

**THE EFFECT OF MANIFEST MANAGEMENT SYSTEM ON TAXES PAID BY
USED CLOTHING IMPORTERS: A CASE OF MOMBASA PORT**

MICAH AMGE NJEULE

HDB335-C016-1827/2016

**A Research Project Submitted to the Department of Economics, Accounts and
Finance in Partial Fulfillment of the Requirements for Award of the Post Graduate
Diploma in Customs Administration, Board of Postgraduate Studies, Jomo
Kenyatta University of Agriculture and Technology (JKUAT)**

May, 2018

DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university for academic credit.

Signed: **Date:**

Micah Amge Njeule

Reg. No: *HDB335-C016-1827/2016*

Supervisor Approval:

This research project has been presented for examination with my approval as the supervisor.

Signed: **Date:**

Martin Mati

ACKNOWLEDGMENT

My deepest gratitude goes to God, for the gift of life, His grace and provisions. My utmost regard also goes to my parents, Willy and Emmy who painstakingly laid the foundation for my education by giving it all it took. I am also grateful to my supervisor, Martin Mati, under whose able guidance this work has been carried out. Further, I appreciate my fellow Post Graduate Diploma in Customs Administration students, colleagues and friends who one way or the other have been there. God bless you. I have also greatly benefited from many special helpful suggestions, comments and moral support from friends, not forgetting all those who I bothered in an attempt to get any information that was relevant to completion of this project. Finally, thank you to those not mentioned but contributed to this project in one way or another and those who supported my efforts.

DEDICATION

This work is dedicated to my parents, Mr. Willie Njeule and Mrs. Emmy Njeule, who passed on a love of reading and respect for education. I also dedicate this work to Elizabeth, Melissa and Melvin for inspiration and moral support.

ABSTRACT

The Customs and Border Control Department (C&BC) of Kenya Revenue Authority (KRA) launched the Manifest Management System (MMS) in September 2011 to facilitated electronic lodgment of manifests and amendments and enhance Manifest processing, reconciliation and accounting for cargo. This study was pursued to evaluate the effect of the MMS on taxes paid for used clothing. This was a comparative study on the effect of MMS on taxes paid for used clothing. The study covered a ten-year period from 2007 to 2016; five years prior to use of MMS in manifest management (2007-2011) and five years following the launch and use of MMS in manifest management (2012-2016). The study evaluated the effect of the system on taxes paid for used clothing between the two periods: pre and post MMS. Descriptive research methodology was adopted in this study. The population of interest in the study entailed importations of cargo meant for discharge at the Port of Mombasa. Since the population of the study was wide, a case study scenario was adopted in which case the sample was limited to used clothing. Therefore, the study purposively targeted importations of used clothing meant for local consumption, discharged at the port of Mombasa covering the specified period. The study used secondary data sourced from C&BC's Statistics Section. These were in form of data from customs declarations of used clothing covering a ten year period from 2007 to 2016. A regression analysis model was used in the analysis procedure using IBM SPSS statistics 23. The study revealed a great positive variation on the means of total taxes paid of used clothing as a result of the switch of manifest management operations from SIMBA 2005 System to MMS. This was an indication that submission, validation and reconciliation of containerized cargo in MMS resulted in a great positive effect on the average of the taxes paid for used clothing. The significant difference showed that the average taxes for the period following the launch of MMS (1,222,642) was greater than that of the period prior to its use (816,750), an indication that its use positively influenced the taxes paid for used clothing. The study recommended the need for C&BC to leverage on technological advancement to improve and advance their operations and ensure that a holistic and integrated approach in cargo management is adopted.

TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGMENT	iii
DEDICATION.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS AND ACRONYMS	xi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Manifest Management System.....	3
1.1.2 Customs and Border Control Department.....	3
1.3 Research Problem	4
1.4 Objectives of the study.....	5
1.5 Research Questions	6
1.6 Significance of the study.....	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1 Introduction.....	7
2.2 Review of Theories	7
2.2.1 Chain PerspectiveTheory	7
2.2.2 Dynamic Capabilities Theory	8
2.2.3 Classical Taxation Theory	9
2.2.4 Theories on Technology Acceptance	9
2.2.5 Theory of Social Determinism.....	10
2.3 Review of Empirical Studies	11
2.3.1 Manifest registration timelines.....	11
2.3.2 Quantity of cargo	12
2.3.3 Manifested weights	12
2.4 Summary of Literature Review.....	13

2.5 Conceptual Framework	14
2.6 Critique and Research Gaps	15
CHAPTER THREE: RESEARCH METHODOLOGY	16
3.1 Introduction	16
3.2 Research Design	16
3.3 Population and Sample	16
3.4 Data Collection	16
3.5 Data Analysis	17
3.6 Conceptual Model	17
3.6.1 Empirical Model	18
3.6.2 Test of Significance	18
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION	19
4.1 Introduction	19
4.2 Diagnostic Tests	19
4.2.1 Tests of Normality	19
4.2.2 Test for Multicollinearity	20
4.2.3 Homoscedasticity	21
4.3 Descriptive Statistics	22
4.3.1 Pre-MMS Descriptive Statistics	22
4.3.2 Post-MMS Descriptive Statistics	23
4.4 Multiple Regression Analysis	24
4.4.1 Pre-MMS Multiple Regression Analysis	24
4.4.2 Post MMS Multiple Regression Analysis	26
4.5 Interpretation of Findings	29
4.6 Discussion of Findings	29
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS ..	31
5.1 Introduction	31
5.2 Summary	31
5.3 Conclusion	31
5.4 Recommendations for Policy	31

5.5 Limitations of the Study.....	32
5.6 Suggestionsfor Further Research	32
REFERENCES.....	33
APPENDICES.....	37
Appendix I: Letter of Introduction.....	37
Appendix II: Data Collection Sheet	39

LIST OF TABLES

Table 4.1: Shapiro-Wilk Test of Normality	20
Table 4.2: Test for Multicollinearity	21
Table 4.3: Test for Homoscedasticity	22
Table 4.4: Descriptive Statistic	23
Table 4.5: Post-MMS Descriptive Statistics	24
Table 4.6: Model Summary	25
Table 4.7: ANOVA ^a	25
Table 4.8: Coefficient of Correlation	26
Table 4.9: Model Summary	27
Table 4.10: ANOVA	27
Table 4.11: Coefficient of Correlation	28

LIST OF FIGURES

Figure 2.1: Conceptual framework	14
--	----

LIST OF ABBREVIATIONS AND ACRONYMS

BPI	Business Process Improvement
Cap	Chapter
C&BC	Customs and Border Control Department
CRM	Customs Reform and Modernization
DV	Dependent Variable
EACCMA	East African Community Customs Management Act
EDI	Electronic Data Interchange
iCMS	Integrated Customs Management System
IV	Independent Variable
KRA	Kenya Revenue Authority
KPA	Kenya Ports Authority
KWATOS	Kilindini Waterfront Terminal Operating System
MMS	Manifest Management System
RARMP	Revenue Administration Reform and Modernization Program
SCS	Supply Chain Security
SOLAS	International Convention for the Safety of Life at Sea
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
US	United States of America
WCO	World Customs Organizations
WSC	World Shipping Council

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The World Shipping Council (WSC) and its Members support the World Customs Organization's (WCO) efforts to establish effective mechanisms to improve maritime cargo to help in enhancing the security of global trade and the maritime transportation network by acknowledging the importance of an efficient, reliable, and fast maritime system to the global economy. Customs administrations worldwide are expected to foster efficient flow of legally traded goods in and out of territories. Appropriate balance must be struck between the goal of trade facilitation and enforcement of trade laws and import security. A key concern in this regard has been mis-declaration of container weights, an issue that has been going on for a long time and has plagued many a shipping line, port and customs authorities (WCO, 2014).

The cargo manifest is the prime document for control of imported goods. It provides sufficient information to permit identification of goods, the names of the consignee and consignor, and certain other information (such as weigh and container numbers). The manifest may be specific customs form or the commercial forms (bill of lading, airway bill) that meet the information needs of the customs administration. In many customs administrations, this information is available electronically from the carriers or transport agents. (Keen, 2003).

The carrier or their agent is obligated to submit the manifest report to the respective customs authorities within the recommended timelines as provided for by the legislation of the customs jurisdiction in question. In Kenya, the East African Community Customs Management Act, 2004 (EACCMA 2004) requires the master or agent of every aircraft or vessel to make a report on the prescribed form to Customs, of the aircraft or vessel, of its cargo and stores, and of any package for which there is no bill of lading, as follows; in the case of a vessel, not less than twenty four hours before arrival from a foreign port and in the case of an aircraft, immediately after take-off from a foreign port destined for a port in a Partner State (EACCMA, 2004).

In an effort to ensure timely and correct reporting of all imported goods coming to Kenya, safeguard accountability and reduce the possibility of fraud and revenue leakage, the Customs and Border Control Department (C&BC) of Kenya Revenue Authority (KRA) developed the Manifest Management System (MMS) in the year 2011. The MMS is a system that facilitates electronic lodgment of manifest and amendments. It also aims at enhancing manifest lodgment and accounting for cargo. Its specific objectives are: To provide a holistic approach in management of goods under customs control imported/exported by sea, centralized mechanism of cargo monitoring, accurate & timely management reports and facilitate the use of common manifest between Kenya Ports Authority (KPA) and KRA for management of imported cargo.

Import taxes are financial charges governments impose on goods purchased from other countries. Import taxes are collected on imports exports by the customs authorities of a country. It is usually based on the value of the goods that are imported. There are two distinct goals to import duties: to raise income for local government, and to give a market advantage to locally grown or produced goods that are not subject to import duties. In practice, import duty is levied when imported goods first enter the country. For example, when a shipment of goods reaches the border, the owner, purchaser or a customs agent must file entry documents at the port of entry and pay the assessed taxes to the customs authority. The amount of duty payable varies greatly depending on the nature of goods being imported, the country of origin, quantities among several other factors. Ultimately for consumers, the cost of the taxes is added to the price paid for the goods (Tanzi and Zee, 2001).

Correct use of the manifest is essential to ensure that all imported goods are brought under customs control and presented to customs for clearance formalities and payment of duties and taxes when applicable. Customs procedures to capture and process data from cargo manifests are generally weak in most countries. Even in developed countries, the reconciliation process to match information on customs declarations with data from manifests is an area where improvements are only quite recent. It is important to realize that strengthening the capacity for customs to control information from cargo manifests means reducing the possibility of fraud and leakage, thereby consolidating the import tax base and increasing revenue (Keen, 2003).

1.1.1 Manifest Management System

A cargo manifest is the document that states what a carrier has loaded aboard a vessel for delivery to a subject Customs jurisdiction. The creation, submission, and retention on board of the manifest are tasks that are the responsibility of the vessel carrier or their appointed agents (Shipping Agents) and are regulated by law and regulations of the subject Customs territory. Proper manifesting is a requirement for allowing the entry of inbound vessels and for the issuance of a permit to unlade (Keen, 2003)

The MMS is a system that facilitates electronic lodgment of manifest and amendments. It also aims at enhancing in manifest lodgment and accounting for cargo. The specific objectives are: to provide a holistic approach in management of goods under customs control imported/exported by sea, centralized mechanism of cargo monitoring, accurate & timely management reports and use of common manifest between Kenya Ports Authority (KPA) and KRA for cargo management. The main features of MMS are: management of vessels and vessel schedules for sea cargo, lodgment and registration of sea manifests, sea manifest approval / rejections /suspension of manifests and BLs, Management of consolidation manifest, manifest amendments and supplementary manifest management and system administration. The MMS was developed by the (KRA – ICT Department in conjunction with Customs Project Division office) under joint working arrangements with KPA and other port stakeholders mainly the shipping agents and consolidators.

1.1.2 Customs and Border Control Department

The C&BC Department (previously Customs Services Department) of KRA was established by an Act of Parliament in 1978. Primarily, the department administers the Customs and Excise Act (Cap 472 of the Laws of Kenya) and the East Africa Custom Management Act, 2004. The core business of C&BC broadly involves enforcement of prohibitions and restrictions, collection and accounting of revenue, security and trade facilitation, and compilation of trade statistics for economic planning.

Among the Revenue Administration Reform and Modernization Programs (RARMP) implemented by KRA was the Customs Reform and Modernization (CRM) aimed at enhancing

and modernizing service delivery in C&BC. CRM was expected to enhance the capability of Customs to perform its core functions by carrying out a comprehensive Business Process Improvement (BPI) and implement full automation. A critical area that BPI addressed is the time it takes to clear cargo through various Customs stations. CRM programme had been inspired by reforms and best practices prevailing in other Customs administrations. A key CRM programme was the development of the MMS.

1.3 Research Problem

The cargo manifest is the prime document for control of imported goods. It provides sufficient information to permit identification of goods, the names of the consignee and consignor, and certain other information (such as weight and container numbers). The manifest may be specific customs form or the commercial forms (bill of lading, airway bill) that meet the information needs of the customs administration. In many customs administrations, this information is available electronically from the carriers or transport agents.

Correct use of the manifest is essential to ensure that all imported goods are brought under customs control and presented to customs for clearance formalities and payment of duties and taxes when applicable. Customs procedures to capture and process data from cargo manifests are generally weak in most countries. Even in developed countries, the reconciliation process to match information on customs declarations with data from manifests is an area where improvements are only quite recent. It is important to realize that strengthening the capacity for customs to control information from cargo manifests means reducing the possibility of fraud and leakage, thereby consolidating the import tax base and increasing revenue (Keen, 2003).

Prior to the launch of MMS, shipping agents submitted different cargo manifests to KRA (C&BC) and KPA since each of the agencies required them for individual purposes, that is, KRA primarily for revenue collections and KPA for collection handling charges. At that point in time, it was possible for the shipping agents to lodge cargo manifests with different details to KRA and KPA because there was no integration between KPA's Kilindini Waterfront Terminal Operating System (KWATOS) and KRA's SIMBA 2005 system. Consequently, no reconciliation was done between the cargo manifests received by the two agencies. With the advent of MMS in 2011, integration was operationalized between MMS and KWATOS enabling

the use of common manifest in management of cargo. This also made it possible to reconcile the cargo details in KWATOS and MMS.

According to Macharia (2014), tax evasion is a great contributor to low tax revenues. Macharia observes that tax evasion in Kenya by some has led to tax evasion by others thus largely impacting on the distribution of tax burden as well as public resources leading to increase in taxes and revenue loss which may in the long run grind the functioning of the public sector to a halt. Nyaga (2014), in her study on the relationship between tax compliance, enforcement and taxpayer services found a positive relationship on audit rate, and a negative relationship on tax compliance and taxpayer services.

The Manifest Management System (MMS) implemented by KRA allows KRA to compare the bay plan filed by the port of origin with the ship manifest to determine whether there is wrongful declaration of contents. In addition, members of the Single Customs Territory (originally Kenya, Uganda and Rwanda and now all of EAC Partner States) can electronically request the manifest for their own verification purposes. Access to the manifest allows importing customs authorities to strike off declarations directly against the manifest in efforts to reduce fraud. There was a concern that lack of integration and reconciliation before MMS could have led to mis-declaration of quantities and weight leading to revenue losses in form of taxes payable for used clothing. However, no known studies had been done to evaluate the value of MMS in improving the quality of the manifest management operations in the C&BC. This study sought to evaluate the effect of MMS on taxes paid for used clothing through the analysis of the variables, that is, manifest registration timelines as provided for in the EACCMA, 2004, quantities of cargo and manifested weights.

1.4 Objectives of the study

The general objective of the study was to determine the effect of the manifest management system on taxes paid for used clothing cargo.

Specific objectives for the study comprised of:

- i. To determine the effect of manifest registration timelines on amount of taxes paid for used clothing.

- ii. To determine the effect of quantity of cargo for used clothing on taxes paid for used clothing
- iii. To evaluate if manifested weights have an effect on taxes paid for used clothing.

1.5 Research Questions

- i. Does manifest registration timelines affect the amount of taxes paid for used clothing?
- ii. How does quantity of cargo affect taxes paid for used clothing?
- iii. What is the effect of manifested weights on taxes paid for used clothing?

1.6 Significance of the study

The findings of this study will be of benefit to the following parties:

This study will be significant to C&BC Department of KRA. The study will serve as practical source of information for their role in managing and ensuring correct declarations at manifest level and in evaluating the effectiveness of any system reforms.

This study will be valuable to KPA. Being the principal cargo handling Agency for cargo coming into or leaving the country, they would be better knowledgeable by the findings on their operations. They will also be able to appreciate the importance of correct cargo detail manifestation on safety and security of their personnel and equipment.

The study will be useful to academicians. It will add to available literature on customs declarations at manifest level thereby filling the gap of knowledge and laying a foundation for further research in regard to subject.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter focuses on both theoretical and empirical literature to understand international maritime supply chain and the role of customs in trade facilitation. This chapter is divided into two broad sections. The first sections reviews select theories of international maritime supply chain and studies related to customs. The second section assesses empirical literature in relation to container transportation and the role of customs and related authorities in managing the risk exposures and security of the supply chain.

2.2 Review of Theories

The study was based on six theories on maritime shipping supply chain management. This section reviews the chain perspective theory, dynamic capabilities theory resource based theory, classical taxation theory, theories on technology acceptance and theory of social determinism.

2.2.1 Chain Perspective Theory

The theory of chain perspective was propounded by Kemppainen and Vepsalainen (2003). The challenges facing chain perspective as theory and practice stem from their interplay and misalignment. Research shows that there are substantial gaps between theory and practice, one of the challenges facing most organizations across the world is managing chain perspective that are efficient for the organization to serve the growing needs of its customers. The organization should have a separate function independent of the existing array of functions which are partially but not only full involved such a developed function might act as the arbitrate or of supply and demand Alternatively, some commentators suggest the need to redefine the purchasing role (Shapiro and Hameri, 2004). The chain perspective is promoted by Robinson (2005) but consists in a very current way of dealing with the shipping industry functioning beyond works in strategic management (i.e. supply chain and logistics management). Robinson (2005) states that shipping lines move freight between buyers and sellers and work in chain. To understand the business success of shipping lines, one must understand the structure of the supply chain and how individual firms operate and accumulate value from their position within the chain.

Chain perspective is appropriate to understand the competitive advantage of shipping lines and to define appropriate strategy for their success. In chain perspective, business success is defined in terms of acquisition and exploitation of supply chain and market power in order to move from weak position to market leadership. Because shipping lines are in the business of moving freight, they are third party service provider and will derive value only by delivering value that customers accept. They will not derive value from network, nor from longer, larger or faster ship (Robinson, 2005).

The focus of shipping lines should be on delivering superior value to target customers at a price that allows profit. An individual line will capture competitive advantage only by delivering superior value to customers on the basis of its position in the network. Network may allow having access to larger customer base. The chain has to deliver value at customers' satisfaction and to the other individual companies making the chain, otherwise it will disappear (Robinson, 2005).

In the chain, each shipping line has something to offer and derive power from that. Power is defined as the ability to own or control critical assets and it oscillates from dominant to no power. The shipping lines strategy should focus on the acquisition of market power. Dominant players may use their power to close the market to the smaller payers. Shipping networks are the artifacts of the corporate strategy. The strategy will answer the following questions: what value, to which customer, at which level of profitability and what line to operate. The network to which the line belongs will impose some constraints on the value to capture. There will be tension between value to deliver and value to capture. Shipping lines operating in networks where value erodes will seek to redefine their strategic positioning to influence the chain or leave (Robinson, 2005).

2.2.2 Dynamic Capabilities Theory

The dynamic capabilities refer to the ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Capabilities are the skills needed to take absolute control over resources, and the capacity to perform specific tasks and operations (Pisano et al., 1997).

Dynamic capabilities are sometimes defined as organizational and strategic routines by which firms achieve new resource configuration (Progoulaki and Theotokas, 2010). For Oswald et al. (2013), dynamic capabilities refer to tools employed to manipulate existing configuration in order to create new resources configuration. It helps firms to convert existing resources into competitive advantage. Dynamic capabilities give firms the capacity to sense and shape opportunities, capacity to seize opportunity by orchestrating resource manipulation. It also gives the ability to adapt in front of challenges like high market velocity (Oswald et al., 2013).

Kim, C. et al. (2008) stated that competitive advantage should be built through expanding capabilities such as human resource management and technology rather than extending physical assets. Cui and Hertz, (2011) explain more the link between resource and capabilities by stating that capabilities are the sources of competitive advantage and resources are the sources of capabilities.

2.2.3 Classical Taxation Theory

Classical taxation theory has for a long time been of great significance in tax administration. According to this theory, the most important role of taxation is that of providing state revenues. The classical theory was founded by Smith (1958). In his book, “An inquiry into the Nature and Causes of the Wealth of Nations”, Adam Smith defined the taxation system, specifying the major circumstances for its foundation and proposing four main taxation principles namely: equity, determination, convenience and thrift of taxation administration. Ricardo and Mills (1994) later on advanced his work. Proponents of the classical theory of taxation argued that the realization of taxation’s main role of provision of state revenue could only be achieved on the basis of the principles of equity and justice. However, as economic relations became a bit complicated prompting the need for stringent state’s regulation, classical theory views on the role of taxation changed in the course of many decades (Haakonssen, 2006).

2.2.4 Theories on Technology Acceptance

Davis (1989) developed the Technology Acceptance Model (TAM) based on the Theory of Reasoned Action (TRA) which specifically deals more with the prediction of the acceptability of an information system. This model serves to predict the acceptability of a communication tool

and to help in identify modifications to be brought to the system to make it more acceptable by users. This model suggests that acceptability of an information system is influenced by factors such as the perceived usefulness and perceived ease of use. Perceived usefulness is defined as being the degree to which a person believes that the use of a system will improve his performance. In this study, women entrepreneurs would adopt mobile technology when they perceive that it is useful in their business operations.

Davis, (1989) observed that, to understand why people apply or reject computers became one of the most challenging themes in researches about information systems. Silva (2006) highlights the importance of not only having a technical view, which means, to direct attention to the requirements offered by technology, to understand the use of information technology, but also to search and comprehend the behavior of its users

According to Davis (1989), for being so universal, the TRA was modified specifically, to create frameworks of acceptance in information engineering. The intention of the growth of the framework TAM resulted from an IBM Canada contract with the Massachusetts Institute of Technology, in the 1980s to evaluate the market potential of new products for a brand and to make it possible as an explanation of the determinants of computers use (Davis, 1989).

This theory supports this study in that technology acceptance is becoming a useful tool of the twenty first century and beyond due to the faster and timely processing of data using information systems

2.2.5 Theory of Social Determinism

According to the proponents of this theory, it is the human race which shapes technology and not vice versa, because technologies are continually reinterpreted by users and given new, often unexpected trajectories. While the internet was first used as a communication and information searching engine, it has now developed to other uses including e-business, marketing media and social interactive media. The central premise of this theory that (Mackenzie & Wajeman, 1999) refer to as the ‘social shaping of technology’, was that what matters is not technology itself, but the social or economic system in which it is embedded. Their view provides an antidote to what they call “naïve technological determinism” and caution that those who have not recognized the ways in which technologies are shaped by social and economic forces have not gotten very far.

They dismiss the theory of Technological Determinism as mere “technological politics” that has fascinated historians, philosophers, and political scientists. Bijker and Law (1992) also make a forceful argument that the idea of ‘pure’ technology is nonsense. Technologies always embody compromise. Political, economics available raw material all of these are thrown into the melting pot whenever an artifact is designed or built. Technologies do not, we suggest, evolve under the impetus of some necessary inner technological or scientific logic. They are not possessed of an inherent momentum. If they evolve or change, it is because they have been pressed into that shape. William & Edge, (1996) hold the same view and posit that organizational, political, economic and cultural factors do influence the design and implementation of technology. The above arguments do suggest that it is not only technology that affects society, but that social factors do affect technology as well.

2.3 Review of Empirical Studies

2.3.1 Manifest registration timelines

Jones and Seghetti (2005), reason that international trade is a critical component of the United States of America (US).S. economy, with U.S. goods trade amounting to about \$4 trillion in 2014, with merchandise imports of \$2.4 trillion and exports of \$1.6 trillion. He further emphasizes efficient flow of legally traded goods in and out of the United States being a vital element of the country’s economic security. While US trade in imports depends on the smooth flow of legal cargo through US ports of entry, the goal of trade facilitation often competes with two additional goals: enforcement of US trade laws and import security. How to strike the appropriate balance among these three goals is a fundamental question at the heart of US import policies. Striking the appropriate balance among competing import policy goals is made more difficult due to the volume and complexity of trade inflows.

Failure to declare/manifest goods details has been an issue that has been going on for a long time and has plagued many a shipping line and port. It all boils down to people taking a “personal” responsibility to be honest and correct in the declaration of their cargo details. On a micro level, it can be a danger for those handling the container and in the immediate vicinity thereof. There are countless claims arising from reach stackers or similar handling equipment tipping, lifting

chains breaking and the risk of injury (or worse) to personnel, damage to equipment, damage to the cargo etc. (SOLAS, 1974).

2.3.2 Quantity of cargo

According to Acciaro and Serra (2013), while on one side the development of container transport has substantially reduced the risks of cargo damage and pilferage, which has been a predicament of transport providers and cargo owners for centuries. On the other side, the resulting international nature of global supply chains as well as relative lack of visibility of chains worldwide has exposed maritime container transport and subsequently supply chains including Customs to the most diverse threats arising out of malicious endeavors including smuggling, contraband and mis-declarations of cargo.

Organizations and governments have responded with policies and practices aiming at reducing the exposure of supply chains to voluntary acts of breach and international chain disruptions. The applications of procedures and technologies aimed at reducing exposure and protecting people, goods, facilities and equipment in the chain as well as preventing malicious interferences on normal flow of goods and information are referred to as supply chain security (SCS) (Closs and McGarell, 2004).

Ensuring security of maritime supply is critical to international trade. Although SCS is a rather developed area of research (Williams, Lueg, & LeMay, 2008), fewer studies have focused so far on maritime and container SCS (Barnes & Oloruntoba, 2005; Marlow, 2010).

2.3.3 Manifested weights

Osoro (2012) examined the revenue productivity implications of tax reforms in Tanzania. In the study, the tax buoyancy was estimated using double log form equation and tax revenue elasticity using the proportional adjustment method. For the study period, the overall elasticity was 0.76 with buoyancy of 1.06. The study concluded that the tax reforms in Tanzania had failed to raise tax revenues. These results were attributed to the government granting numerous tax exemptions and poor tax administration

Chipeta (1998) evaluated effects of tax reforms on revenue collection in Malawi for the period 1970 to 1994. The results indicated buoyancy of 0.95 and an elasticity of 0.6. The study concluded that the tax bases had grown less rapidly than GDP. (Kusi, 1998) studied tax reform

and revenue productivity of Ghana for the period 1970 to 1993. Results showed a pre-reform buoyancy of 0.72 and elasticity of 0.71 for the period 1970 to 1982. The period after reform, 1983 to 1993, showed increased buoyancy of 1.29 and elasticity of 1.22. The study concluded that the reforms had contributed significantly to tax revenue productivity from 1983 to 1993.

Muthama (2013) did a study on change management practices adopted by Kenya Revenue Authority in its reform and modernization programme. The objective of this study was to determine the change management practices adopted by KRA. The study was conducted through a case study of KRA. It was found that there have been a lot of changes in the firm that have prompted the management to effectively manage change. New departments have been created, others merged while others split in a bid to deliver better services to clients. Similar to organizations, resistance to change was inevitable but the management was able to contain the pressures that wanted status quo to prevail.

2.4 Summary of Literature Review

Revenue collection has become an integral part of any society. It has emanated from early history of civilization through which government got funding so as to sustain its operations for the public good (Broadway, 2012). Tax revenue collection should comply with best practices of equity, ability to pay, economic efficiency, convenience and certainty (Visser& Erasmus, 2005). Just like any other organization, the government also looks at all ways and means to reduce the expenditure so as to have a reciprocate effect of the public national debt of the economy (Ireland, 1994). Various accounting and control procedures are usually adopted in order to ensure that the spending is in line with government policy and framework. Some of the controls include budgetary measures, checks and balances and many others. This engulfs the whole rationale of any corporate be it public or non-public institution which institutes to lower expenditure and increase in revenue so as to attain ultimate objectives (IMF, 2014)

This chapter covered a review of the literature regarding shipping as a factor in the supply chain management. It also denoted the role of customs in fostering trade facilitation whilst striking a balance with enforcement of trade laws and import security.

Whilst the above studies provided valuable information regarding shipping supply management chain and the role of customs in facilitating international trade, little is known of any local studies to assess the effect of MMS on taxes paid for used clothing, an area which this study sought to explore.

2.5 Conceptual Framework

In order to conceptualize the effect of MMS on taxes paid for used clothing, we must therefore take into account the functionalities of the system which may have an impact on the taxes paid.

The relationship between the taxes paid for used clothing and changes in the same was conceptualized at a fairly general level, depicted in Figure 1, as a two stage relationship where a set of functions in MMS determine the taxes paid. It was recognized that the change from the use of SIMBA 2005 System to MMS, may have had an effect on the taxes paid hence the study of the effect of MMS on the tax paid for used clothing.

Independent Variable

MMS

Manifest registration
timelines

Quantity of cargo

Manifested weights

Dependent Variable

Taxes Paid

Figure 2.1: Conceptual framework

2.6 Critique and Research Gaps

Automation of process at revenue collection points has a positive impact on the tax clearance time. Conversely, the automation of tax system rather than just affecting the revenue collection, expenditure and clearance time as highlighted above, will also impact the overall staffing, confirming that the right measure of tax assessment has been undertaken so as to deter underpayments and tax evasions, and proper ways of accountability and audit trails instigated so as to curb embezzlements. This usually attained successfully by synchronizations of various systems in various systems towards a common repository mapping which is a fundamental tool in automation

The KRA developed MMS as an improvement on their customs management system, SIMBA 2005, which receives the manifest through Electronic Data Interchange (EDI). This MMS is responsible both for receiving the manifest and making it accessible to the KPA and revenue authorities in countries of destination or transit. To the best knowledge of the researcher, there is no study which have been done with regard to the effect of MMS on taxes paid by used clothing importers and therefore, this study aimed at bridging this gap through undertaking a study on the effect of the system on taxes paid by used clothing importers: a case of Mombasa port.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology used to conduct the study. It specifies the research design, target population, data collection method and instruments, and data analysis and interpretation.

3.2 Research Design

A research design is a plan, structure and strategy conceived so as to obtain answers to research questions. It provides a framework for planning and conducting a study (Bryman, 2012).

The descriptive research methodology was adopted in this study. The methodology was preferred because the study used quantitative statistical data to describe the effect of MMS on taxes paid for used clothing. The study covered a ten-year period from 2007 to 2016; five years prior to use of MMS in manifest management (2007-2011) and five years after following the launch and use of MMS in manifest management (2012-2016). The study compared the taxes paid for used clothing between the two periods: pre and post MMS.

3.3 Population and Sample

Cooper and Schindler (2003) define population as the total collection of elements about which the researcher wishes to make some inferences. Element is the subject on which the measurement is being taken and is the unit of study.

The population of interest in this study entailed all the importations of used clothing for discharge at the Port of Mombasa. Since the population of the study was wide, a case study scenario was adopted in which case the sample was limited to used clothing meant for local use. Therefore, the study purposively targeted the importations of used clothing meant for local use and discharged at the Port of Mombasa covering the specified period.

3.4 Data Collection

The study used secondary quantitative data. The data was sourced from C&BC's Statistics Section. These were in form of extracts of declarations for used clothing and covered a ten-year

period from 2007 to 2016—five years prior to use of MMS in manifest management (2007-2011) and five years after implementation of MMS in manifest management (2012-2016).

3.5 Data Analysis

The study sought to determine the effect of MMS on taxes paid by comparing the taxes paid five years prior to use of MMS in manifest management (2007-2011) and five years after implementation of MMS in manifest management (2012-2016).

IBM SPSS statistics 23 was used in analysis of the data. A multivariate multiple regression was carried out.

Multivariate multiple regression was favored because it would be able to model the linear relationship between more than one independent variable (IV) and more than one dependent variable (DV). The analysis is multiple because there is more than one variable and it is multivariate because there is more than one DV.

The assumptions made were follows:

There exists a linear relationship between the outcome variables and the independent variables.

A plot of the standardized residuals verses the predicted Y' values show whether there is a linear or curvilinear relationship.

The regression assumed that there is a Normality i.e. the variables are normally distributed.

The other assumption is that there is no multicollinearity, the independent variables are not highly correlated with each other.

It also assumed that there is Homoscedasticity, variance of error terms are similar across the independent variables.

3.6 Conceptual Model

The analysis will be done based on the following linear regression model:

$Y = a + bX$ where,

X is the explanatory variable

Y is the dependent variable

The slope of the line is ***b***,

a is the intercept (the value of ***y*** when ***x*** = 0).

3.6.1 Empirical Model

The Regression equation is modeled as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y the response variable, in this study; taxes paid

***X*₁** is manifest registration timelines

***X*₂** is Manifested weights

***X*₃** is Quantity of cargo

***β*₀** is the regression constant

***β*₁**, ***β*₂**, and ***β*₃** are the coefficients of independent variables

ε: Standard Error term.

3.6.2 Test of Significance

The results of the regression analysis were assessed based on the R^2 , ANOVA, and significance of F statistics and the significance of beta values from the coefficients of the X variables. Results will be said to be statistically significant within the 0.05 level, which means that the significance value must be smaller than 0.05. Significance will be tested at 5% level.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data findings on effect of the MMS on taxes paid for used clothing. The data was sourced from C&BC's Statistics Section in form of extracts of declarations for used clothing and covering the period a ten-year period from 2007 to 2016 – five years prior to prior to use of MMS in manifest management (2007-2011) and five years after implementation of MMS in manifest management (2012-2016). A regression analysis was invoked to establish the effect of the MMS on taxes paid for used clothing.

4.2 Diagnostic Tests

The study established the suitability of the data by examining the tests of normality, heteroscedasticity test as well as test for multicollinearity for the variables. The findings are discussed in the subsequent sections.

4.2.1 Tests of Normality

Use of inferential parametric statistical procedures requires that the assumptions of such tests of normality are tested. This is to assist the graphical tests to be performed about the normality of the data to check for skewness and kurtosis coefficients. These tests helps to confirm whether the data follows a normal distribution or not. If the normality is not achieved, the results may not depict the true picture relationship amongst the variables. In this study, normality was tested using Kolmogorov-Smirnov test and the Shapiro-Wilk test. The Shapiro-Wilk test is more appropriate for small sample sizes (< 50 samples), but can also handle sample sizes as large as 2000. For this reason, this study used the Shapiro-Wilk test as our numerical means of assessing normality. If the Sig. value of the Shapiro-Wilk test is greater than 0.05, (P-value test statistic) the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution.

Table 4.1: Shapiro-Wilk Test of Normality

Variables	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Manifested Weights	.288	250	.331	.747	250	.401
Quantity of cargo	.364	250	.331	.656	250	.401
Manifest Registration Timelines	.309	250	.331	.742	250	.401
Taxes Paid	.329	250	.331	.703	250	.401

a. Lilliefors Significance Correction

The findings depict that, the significance values for the Shapiro-Wilk tests were 0.401 for manifested weights, quantity of cargo, manifest registration timelines and taxes paid each. For the Kolmogorov-Smirnov tests, the significance values were 0.331 for manifested weights, quantity of cargo, manifest registration timelines and taxes paid each. This implies that since the p-value is greater than the chosen alpha level of 0.05 then we fail to reject the hypothesis based on that the data came from a normally distributed population. The results of the tests are therefore of normally distributed population

4.2.2 Test for Multicollinearity

When there is a perfect linear relationship among the predictors, the estimates for a regression model cannot be uniquely computed. The term collinearity implies that two variables are near perfect linear combinations of one another. When more than two variables are involved it is often called Multicollinearity, although the two terms are often used interchangeably. Multicollinearity is a test that evaluates whether the independent variables are highly correlated. The primary concern is that as the degree of Multicollinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients can get wildly inflated.

The variance inflation factor (VIF) was used to evaluate the level of correlation between variables and to estimate how much the variance of a coefficient was inflated because of linear dependence with other predictors. As a rule of thumb if any of the VIF are greater than 10 (greater than 5 when conservative) then there is a probability of a problem with Multicollinearity

and is harmful to the study (Newbert, 2008). Tolerance, defined as $1/VIF$, is used by many researchers to check on the degree of collinearity. A tolerance value lower than 0.1 is comparable to a VIF of 10. It means that the variable could be considered as a linear combination of other independent variables (Newbert, 2008). The results for tests of Multicollinearity were as presented in Table 4.2.

Table 4.2: Test for Multicollinearity

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
(Constant)		1.272	.350		3.636	.000		
Manifested Weights		.198	.063	.188	3.126	.002	.780	1.281
Quantity of cargo		.096	.066	.107	1.451	.148	.512	1.954
Manifest Registration Timelines		.325	.073	.349	4.481	.000	.463	2.162

a. Dependent Variable: taxes paid

The results in Table 4.2 revealed that there was no problem of multicollinearity. The variance inflation factors for the variables were all below 5 meaning that the variables were not highly correlated.

4.2.3 Homoscedasticity

The study utilized Glejser test (1969) conducted by regression residual value of the independent variable. In the case there is an assumption that if the Sig. value >0.05 , then there is no problem of homoscedasticity. The results for tests of homoscedasticity were as presented in Table 4.3.

Table 4.3: Test for Homoscedasticity

Model	Coefficients^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	1.125	.012		3.856	.000
Manifested Weights	.198	.045	.186	0.156	.269
Quantity of cargo	.096	.056	.112	0.258	.148
Manifest Registration Timelines	.256	.089	.349	0.481	.86

a. Dependent Variable: taxes paid

4.3 Descriptive Statistics

4.3.1 Pre-MMS Descriptive Statistics

The table (Table 4.4) is for the descriptive statistics of all the variables in the model. In this case the dependent variables are shown in row whereas their statistic is displayed in the columns. The interpretation of the descriptive table is discussed below.

Table 4.4: Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Taxes Paid	19732	793.53	25048004.53	816750.5936	442551.34421
Manifested Weights	19732	102.00	69000.00	16307.4431	8072.92714
Quantity of cargo	19732	2.00	1500.00	354.5159	175.50081
Manifest Registration Timelines	19732	-35.65	7.00	1.8721	2.94181

(Source: Research Findings)

The mean of the total taxes paid is found to be 816750.5936 where the total number of observations was 19732. The deviation from the mean was found to be 442551.34421. The mean of the total manifest registration timelines is found to be 1.8721 while the deviation from the mean was found to be 2.94181. The mean of the total manifested weights is found to be 16307.4431 while the deviation from the mean was found to be 8072.92714. The mean of the total quantity of cargo is found to be 354.5159 while the deviation from the mean was found to be 175.50081.

4.3.2 Post-MMS Descriptive Statistics

The table (Table 4.5) is for the descriptive statistics of all the variables in the model. In this case the dependent variables are shown in row whereas their statistic is displayed in the columns. The interpretation of the descriptive table is discussed below.

Table 4.5: Post-MMS Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Tax paid	20956	501263.00	4688443.00	1222642.0366	368075.83029
Manifested weights	20956	100.00	71580.00	20642.7794	7832.41043
quantity	20956	2.00	1704.00	491.5053	186.48087
Manifest registration timelines	20956	-2.71	34.30	3.0310	2.67294

(Source: Research Findings)

After the implementation of the MMS the mean value of the tax paid is 1222642.0366 with a total of 20956 observations. The standard deviation from the mean is 368075.83029. The mean of the total manifest registration timelines is found to be 3.0310 while the deviation from the mean was found to be 2.67294. The mean of the total manifested weights is found to be 20642.7794 while the deviation from the mean was found to be 7832.41043. The mean of the total quantity of cargo is found to be 491.5053 while the deviation from the mean was found to be 186.48087.

4.4 Multiple Regression Analysis

In this study, a parametric hypothesis analysis was conducted find the relationship between the dependent variable and three independent variables to test the influence among predictor variables. The research used Statistical Package for Social Sciences (SPSS V 23) to code, enter and compute the regression analysis.

4.4.1 Pre-MMS Multiple Regression Analysis

Model summary' table, provides information about the regression line's ability to account for the total variation in the dependent variable.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436 ^a	.190	.190	331235.82038

a. Predictors: (Constant), manifested weights, quantity of cargo, manifest registration timelines

Table 4.6 illustrates that the strength of the relationship between taxes paid and independent variables. From the determination coefficients, it can be noted that there is a relationship between dependent and independent variables given an R^2 values of 0.19. This shows that the independent variables (manifested weights, quantity of cargo, and manifest registration timelines) accounts for 19% of the variations in taxes paid.

Analysis of variance (ANOVA) is a collection of statistical models used to analyze the differences among group means and their associated procedures (such as "variation" among and between groups)

Table 4.7: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1546926972204765.800	3	515642324068255.250	3556.778	.000 ^b
1	Residual	3037507207621940.500	20952	144974570810.516		
	Total	4584434179826706.000	20955			

a. Dependent Variable: taxes paid

b. Predictors: (Constant), manifested weights, quantity of cargo, manifest registration timelines

Analysis of Variance (ANOVA) was used to make simultaneous comparisons between two or more means; thus, testing whether a significant relation exists between variables (dependent and independent variables). This helps in bringing out the significance of the regression model. The ANOVA results presented in Table 4.7 shows that the regression model has a margin of error of $p = 0.000$. This indicates that the model is significant since its p value is less than significance test of 0.05. An F statistic of 3556.778 indicated that the combined model was significant. This

was supported by a probability value of (0.000). The reported significance level of (0.000) is less than the conventional probability of (0.05) hence significant.

Table 4.8: Coefficient of Correlation

Model	Unstandardized Coefficients		Standardized t Coefficients		Sig.
	B	Std. Error	Beta		
(Constant)	324341.131	6021.323		53.865	.000
1 Manifested weights	-30.843	.324	.563	-95.281	.000
Quantity	10.873	4.015	0.623	2.708	.007
Manifest registration timelines	-5642.952	888.318	-.038	-6.352	.000

a. Dependent Variable: taxes paid

From the finding in Table 4.8, the study found that holding manifested weights, quantity of cargo and manifest registration timelines at zero, taxes paid will be 324341.131. Also, a unit raise in manifested weights, while holding quantity of cargo, and manifest registration timelines constant, will lead to a decrease in taxes paid by 30.843 ($p = 0.000$). Further, unit raise in quantity, while holding manifested weights and manifest registration timelines constant, will lead to a rise in taxes paid by 10.873 ($p = 0.007$). A unit raise in manifest registration timelines, while holding manifested weights and quantity constant, will lead to a decrease in taxes paid by 5642.952 ($p = 0.000$). At 5% level of significance and 95% level of confidence, manifested weights, quantity of cargo and manifest registration timelines are significant in taxes paid.

4.4.2 Post MMS Multiple Regression Analysis

Model summary' table, provides information about the regression line's ability to account for the total variation in the dependent variable.

Table 4.9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561 ^a	.315	.315	366256.62694

a. Predictors: (Constant), manifested weights, quantity of cargo, manifest registration timelines

Table 4.6 illustrates that the strength of the relationship between taxes paid and independent variables. From the determination coefficients, it can be noted that there is a relationship between dependent and independent variables given an R^2 values of 0.315. This shows that the independent variables (manifested weights, quantity of cargo, and manifest registration timelines) accounts for 31.5% of the variations in taxes paid.

Analysis of variance (ANOVA) is a collection of statistical models used to analyze the differences among group means and their associated procedures (such as "variation" among and between groups)

Table 4.10: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1217824405879860.200	3	608912202939930.100	4539.246	.000 ^b
1	Residual	2646525334130840.000	19728	134143916778.896		
	Total	3864349740010700.000	19731			

a. Dependent Variable: taxes paid

b. Predictors: (Constant), Manifested weights, quantity, Manifest registration timelines

Analysis of Variance (ANOVA) was used to make simultaneous comparisons between two or more means; thus, testing whether a significant relation exists between variables (dependent and independent variables). This helps in bringing out the significance of the regression model. The ANOVA results presented in Table 4.10 shows that the regression model has a margin of error of $p = 0.000$. This indicates that the model is significant since its p value is less than significance test of 0.05. An F statistic of 4539.246 indicated that the combined model was significant. This

was supported by a probability value of (0.000). The reported significance level of (0.000) is less than the conventional probability of (0.05) hence significant.

Table 4.11: Coefficient of Correlation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	388038.750	6081.687		63.804	.000
Manifested weights	-250.978	6.070	-4.371	-41.350	.000
Quantity	12808.312	276.474	4.898	46.327	.000
Manifest registration timelines	-3205.348	898.441	-.020	-3.568	.000

a. Dependent Variable: taxes paid

From the finding in Table 4.11, the study found that holding manifested weights, quantity of cargo and manifest registration timelines at zero, taxes paid will be 388038.750. Also, a unit raise in manifested weights while holding quantity of cargo and manifest registration timelines constant, will lead to a decrease in taxes paid by 250.978 ($p = 0.000$). Further, unit raise in quantity of cargo while holding manifested weights and manifest registration timelines constant, will lead to a rise in taxes paid by 12808.312 ($p = 0.000$). A unit raise in manifest registration timelines, while holding manifested weights and quantity of cargo constant, will lead to a decrease in taxes paid by 3205.348 ($p = 0.000$). At 5% level of significance and 95% level of confidence, manifested weights, quantity of cargo and manifest registration timelines are significant in taxes paid.

4.5 Interpretation of Findings

The study sought to establish the effect of the MMS on taxes paid for used clothing. In the period 2007 to 2011 the mean taxes paid for used clothing of 816,750.5936 was found to be significantly lower than the mean tax paid for the period 2012 to 2016 which was 1,222,642.0366.

After the launch and implementation of MMS in manifest management operations, the study revealed that there was a great positive variation on the taxes paid for used clothing. The significance value was 0.000, an indication that at 95% confidence interval there was a statistically significant deviation between the averages of taxes paid for used clothing following the implementation of MMS compared to when SIMBA 2005 system was being used in manifest management.

The study inferred that the use of MMS in management of quantity of cargo, manifested weights, and manifest registration timelines resulted in a pronounced positive effect on the average taxes paid.

4.6 Discussion of Findings

The study inferred that the use of MMS in management of quantity of cargo, manifested weights, and manifest registration timelines resulted in a pronounced positive effect on the average taxes paid. In tandem with the study findings, Keen (2003) observed that correct use of the manifest is essential to ensure that all imported goods are brought under customs control and presented to customs for clearance formalities and payment of duties and taxes when applicable. Customs procedures to capture and process data from cargo manifests are generally weak in most countries. Even in developed countries, the reconciliation process to match information on customs declarations with data from manifests is an area where improvements are only quite recent. It is important to realize that strengthening the capacity for customs to control information from cargo manifests means reducing the possibility of fraud and leakage, thereby consolidating the import tax base and increasing revenue.

SOLAS (1974) noted that failure to declare/manifest goods details has been an issue that has been going on for a long time and has plagued many a shipping line and port. It all boils down to

people taking a “personal” responsibility to be honest and correct in the declaration of their cargo details. On a micro level, it can be a danger for those handling the container and in the immediate vicinity thereof. There are countless claims arising from reach stackers or similar handling equipment tipping, lifting chains breaking and the risk of injury (or worse) to personnel, damage to equipment, damage to the cargo etc.

Also in line with the findings of the study is the reasoning of Jones and Seghetti (2005) inferring efficient flow of legally traded goods in and out of a country being a vital element of the country’s economic security. While trade in imports depends on the smooth flow of legal cargo, the goal of trade facilitation often competes with two additional goals: enforcement of trade laws and import security. How to strike the appropriate balance among these three goals is a fundamental question at the heart of import policies. Striking the appropriate balance among competing import policy goals is made more difficult due to the volume and complexity of trade inflows.

The findings of the study concur with Gloss and McGarell (2004) on the submission that the challenges posed by growing global trade and international supply chain concerns have led to organizations and governments responding with policies and practices aiming at reducing the exposure of supply chains to voluntary acts of breach and international chain disruptions. This has resulted to applications of procedures and technologies aimed at reducing exposure and protecting people, goods, facilities and equipment in the chain as well as preventing malicious interferences on normal flow of goods and information.

Aamir , et al. (2011) identified restructuring of the tax system as an important determinant in an economies’ revenue collection. Restructuring the tax system at federal level was central to the entire process of economic reforms. Direct tax reforms at federal level formed key component of wider reforms in fiscal and economic sector of Pakistan. Like in other developing countries, in India also the tax reforms aimed at correcting fiscal imbalances (Panday, 2006). The rise of the manifest management system (MMS) has been one of the most important tax developments of recent times in Kenya.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. The researcher had intended to determine the effect of the MMS on taxes paid for used clothing.

5.2 Summary

The study sought to establish the effect of the MMS on taxes paid for used clothing. In the period 2007 to 2011 the mean taxes paid for used clothing was found to be significantly lower than the taxes paid for the period 2012 to 2016.

The research study revealed that the launch and implementation of MMS in manifest management operations led to an affirmative increase in the means of taxes paid of used clothing. The test statistics conducted denoted a statistically significant deviation between the means of taxes paid for used clothing cargo following the implementation of MMS compared to when SIMBA 2005 system was being used in manifest management.

5.3 Conclusion

The study concluded that the use of MMS in manifest management and particularly in submission of manifests, their validation and reconciliation of containerized cargo led to a statistically significant increase in the average taxes paid for used clothing. There was a recorded significant increase in taxes paid after the implementation of the system. Comparing the tax values for the pre and post MMS, there is a 49.7% increase in taxes paid.

5.4 Recommendations for Policy

There is need for C&BC to improve and advance their operations through leveraging on technology to ensure that a holistic and integrated approach in cargo management is adopted. The success of MMS in ensuring improved submission, processing and reconciliation of imported cargo should be used as a building block and expanded to cover other cargo transported via different modes e.g. air, rail and road.

5.5 Limitations of the study

The following could be some of the limitations of the study;

This study relied on the analysis of used clothing to determine the effect of MMS on taxes paid. A conclusion based on the findings of the study may not therefore be extended to other categories of goods.

The researcher used data for used clothing meant for local use. The impact on other regimes e.g. transit, transshipment may not have been clearly defined and measured.

The researcher study was narrowed to containerized cargo for used clothing meant for local use. Loose cargo was therefore not subject to analysis hence the findings from the study may not be applicable to non-containerized consignments of used clothing.

5.6 Suggestions for further research

The researcher suggests the following areas for further research:

This study focused on used clothing to determine the effect of MMS on taxes paid. Further studies could be carried out to establish the effect of the MMS on the rate or trends in goods import.

The researcher limited the regime of importation to used clothing meant for local consumption. Further studies could be carried out using additional regimes e.g. transit, transshipment among others.

The researcher limited the study to imports through the port of Mombasa. Additional studies could be carried out at other ports of entry.

There are advances in C&BC which include the development of the new integrated Customs Management System (iCMS). This would impact manifest management and other customs processes. This opens an area for further research study.

REFERENCES

- Aamir , M., Qayyum , A., Nasir, A., Hussain , S., Khan, K. I., & Butt, S. (2011). Determinants of tax revenue: Comparative study of direct taxes and indirect taxes of Pakistan and India. *International Journal of business and social sciences*, 171-178.
- Acciaro, M. and Serra, P. (2013). Maritime Supply Chain Security: A critical review. The Kuehn Logistics University.
- Barnes, P. and Oloruntopa, R. (2005). Assurance of Security in Maritime Supply Chains: Conceptual Issues of vulnerability and Crisis Management. *Journal of International Management* 11(4).
- Bijker, W. E., & Law, J. (1992). *Shaping technology/building society: Studies in sociotechnical change*. MIT press.
- Broadway, R. W. (2012). *From optimal tax theory to tax policy: retrospective and prospective views*. Cambridge: MIT Press.
- Bryman, A. (2012). *Social Research Methods*. (4th edition). Oxford University Press
- Chipeta, C. (1998). Tax Reforms and Tax Yields in Malawi. *AERC Research Paper No 81*.
- Closs, D. and McFarrell, E. (2004). Enhancing Security throughout the Supply Chain. *Special Report to the IBM Center for the Business of Government*.
- Cooper, D. and Schindler, P. (2003). *Business Research Methods*. (8th Edition). McGraw-Hill Irwin. Boston.
- Cui, L., and Hertz, S. (2011). Networks and capabilities as characteristics of logistics firms. *Industrial Marketing Management* 40, pg. 1004–1011.
- Davis (1989), *User acceptance of computer technology*. A comparison of two theoretical models – Management science.
- Fagan, E. D. (2012). Recent and contemporary theories of progressive taxation. *Journal of Political Economy*, 46(4), 457-498.
- http://kenyalaw.org/kl/fileadmin/pdfdownloads/EALA_Legislation/East_African_Community_Customs_Management_Act_2004.pdf

- <http://kenyalaw.org/lex/rest/db/kenyalex/Kenya/Legislation/English/Acts%20and%20Regulations/K/Kenya%20Revenue%20Authority%20Act%20Cap.%20469%20%20No.%202%20of%201995/docs/KenyaRevenueAuthorityAct2of1995.pdf>. (Accessed July 2017).
- [http://worldcustomsjournal.org/Archives/Volume%208,%20Number%202%20\(Sep%202014\)/00%20Complete%20Issue%20WCJ_Volume_8_Number_2.pdf](http://worldcustomsjournal.org/Archives/Volume%208,%20Number%202%20(Sep%202014)/00%20Complete%20Issue%20WCJ_Volume_8_Number_2.pdf). (Accessed February 2017).
- Ireland, P. N. (1994). Supply-side economics and endogenous growth. *Journal of Monetary Economics* 33, 559-571.
- Jones, V.C and Seghetti, L. (2005). U.S. Customs and Border Protection: Trade Facilitation, Enforcement, and Security. *Congressional Research Service, May 18, 2015*.
- Keen, M. (2003). Changing Customs: Challenges and Strategies for the Reform of Customs Administration. *IMF*.
- Kemppainen, K. and Vepsalainen, P. (2003). Trends in industrial supply chains and networks, *International Journal of Physical Distribution & Logistics Management*, 33(8):701-20.
- Kim, S., Deng, G., Gupta, S., and Murphy-Hoye, M. (2008). Enhancing Cargo Container Security during Transportation: A Mesh Networking Based Approach. *Technologies of Homeland Security, 2008 IEEE Conference*.
- Kusi, K. (1998). Tax Reform and Revenue Productivity in Ghana. *African Economic Research Consortium Research Paper No.74*.
- Macharia, J. K. (2014). *The Effect of Tax Evasion on Tax Revenues in Kenya* (Unpublished MBA Project), University of Nairobi.
- Mackenzie, D., & Wajeman, J. (1999). *The social shaping of technology* (2ed.). Philadelphia: Open University Press.
- Musgrave, R. A. (2011). Approaches to a fiscal theory of political federalism. In *Public Finances: Needs, Sources, and Utilization* (pp. 97-134). Princeton University Press.
- Musgrave, R. A., & Peacock, A. T. (Eds.). (2008). *Classics in the theory of public finance*. Springer.
- Muthama, J. (2013). *Effects of Revenue Systems on KRA*. Nairobi University.

- Nyaga, G. A. (2014). *Tax Compliance, Enforcement and Taxpayer Services in Kenya: A case study* (Unpublished Master of Commerce Thesis), Strathmore University, Kenya.
- Olavarrieta, S. and Ellinger, A. (2007). Resource-Based Theory and Strategic Logistics Research: *Integrational Journal of Physical Distribution & Logistics Management*, Vol. 27, No. 9/10.
- Osoro, N. E. (2012). Revenue Productivity Implications of Tax Reform in Tanzania. (AERC, Ed.) *Research Paper* No 20.
- Oswald J., Ghobadian A., O'Regan N. Antcliff V. (2013). Dynamic Capabilities in a Sixth generation family Firm: Entrepreneurship and the Bibby Line. *Business History*, 55, pg. 910 – 941.
- Panday, M. (2006). Direct Tax Reforms in India. *International Journal of Business and Social Sciences* 2, no 19 Special Issues.
- Penrose, E. (1959). *The Theory of the Growth of the Firm*, Blackwell, 1959. Revised edition: Oxford University Press.
- Pisano, G., Teece, D. and Shuen, M. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, Vol.18, No.2, pg.509–533.
- Progoulaki, M. and Theotokas, I. (2010). Human resource management and the competitive advantage: An application of resource-based view in the shipping industry, *Marine Policy* 34, pg. 575 – 582.
- Ricardo, D. and Mills J., (1958). The "classical theory" of international trade and the underdeveloped countries. *The Economic Journal*, 68(270), 317-337.
- Robinson, R. (2005), Liner Shipping Strategy, Network Structuring and Competitive Advantage: A chain systems perspective, *Shipping Economics, Research in Transportation Economics*, Volume 12, pg. 247–289.
- Shapiro, D. and Hameri, P. (2004). From supply chain to demand chain: the role of lead time reduction in improving demand chain performance, *Journal of Operations Management*, 21(6):613-28.

- Stirati, A. (1994). *The theory of wages in classical economics: a study of Adam Smith, David Ricardo, and their contemporaries*. Edward Elgar Publishing.
- Studenski, P. (2010). Toward a theory of business taxation. *Journal of Political Economy*, 48(5), 621-654.
- Tanzi, V. and Zee, H. (2001). Tax Policy for Developing Countries. *Economic Issues* No. 27. IMF.
- Visser, C. B., & Erasmus, P. W. (2005). *The Management of Public Finances: A Practical Guide*. Oxford: Oxford University Press.
- William, D., & Edge, F. (1996). Tax system automation and revenue collection. *Journal of Management Science*. 26, 154-186.
- Williams, Z., Lueg, J. and Lemay, S. (2008). Supply chain security: an overview and research agenda. *The International Journal of Logistics Management*, Vol. 19 No. 2, pg. 254-281.
www.mar.ist.utl.pt/mventura/Projecto-Navios-I/IMO.../SOLAS.pdf (Accessed July 2017).

APPENDICES

Appendix I: Letter of Introduction

The Manager

Statistics Section

Customs and Border Control Department

Kenya Revenue Authority

10th Floor, Times Tower

Nairobi

Kenya

Dear Sir/Madam,

RE: Research Information

I am a postgraduate student at the Jomo Kenyatta University of Agriculture and Technology pursuing a Post Graduate Diploma course in Customs Administration. As part of the course requirements, I am undertaking a research project on “THE EFFECT OF THE MANIFEST MANAGEMENT SYSTEM ON TAXES PAID BY USED CLOTHING IMPORTERS: A CASE OF MOMBASA PORT”.

To fulfill information requirements for the study, I intend to collect secondary data from your Section/Division. The information being requested is purely for academic purposes and will be treated in strict confidence, and will not be used for any purposes other than for my research. I am interested in containerized cargo (ocean cargo) declarations of used clothing covering HS codes 63090010, 63090020 and 63090090 for entries entered for local use (C400 entries). In this regard, please provide me with data mentioned for the period 1st January 2007 to 31st December 2016 detailing the following fields:

1. Manifest Number
2. Bill of Lading
3. Manifest Registration Date
4. Manifest Approval Date
5. Voyage Number
6. Voyage Name

7. Date of arrival
8. Date of Discharge
9. Entry number
10. Entry Registration date
11. Entry Pass date
12. Entry Release date
13. Quantity of cargo
14. Taxes Paid
15. CPC
16. Station
17. Country of Destination
18. Consignor name
19. Consignee name
20. Gross Weight
21. Container Number

I would really appreciate if you would allow me to access all the relevant information for the research project. Any additional information you might consider useful for the study is most welcome.

Thank you.

Njeule M.A.

Appendix II: Data Collection Sheet

Pre-MMS	Year	Number of observations	Gross weight (Kgs)	Quantity (Bales)	Taxes paid (Kshs)	Manifest registration timelines (Days)
	2007					
	2008					
	2009					
	2010					
	2011					
	TOTAL					
Post-MMS						
	2012					
	2013					
	2014					
	2015					
	2016					
	TOTAL					