average tariff does not represent a good proxy for openness since it underestimates the exact level of protection.2 Indeed, tariff is argued to be
relatively weak measure of trade policy especially when tariff and non-tariff barriers are used simultaneously, Edwards, (2007). Non-tariff barriers also do not distinguish between goods with either the highest or the lowest levels of restrictions. Moreover, theoretical framework in earlier studies failed to articulate the exact transmission mechanism through which the export expansion spurs economic growth. And failure to deal with issues related to endogeneity and other measurement errors has rendered these studies unpersuasive.

2.4.1 International Evidence

Disdier, Fontagné, and Mimouni (2008) in their study estimate the trade effect of standards and other non-tariff measures on 690 agri-food products (HS6-digit level). Their data cover the bilateral trade between the OECD as importing countries and 114 others as exporting countries in 2004. When they consider different groups of exporting countries, they show that OECD exporters are not significantly affected by TBT in their exports to other OECD countries, whereas the exports of developing countries and LDCs are negatively and significantly affected.

In their paper, Bao and Qiu (2010) 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.

Bose (2013) carried out a study on the effect of Tariffs and 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 tariffs have a robust significant negative impact on imports over all the different econometric specifications, and increasing tariffs raise the probability of a zero trade flow. There is evidence that NTMs have a positive impact on imports and the probability to trade. The effect of NTMs on imports is an overall effect. Individual effects of several types of NTMs are unknown and can still be negative. The effect found possibly suffers from several problems, such as the underlying definition and reverse causality. Robustness checks show that it is likely that at least the probability to trade is negative related to having NTMs in place.

In his study of the effect of NTB on trade integration in Japan Theje (2014) explained the reason for the larger coefficient on tariffs relative to NTBs as the indirect effect through multilateral resistance terms is larger for NTBs than for tariffs. He explained that since tariffs are more discriminatory, it is likely that exports from one country to the other will increase more if tariffs rather than NTBs are reduced between them, since this reduction will concern the two countries only. On the other hand, if NTBs are reduced between the two countries, this may implicitly reduce NTBs between all countries trading partners
through the spillover effects. Thus, bilateral trade between the two countries will be lower relative to what it would have been with an equal tariff reduction since frictions between all trading partners of the two countries are controlled for through multilateral resistance.

Ur (2014) performed a survey study on whether tariff rate quotas (TRQ) result into free trade of non-tariff barriers in Norway where around 10% of the 183 companies sampled responded. Through both the survey and the utilization data the study reveal that the transaction costs of utilizing the TRQs are varying across the different seafood groups. Processed pelagic fish and shrimp experiencing the most severe barriers with small TRQs and high out-of-quota tariffs. Overall the transaction costs turn out to be modest. This was also confirmed by the utilization data. Four companies reported minor costs related to the documentation of origin utilizing the compensation TRQs and two companies reported on different adjustments trying to reach the TRQ in time.

2.4.2 Local Evidence

Karugia et al., (2009) in their study found that the quantification of the trade and welfare impacts of NTBs involved three main scenarios: a complete elimination of all the existing NTBs within the EAC; a 50 percent reduction in NTBs; and the separate elimination of individual types of NTBs such as roadblocks, permits, and customs clearance. In conformity with findings from other studies on regional trading blocks in Africa, intra-EAC trade in maize and beef was disturbingly low. In addition, the study found that the main types of NTBs within the three founder members of the EAC were similar. They included administrative requirements (mainly licenses, municipal and council permits),
taxes/duties (mainly excise and cess duty), roadblocks, customs barriers, weighbridges, licensing, corruption (for example, bribes), and transiting.

Karugia and his colleagues 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.

Teweldemedhin (2009) in his study of the implications of trade liberalisation and economic growth for South African agricultural industries found that the Gini coefficient of exports and imports was calculated as 0.55 and 0.62, respectively. The aggregate, with respect to the South African agricultural Intra-Industrial Trade (IIT), was higher than the average attributed to advanced countries. This shows that South Africa needs to reinforce the position of a bilateral agreement, which should be accompanied by regional or even multilateral liberalisation. The econometric analysis conducted on determinants of high IIT, gives a more magnified effect of the coefficients of export to import ratios and the TIMB (trade balance). If the South African industries implement and increase trade
liberalization on the diversified level of industrial specialisation, the IIT level would remain high, and significant economic gain might be achieved. The gravity model finding shows that all variables were significant at one percent, and carried the expected sign. Only the EU dummy variable had an inverse relationship, implying that the EU trade agreement creates a negative impact on export capacity for South African farmers.

Okumu and Nyankori (2010) in his study on NTB in East Africa Customs Union found that several NTBs continue to exist, and some have persisted where the that persisted included a long list of customs documentation requirements, cumbersome formalities, and limited testing and certification arrangements. Other included 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. The gains are greatest in trade and production in Uganda compared to Kenya and Tanzania.

Mellado and others (2010) in of the Non-tariff measures affecting agro-food trade between the EU and Africa found that tariff equivalent ranged between 36 per cent and 190 per cent. Regarding importing countries, they found a strong preference of more than 99 per cent for domestic frozen fish fillets and an important variation of the tariff equivalent for all the products among the EU importing countries and over time. The tariff equivalents obtained are used in a gravity econometric estimation to quantify the trade effect of these NTMs on imports.
2.5 Summary of the Literature Review

The reviewed literature has shown that the non tariff barriers have an influence on the economic development of the member countries both in the negative and positive. The review by Okumu and Nyankori (2010) has shown that the non tariff barriers have effect on the balance of trade. It has further been demonstrated by Ur (2014) that the volumes traded and the product prices. The review has shown that there are benefits associated with bilateral trade (Mellado, et al., 2010).

These studies were however not done on the effect of non tariff barriers on COMESA countries. It failed to demonstrate how the NTB influenced the balance of trade, the trade volume. Even though the literature revealed that NTB have effect on the cost of doing business, no mention was made on how the NTN led to the reduction of the product prices hence a knowledge gap. The review has shown the general effect of the NTB on trade, however how the NTB have effected the economic performance is missing hence knowledge gap. This study will therefore focus on the effect of non tariff barriers on the economic performance of COMESA region focusing on the effect on balance of trade, volumes of trade and the product prices.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedures that was used in conducting the study. It is organized into the following sub-headings: introduction, research design, target populations, sampling frame and size, data collection, unit of observation, unit of analysis and data analysis.

3.2 Research Design

This study used a descriptive cross sectional research design. According to Orodho (2004), the purpose of survey is to produce quantitative descriptions of some aspects of the study population. Survey analysis is primarily concerned with relationships between variables. This study sought to determine, the effect of non-tariff barriers on economic performance. Survey research is a quantitative method, requiring standardized information from and/or about the subjects being studied. Purpose of survey research design is for researchers to describe the attitudes, opinions, behaviors, or characteristics of the population based on data collected from a sample or a population. This approach emphasizes the value-laden nature of an inquiry and seeks answers to questions that stress how social experience is created and given meaning. This design was adopted due to difficulty in quantifying the variables of the study.
3.3 Target Population

The target population was identified on the basis of the survey of existing literature on NTBs faced by traders in the COMESA countries; analysis of member states was conducted. According to the East African Community secretariats, there are 19 member countries.

3.4 Sample

The study adopted convenience sampling in the nine East African Region Countries that were sampled. The countries include, Kenya, Uganda, Namibia, DR Congo, Ethiopia, Zambia Tanzania, Rwanda and Burundi. According to Mugenda and Mugenda (2003), convenience sampling involves drawing samples that are both easily accessible and willing to participate in a study. For this matter, the researcher selected the nine countries due to their proximity and limited resources.

3.5 Data Collection

The study employed secondary data. The secondary data collection instruments used were documentary sources, publications. These were obtained from the Central bank of respective countries, Ministry of trade, IMF statistical report and Kenya bureau of statistics. The data was from 2009 to 2014 this is a period of seven years which COMESA has been actively operational.
3.6 Data Analysis

Upon completion of the data collection exercise, all completed research instruments were assembled, coded and analyzed using the statistical package for social science (SPSS). Data was analyzed using descriptive statistics such as frequency distribution and percentages, the measures of central tendencies such as the mean, mode and standard deviation. Presentations are done in tables, graphs and charts.

3.6.1 Analytical Model

Further analysis namely the regression analysis was done to test the relationship between the economic performance and the production subsidy, trade quotas, trade license and domestic content provision.

This model is borrowed from Theie (2014) who used the model to test the relation of NTB and the gravity mode. The model presented as follow:

\[ Y = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \epsilon_i \]

Where:

- \( Y \) = Economic Performance; Measured by GDP per capita income for each country each year.
- \( \beta_0 \) = Is the constant
- \( X_1 \) = Import licenses; Measured by volume of imports and exports this is captured in the import licenses/GDP.
- \( X_2 \) = Trade quotas; Measured by the volume of the quota imported and exported i.e. the surplus or consumption/GDP
\[ X_3 = \text{Production subsidies; Measured by volume of raw materials imported or exported/GDP.} \]

\[ \beta_1, \beta_2 & \beta_4 = \text{Regression Coefficients} \]

\[ i = \text{Market index measure per country} \]

\[ t = \text{Time period} \]

\[ e_i = \text{Error term represents the deviations of the observed values Y, from their mean.} \]

### 3.6.2 Test of Significance

The regression model was used to test the hypothesis of this study. The level of significance was determined using p-values(s) in more than 5% then the null hypothesis is true since this meant that there is no statistical significant relationship between import licenses, trade quotas and production subsidies and economic performance.
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter is a presentation of results and findings obtained from field data, both descriptive and inferential statistics have been employed specifically using regression and ANOVA to establish the significance and fitness of the model and also to establish the link between the effect of no-tariff barriers on the economic performance of Comesa countries. Descriptive Statistics of the Population summarizes the population characteristics between the no-tariff barriers and the economic performance of Comesa countries. The results of tests on the differences in means of all variables are considered

4.2 Reliability Test

Durbin Watson test for auto correlation as statistical test used to detect the presence of autocorrelation in the residuals. Let $e_i$ be residual sorted into time order then the Durbin Watson test statistic is

$$d = \frac{\sum (e_n - e_{n-1})^2}{\sum e_n^2}$$

matrix, exact critical If $d$ is less than 2 then there is a positive serial correlation, if $d$ is 2 then there is no serial correlation. If $d$ is more than 2 then there is a negative serial correlation. Because of the dependence of any computed Durbin Watson value on the associated values of Durbin Watson statistic are not tabulated for all possible cases. The conventional Durbin Watson tables are not applicable when you do not have constant term in the equation.
According to our model d=1.4312, p value=0.0175731 Where d represents Durbin Watson Since d is less than 2 then there is evidence of positive serial autocorrelation in the residual. Pearson correlation was used to examine if there was correlation or degree of association between the firms performance.

4.3 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 4.1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>IMPORT LICENSES</th>
<th>TRADE QUOTAS</th>
<th>PRODUCTION SUBSIDIES</th>
<th>DOMESTIC CONTENT PROVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.2585</td>
<td>0.354364</td>
<td>0.484295</td>
<td>0.268682</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.030885</td>
<td>0.041901</td>
<td>0.03667</td>
<td>0.02734</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.204866</td>
<td>0.27794</td>
<td>0.243243</td>
<td>0.181352</td>
</tr>
<tr>
<td>Sample Variance</td>
<td>0.04197</td>
<td>0.077251</td>
<td>0.059167</td>
<td>0.032888</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.101</td>
<td>0.02</td>
<td>0.129</td>
<td>0.005</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.95</td>
<td>0.96</td>
<td>0.973</td>
<td>0.93</td>
</tr>
<tr>
<td>N</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Research Findings

Table 4.1 above shows the descriptive statistics for the variables under study with 36 observations each from the time series data and industry. As indicated in table 4.2 above, the economic performance had a mean of 0.2585, The import licenses had a mean of 0.354364, mean ,trade quotas had a mean of 0.2355,production subsidies was at 0.484295, domestic content provision had a mean 0.268682.
4.4 Inferential Statistics

4.4.1 Correlation Analysis

Pearson correlation was used to examine if there was correlation or degree of association between the non-tarrif barriers and economic performance of Comesa countries. The results are shown in the table 4.2 below.

Table 4.2: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>ENC</th>
<th>PFM</th>
<th>IMPT</th>
<th>LSES</th>
<th>TDE</th>
<th>PDN</th>
<th>QUOTAS</th>
<th>SBDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMPT</td>
<td></td>
<td>0.55877</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSES</td>
<td>0.528554</td>
<td>-0.32188</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LQR</td>
<td>0.15514</td>
<td>0.229668</td>
<td>0.182807</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

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

The findings shows positive correlation between Non-tarrrif barriers and economic performance with a correlation coefficient of 0.55877. This implies that non-tariff barriers affect the economic performance of Comesa countries. Economic performance of Comesa countries also according to the findings also show a positive correlation with Import licenses with a correlation of 0.528554. This implies that if countries within the Comesa region can make efficient decisions that have a direct bearing on import licenses then this can improve the economic performance of Comesa countries.

However the study shows a negative a correlation between economic performance and production subsidies with correlation of 0.15514. This implies that increasing the production subsidies can significantly decrease reduce the level of economic performance
of those countries. The production subsidies are measured by the ratio of volume of raw materials to the amount of GDP. Production subsidies therefore are for countries inured to maintain the high levels of economic performance among the Comesa countries. The study shows a positive correlation between economic performance and domestic content provision with correlation of 0.15514. This implies that increasing the domestic content provision can significantly increase the level of economic performance of those countries. The production subsidies are measured by the ratio of volume of deficits or surpluses to the GDP.

The study shows a positive correlation between economic performance and trade quotas with correlation of 0.15514. This implies that increasing the trade quotas can significantly increase the level of economic performance of those countries. The trade quotas are measured by the ratio of volume of surplus or consumption to the GDP. These findings illustrate the results obtained from correlation analysis for the population of commercial for the period of study at 0.05 percent level of significance.

4.4.2 Regression Analysis

Table 4.3(a): Model Summary

SUMMARY OUTPUT

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.228352</td>
</tr>
<tr>
<td>R Square</td>
<td>0.62144</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.34894</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.206798</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Research Findings
Table 4.3 b) Distribution of Coefficient

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.230007</td>
<td>0.096292</td>
<td>2.388626</td>
<td>0.02172</td>
<td>0.035392</td>
</tr>
<tr>
<td>IMPORT LICENSES</td>
<td>0.041777</td>
<td>0.12605</td>
<td>0.331431</td>
<td>0.742049</td>
<td>-0.21298</td>
</tr>
<tr>
<td>TRADE QUOTAS</td>
<td>0.154697</td>
<td>0.142583</td>
<td>1.084964</td>
<td>0.284434</td>
<td>-0.13347</td>
</tr>
<tr>
<td>PRODN SUBSIES</td>
<td>-0.22789</td>
<td>0.186039</td>
<td>-1.22496</td>
<td>0.227754</td>
<td>-0.60389</td>
</tr>
</tbody>
</table>

Source: Research Findings

The correlation and the coefficient of determination of economic performance of Comesa countries when all the four independent variables production subsidies trade quotas, domestic content provision and the production subsidies combined was measured and tested. From the findings 62.14 percent of the economic performance by the Comesa countries was attributed to the independent variables investigated in this study.

Table 4.3 (c): ANOVA

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>Significance F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3</td>
<td>0.094106</td>
<td>0.031369</td>
<td>7.733508</td>
<td>0.0438178</td>
</tr>
<tr>
<td>Residual</td>
<td>4</td>
<td>1.710615</td>
<td>0.042765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>1.804721</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Research Findings

From the data findings in table 4.4 above, the sum of squares due to regression is 0.094106 while the mean sum of squares is 0.094106 with 3 degrees of freedom. The sum of squares due to residual is 1.710615 while the mean sum of squares due to residual is 0.042765 with 36 degrees of freedom. The p value is 0.0438178. Since the p value is less
than 0.05 implies that the relationship is significant at 0.05 percent level of significance, the model is therefore significant for the study and prediction.

According to the model the import licenses were positively related to economic performance measured by measured by GDP per capita. Its significance value was less than 0.05. The other variables (import licenses, trade quota, production subsidies and domestic content provision) were also positively related to the economic performance of the Comesa countries. Their significance value was also less than 0.05. The import licenses were positively and significantly related to the economic performance. Its significance value was 0.148108 which is more than the 0.05 percent level of significance. From the model, taking all factors (import licenses, production subsidies, trade quotas and domestic content provision) constant at zero, economic performance have an autonomous value of 0.230007. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in import licenses will lead to a 0.041777 increase in economic performance of Comesa countries. A unit increase in trade quotas will lead to a 0.154697 increase in economic performance. A unit increase in production subsidies will lead to a 0.22789 decrease in economic performance. Also a unit increase in domestic content provision will lead to 0.2355 increases in economic performance. This infers that import licenses, trade quotas and domestic content provision have a positive effect to the economic performance of Comesa countries. However, the production subsidies had a negative contribution to the economic performance among the Comesa countries. The coefficient table above was used in coming up with the model below:

Non-performing loans = 0.230007 + 0.041777X_1 + 0.154697X_2 - 0.22789X_3 + 0.096292
4.5 Interpretation of the Findings

The study found that the regression equations for the period 2009 to 2014 related economic performance of the countries in the Comesa countries their, import licenses, domestic content provision, production subsidies and trade quotas. From the findings of the model summary from 2009 to 2014, 62.14 percent of the economic performance among the Comesa countries was explained by the independent variables (import licenses, production subsidies, domestic content provision and trade quotas) investigated in the study while other factors not studied in this research contributed 37.86 percent. From the coefficient table of 2009 to 2014, taking all factors (import licenses, trade quotas, and domestic content provision and production subsidies) constant at zero, economic performance of the Comesa countries will be 0.0438178. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in import licenses will lead to a 0.041777 increase in economic performance of the Comesa countries. A unit increase in trade quotas will lead to a 0.154697 increase in economic performance of the Comesa countries. A unit increase in production subsidies will lead to a 0.22789 decrease in economic performance of the countries in the Comesa region. A unit increase in the domestic content provision will lead to 0.22545 increase in the economic performance of countries in the region.

These findings are in line with that of Disdier, Fontagné, and Mimouni (2008) who assessed the determinants of economic performance and concluded that non-tariff barriers affected the economic performance. The empirical results suggest that non-tariff factors play a significant role in the determination of the economic performance of countries.
They further established that various economic development measures instituted by various countries such as increasing the industrial production, promoting exports over the years have directly and indirectly affected the economic development of various countries. He further confirmed that the effectiveness of such measures depends on various macroeconomic policies at play in those countries. Efficiency depends on the instruments used in macroeconomic policies and the prevailing economic conditions and the deregulation of the various sectors which consequently led to a number of improvements.

These findings agree with the position held by Bose (2013) who carried out a study on the effect of Tariffs and 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 tariffs have a robust significant negative impact on imports over all the different econometric specifications, and increasing tariffs raise the probability of a zero trade flow. There is evidence that NTMs have a positive impact on imports and the probability to trade. The effect of NTMs on imports is an overall effect. Individual effects of several types of NTMs are unknown and can still be negative. The effect found possibly suffers from several problems, such as the underlying definition and reverse causality. Robustness checks show that it is likely that at least the probability to trade is negative related to having NTMs in place.
Also the study findings are in agreement to Teweldemedhin (2009) in his study of the implications of trade liberalisation and economic growth for South African agricultural industries found that the Gini coefficient of exports and imports was calculated as 0.55 and 0.62, respectively. The aggregate, with respect to the South African agricultural Intra-Industrial Trade (IIT), was higher than the average attributed to advanced countries. This shows that South Africa needs to reinforce the position of a bilateral agreement, which should be accompanied by regional or even multilateral liberalisation. The econometric analysis conducted on determinants of high IIT, gives a more magnified effect of the coefficients of export to import ratios and the TIMB (trade balance).

The study is also in agreement to the study by Okumu and Nyankori (2010) on the effects of macroeconomic policies on the economic performance of various countries the Kenyan economy.
CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions and recommendations derived from the findings of the study. The chapter also introduces the limitations that were encountered in the study with suggestions for further research. It is divided into section 5.2 on summary of the study, section 5.3 on conclusion, section 5.4 on policy recommendation, section 5.5 on limitations of the study and section 5.6 on recommendation for further research.

5.2 Summary

The dependent variables (Non-performing loans for the year 2004 to 2014) when all the four independent variables (import licenses, production subsidies, domestic content provision and the trade quotas) are combined were measured. The study found out that 64.39 percent of the economic performance of the Comesa countries in the study period of 2009 to 2014 was attributed to the four independent variables investigated in this study. The significance value is 0.0438178. The p value is 0.0438178. Since the p value is less than 0.05 implies that the relationship is significant at 0.05 percent level of significance. The import licenses variable was significant as its significance value was less than 0.05. Domestic content provision is also significant as its significance value is less than 0.05. The trade quotas are also positively related to the economic performance of the Comesa countries. However, production subsidies are negatively related to the economic performance of Comesa countries.
Taking all factors (Import licenses, production subsidies, and domestic content provision and trade quotas) constant at zero, economic performance of the Comesa countries had an autonomous value of 0.230007. The data findings analyzed also showed that taking all other independent variables at zero, a unit increase in import licenses will lead to a 0.041777 increase in economic performance of Comesa countries. A unit increase in trade quotas will lead to a 0.154697 increase in economic performance of the Comesa countries. A unit increase in production subsidies will lead to a 0.22789 decrease in economic performance of the Comesa countries. Also a unit increase in domestic content provision measured by the volume of raw materials to GDP will lead to 0.23456 increase in economic performance.

5.3 Conclusions
From the analysis, it can be noted that the three independent variables (Import licenses, production subsidies, domestic content provision and trade quotas,) had varying degrees of effect on the economic performance of the Comesa countries. The study concludes that import licenses influences economic performance of positively. The study also deduced that import quotas positively influenced the economic performance of the Comesa countries banks in Kenya. Also domestic content provision influences the economic performance of the Comesa countries positively. However provision subsidies had a negative influence on the economic performance of the Comesa countries. The results are similar to the work of Bose (2013) who carried out a study on the effect of Tariffs and 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 tariffs have a robust significant negative impact on imports over all the different econometric specifications, and increasing tariffs raise the probability of a zero trade flow. There is evidence that NTMs have a positive impact on imports and the probability to trade. The effect of NTMs on imports is an overall effect. Individual effects of several types of NTMs are unknown and can still be negative. The effect found possibly suffers from several problems, such as the underlying definition and reverse causality.

These findings agree with the position held by Disdier, Fontagné, and Mimouni (2008) who assessed the determinants of economic performance and concluded that non-tariff barriers affected the economic performance. The empirical results suggest that non-tariff factors play a significant role in the determination of the economic performance of countries. They further established that various economic development measures instituted by various countries such as increasing the industrial production, promoting exports over the years have directly and indirectly affected the economic development of various countries. He further confirmed that the effectiveness of such measures depends on various macroeconomic policies at play in those countries.

5.4 Recommendations for Policy and Practice

This study established that import licenses, trade quotas, production subsidies and domestic content provision play a key role on the level of economic performance of the Comesa countries. This study therefore recommends that the Comesa countries should handle their import licenses, Production subsidies, and domestic content provision and import quotas appropriately so as to help promote economic performance. Taking care of factors will ensure stability of the economy of the Comesa countries.
This study also establishes that import licenses is positively correlated with the economic performance. Also production subsidies, domestic content provision and trade quotas positively influences the economic performance of the Comesa countries. This study therefore recommends that Comesa countries should come with measures to raise their GDP. The study recommends that the Comesa countries should increase the volume of raw materials so as to increase the level of domestic content provision. The recommends that the Comesa countries should consider introducing subsidies targeting key sector areas of their economies as a means of promoting their economy. Furthermore the study also recommends the Comesa countries should consider increasing their surplus.

5.5 Limitations of the Study

This study was not without limitations. In attaining its objective the study was limited to five years period starting from year 2009 to year 2014. The study was limited to secondary data collected from the IMF country annual report. While the data was verifiable since it came from the IMF country report, it nonetheless could still be prone to shortcomings such as accuracies related to the determination of variable such as the GDP per capita. The study was limited to determining the effects of non-tariff barriers on the economic performance of Comesa countries

The study also faced the challenge of unstandardized country GDP determination methodology among various Comesa countries. The policy applied in the computation of the economic performance of the Comesa countries is not uniform across all the financial institution. This made it difficult to do comparison across the commercial banks.
5.6 Suggestions for Further Research

This paper examines the effects of non-tariff barriers on economic performance of the Comesa countries. Because of data unavailability, it was not possible to include other independent variables in our study. Therefore I suggest further research on the effects of non-tariff barriers on economic performance of the Comesa countries inclusive of those other variables that affect economic performance of countries. The study showed that the import licenses, Production subsidies, domestic content provision and trade quotas influence Comesa countries economic performance. The analytical model may be incomplete. For example, the extent of countries dependence on foreign aid, the amount of the individuals Comesa countries amount of public debt in comparison to the country’s GDP as well other factors might impact on findings. The study excluded these variables due to data and cost constraints. Future research should consider these other factors.

Since the study findings on The non –tariff barriers among the Comesa countries contradicts some of those done by earlier researchers who had established that import licenses, domestic content provision and trade quotas risk have a significant negative association with the level of economic performance of the Comesa countries. Further studies should be done to establish the cause of such discrepancy.
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APPENDICES

Appendix I: List of Comesa countries used in the study

1. Kenya
2. Uganda
3. Tanzania
4. Burundi
5. Ethiopia
6. DR Congo
7. Namibia
8. Zambia
9. Rwanda

Source: IMF statistical report and Kenya Bureau of Statistics
Appendix II: Summary of Import licenses, Trade Quotas, Production Subsidies, Domestic Content Provision

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