

GSJ: Volume 10, Issue 2, February 2022, Online: ISSN 2320-9186 www.globalscientificjournal.com

ROLE OF CUSTOMS RISK MANAGEMENT IN ENHANCING COMPLIANCE OF TAXPAYERS: THE CASE OF THE ETHIOPIAN REVENUES AND CUSTOMS AUTHORITY MODJO CUSTOMS BRANCH

BY:

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A THESIS SUBMITTED TO THE BUSINESS ADMINISTRATION PROGRAM IN THE PARTIAL FULFILLMENT OF MASTER OF ART DEGREE AWARD IN BUSINESS ADMINISTRATION

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# JUNE, 2018 BISHOFTU, ETHIOPIA

# **Statement of Declaration**

I, the undersigned, declare that this study is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been properly recognized.

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This Thesis has been submitting for examination with my approval as University.

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## ACKNOWLEDGMENTS

First and for most I would like to express my gratitude to the almighty ALLAH who makes this all to happen for the realization of this thesis and want to say Alhamdulillah.

Secondly I would like to express my gratitude to Gemechis Mersha (PhD candidate) for his unreserved advice and assistance for the realization of this thesis. This thesis has successfully completed with his kind and friendly advice under his guidance.

Thirdly, my thank goes to my friends and family members who support me by their ideas and advice. My special thanks go to my wife Ekram Fetasho for her patience and support during my study in the last two years. I am greatly honored to her for the love and family affections she offered me during the course of my study in the university.

Fourthly, I thank to my colleagues in the tax compliance risk management department for their cooperation during data collection with special gratitude to tax compliance team leader Wesenu Tesfaye.

Finally, my great thank goes to my father Abduro Serba and my mother Arabe H/deko, again for Adem and Murad for their unlimited support.



# **Approval Signatures**

Researcher's name	Date and sign
Advisor's name	Date and sign
Name, examiner	Date and sign
Name, chair of the DGC	Date and sign

# Acronyms

AEO	Authorized Economic Operators
ASYCDA++	Automated System for Customs Data
BPR	Business Process Reengineering
ERCA	Ethiopian Revenues and Customs Authority
ESLSE	Ethiopian Shipping and Logistics Service Enterprise
ICT	Information Communication Technology
IT	Information Technology
PCA	Post Clearance Audit
SPSS	Statistical Packages for Social Science
TRDP	Traders" Risk Data Profile
UNCTAD	United Nations Conference for Trade and Development
WB	World Bank
WCO	World Customs Organization
WTO	World Trade organization

## ABSTRACT

In customs, to apply risk management practice is not an option rather it becomes the contemporary instrument to accomplish the two mutually competing objectives-trade facilitation and regulatory control. Unlike the traditional gatekeeper style, nowadays, it is hardly possible to ensure compliance through an indiscriminate inspection of all transactions. This thesis looks into the Roles of customs risk management towards achieving the two objectives with particular focus exerted to enhancing compliance level of taxpayers and important factors that affect compliance behavior of taxpayers is also addressed. Additionally, this research thesis assessed challenges of ERCA's risk management. Researcher used research design to address the research questions and objectives mentioned in chapter one, a mixed approach (QUAN  $\rightarrow$  QUAL) of descriptive and casual (correlation between dependent and independent variables) design is employed. In other word the researcher employed both correlation and descriptive analysis. This design is typically suitable to explain and interpret quantitative results by collecting and analyzing followup qualitative data. Regarding sample size the researcher used Naresh sample determination techniques for determining sample size. Researcher used both primary and secondary data as data sources. Regarding data collection method researcher collects primary data through questionnaires and interviews. Besides this, the secondary sources of data are collected from ERCA, WCO websites and other sources. Data gathered through above technique is analyzed using descriptive statistics based on summarized comparisons using percentages, ratios, graph, and table and additionally researcher used SPSS software Version 20 to analyze the data.

Keywords: Risk Management, Facilitation, Compliance

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## **CHAPTER ONE**

## **1. INTRODUCTION**

#### 1.1 Background of the Study

A common characteristic of Customs work is the high volume of transactions and impossibility of checking aspects of transaction in customs administration. Risk management has a role in Customs administrations and facilitating the movement of legitimate passengers and cargo while applying controls to detect Customs fraud and other offences. Customs administrations find themselves increasingly under pressure from national governments and international organizations to facilitate the clearance of legitimate passengers and cargo while also responding to increase in transnational crime and terrorism. These competing interests mean that it is necessary to find a balance between facilitation and control. Customs controls should ensure that the movement of vessels, vehicles, aircraft, goods and persons across international borders occurs within the framework of laws, regulations and procedures that comprise the Customs clearance process. Given the high number of export, import and transit transactions many Customs administrations use risk analysis to determine which persons, goods, and means of transport should be examined and to what extent (WCO Revised Kyoto Convention, Standard 6.4.). Trade liberalization through harmonization and simplification of customs processing is the current global agenda where the need for the application of risk management system has gained momentum more recently. The importance of effective risk management is often explained in every documents related to customs modernization. For example, international institutions like the World Trade Organization, World Bank, and World Customs Organization have been insisting and supporting customs administrations of developing countries including Ethiopia to introduce and practice modern risk management. The revised Kyoto convention, which is a blue print for customs modernization has also considered the implementation of advanced risk management as a key principle among others. As a modern methodology to achieve balanced approach in customs, much is expected from the application of risk management.

In today's era of globalization, to introduce modern risk management system, is not a matter of choice rather it is an integral part of customs modernization. Consequently, reform programs are undergoing in almost all customs administrations around the world targeting at making trade

efficient and effective than ever. Similarly, it has been reportedly said that Ethiopia's development agenda is highly influenced by the performance of customs administration. Meanwhile, experiences also show that the countries which have established more advanced risk management system, equipped with latest technology have achieved the best level of compliance with customs requirements. Unlike the less developed nations, in most European countries for example, according WCO survey, (2007), more than 80% of consignments are cleared without customs intervention. That means most of the customers are compliant with the customs laws. And the main reason associated to the fact is that they have introduced advanced risk based controlling system. This ultimately has brought about balanced approach optimized both trade facilitation and controlling of the high risk consignments.

As mentioned above, since the essence of risk based management system was recognized and introduced very recently but poorly organized, its contribution to the enhancement of compliant traders has been very less in ERCA (Tekleweyni, 2012). That is why Ethiopian Revenues and Customs Authority have been engaged in implementing risk management system. In our case the Ethiopian revenues and customs authority introduced a new strategy for mitigating non-compliance of taxpayer but still there are a number of challenges and factors that affect compliance of taxpayer. So, it is important to see into this problem. Understanding the above literature gap the researcher needs to study focusing on major factors that affect effectiveness of customs risk management system, practical problems currently faced and examines causes of the problems at the Ethiopian Revenues and Customs Authority Modjo branch.

#### 1.2. Background of the organization

Modjo Customs Branch office is one of the branches of Ethiopian revenue and customs authority established on 2008 EC. It is located in Oromia regional states in East shoa zone Lume woreda Modjo town within the largest Dry Port- in the country which covers 80% of Multimodal transported goods. This branch office name originated from the name of the town Modjo.

Establishment of the branch office is to facilitate the flow of trade in the Ethio-Djibouti corridor. As the port Djibouti is costly for the importers to keep the goods there Ethiopian government establishes this port and helps to save the foreign currency of the country. The branch office were first established as check point under Adama customs branch and later recognized as branch office by itself for the sake of facilitating the port import and export services. The major challenge for this branch office is the hoard of large number of containers which come here through multi modal then have impact in the process of export and import service.

There are 459 total number of employees and managed by a general manager and three deputy managers classified as custom affairs, enforcement and change and modernization affairs. These three deputy mangers holds 7 process units which finally divided into 38 sub process units (teams).

Major Automations in use are

- ASYCUDA++ to process declarations
- Ethiopian Customs Valuation System/ECVS/
- Web based customs goods value data base
- Face vet checklist-Document flow and status
- Cargo Tracking System-For transit control
- Tax Payers Risk Data Profile/TPRDP/ system
- Mobile Cargo scanning machine

## **1.3 Statement of the Problem**

In far too many countries, customs still apply 100% physical inspection regime, i.e. every shipment is stopped and physically examined (partially or completely), causing significant delays at customs ports, border and air ports. Such 100% inspection regime also creates an enabling environment for non-complaint. In customs, where there is high traffic of goods and people demanding for fast services coupled with limited resources, the risk based management system becomes decisively important (WCO, 2007).Such a system support customs to properly identify compliant customers from that of non compliant thereby to allocate resources accordingly. In this case it becomes simple to provide uninterrupted services to those who comply with the customs laws and the set requirements while deploying resources to the high risk area for effective controlling. Therefore, risk management is not only instrumental in optimizing both trade facilitation and regulatory requirements but also crucial to improve compliance level of customers (De Wulf and Sokol, 2005).

Currently, customers fail to comply with at least to one of the requirements related to duties and taxes (Tekleweyni, 2012).Commercial frauds such as under valuation, misclassification, and miss description, concealment of extra items and abuse of origin privilege are the most frequently

observed offenses (Getu L., 2011). A study conducted in 2012 by ERCA regarding the compliance also shows that there is wide gap in complying with laws and regulations related to duties and taxes in Ethiopia. This has happened primarily because of lack of effective (modern) risk management system even though there are other contributing factors like awareness of customers, ineffectiveness of enforcement department, ineffective clearance system (legislation), etc. However, it is important to note that in the presence of dependable risk management in

customs, the adverse effects of the other factors can be substantially reduced (ERCA, 2012).

The central issue that the researcher is intended to investigate is roles of customs risk management in ensuring compliance level in customs. In addition to this, the major challenges of risk management in ERCA Modjo branch also assessed. In other words this research identifies major factors that affect compliance level of taxpayers with a special emphasis on the customs risk management system.

#### **1.4 Research question**

Now, it becomes worthwhile to raise pertinent leading questions of the entire study as stated below:

- 1. What are the major factors that affect compliance behavior (level) of taxpayers in customs?
- 2. What are roles of customs risk management which affect compliance level of taxpayers in ERCA Modjo branch?
- 3. What are the major challenges of customs risk management system in ERCA Modjo branch?

## 1.5. Objectives of the Study

This thesis has tried to analyze roles of customs risk management to make traders more compliant with customs laws in ERCA. It has both general and specific objectives as stated below.

#### **1.5.1. General Objectives**

The general objective of this thesis is to identify factors that affect compliance level of tax payers with a special focus on the customs risk management practice role in ensuring compliance of tax payers with the customs laws and regulations.

#### **1.5.2 Specific Objectives**

In order to easily understand and manage the entire study, the general objective of this research can be decomposed in to some three specific objectives. Thus, it is aimed at:

- 1. Identify factors that affect compliance level of tax payers with the customs laws or regulatory requirements;
- 2. Investigate relationship between roles of customs risk management and its roles for compliance level of tax payers ;
- 3. Identify major challenges of risk management in ERCA Modjo branch;

## 1.6. Significance of the Study

Considering the fact that trade facilitation and compliance with laws are the two most interrelated and contradictory objectives of customs administrations, it becomes crucial to conduct an in depth research on the roles of customs risk management. In the first place it can directly affect trade and development performance of Ethiopia. That means risk based controlling in customs has to do a lot with the efficiency of trade. Secondly, it becomes an internationally burning issue as result of the ever increasing dependence in international trade and security problems. Therefore, the findings of this study will contribute a lot for different purposes. Overall, it will enable ERCA understand more about the gaps in the current compliance problem and its solution in light of modernization of its risk management. Secondly, it will assist to the risk and compliance management department in order to improve performance. Equally important, this thesis can also be used as a reference material for further research undertakings to come.

## 1.7. Delimitation of the Study Area

Generally, this thesis studied important factors that affect compliance level of taxpayers related with import trade. Meanwhile, a special emphasis exerted on the customs risk management in bringing customers compliant. Due to the vast nature of the revenue sector, this research will not incorporate the domestic tax and export trade. Similarly, it has excluded the contraband and border management issues across the country. Thus, the primary focus of this thesis lies on the legally imported (commercial and non commercial) trade activities of the country and limited with selected branch of Ethiopia revenues and customs authority which is Modjo Customs branch.

# **1.8.** Limitations of the Study

Acknowledging the limitations of the study empowers the reader to appreciate the constraints that were imposed on the study and to understand the context to which the research claims are set. Researcher apply time management strategy in an attempt to complete the study as well as focus on the work, background information of the respondent taxpayers showed that most of them had no professional experience about tax administration, which affected the responses. Lastly, limited access to research sites, non availability of participants, secondary data and inadequate response were constraints in conducting the study.

# **1.9.** Operational definition of terms

For the purpose of this research context, the following words and terms are defined for the ease of understanding of the entire thesis.

**Taxpayers:** refers to any person who are involved in import and export activities specifically importers and clearing agents in Ethiopia. It is important to note that taxpayers and customers will be inter-changeably used for the purpose of this thesis.

**Risk:** the degree of non-compliance with the customs laws, rules and procedures in the process of clearing import goods.

**Risk management**: the systematic application of management procedures and practices which provide customs with necessary information that helps to tackle compliance risk.

**Compliance:** the act of being obedient with customs laws, rules and procedures in customs administration.

**Compliance risk:** the possibility to which customs taxpayers become noncompliant with customs laws, rules and procedures

**Balanced approach**: the method through which customs achieve maximum of trade facilitation and effective controlling of illegal trade.

## **1.10. Organization of the Study**

The research study is organized in to five chapters. The first chapter of this research contain introduction, background of the study, problem of statement, and research question objectives of the study, scope of the study, and operational definition of terms as well as significance of the study. In Chapter two theoretical foundation and some empirical aspects of the study is presented. Chapter three describes the research methodology. Results and discussions are contained in Chapter four together with the survey outcomes. Finally, Chapter five provides conclusion and recommendations of the study.

# CHAPTER TWO LITERATURE REVIEW

## 2. 1 Theory and Concepts of Risk Management and Compliance

## 2.1.1 Definition and Concepts of Risk Management in the Customs Context

Different writers and scholars defined risk management in different ways even though there is much similarity among them. Herein, some important definitions related to customs risk as well as risk management are included among others.

Risk is defined as the degree of exposure to the chance of non compliance with customs laws that would result in loss or injury to trade, industry, and the public. Risk management is the systematic application of management procedures and practices which provide customs with the necessary information to address movement or consignments which represent a risk (De Wulf and Sokol, 2005). Meanwhile modern risk management is also defined as a more disciplined and structured approach to managing risk. By implementing such advanced risk management system many customs service mostly the developed nations, have brought about balanced compliance level.

More specifically, Lane (1998) has defined risk management in the customs context as "narrowing the gap between those areas where customs has some control over the outcome and some knowledge of cause and effect and those areas where control and knowledge are absent" (Lane, 1998; pp.116).

Similarly, according to the Ethiopian customs proclamation 622/2009, risk management is defined as a system of management by which different risk bands are categorized on the basis of their risk levels in light of fair customs service provisions and controls with respect to goods brought to or taken out of customs territory.

## 2.1.2The Driving Forces to Apply Modern Risk Based System

#### 2.1.2.1. Changing Operating Environment

The need for the introduction of modern risk management practice in customs administration becomes more crucial than ever. The basic reason as De wulf and Sokol, 2005 noted is that to follow a trend called 'business as usual' is no more effective in the contemporary world. That means exercising the gatekeeper style of management need to be replaced by a more dynamic and flexible that allows better service delivery without compromising regulatory control. Moreover, as the responsibility of customs is becoming diverse and complex spinning from revenue collection up to ensuring security concerns and preserving cultural heritage, intellectual property (WCO customs risk management compendium, (2008).

Unlike the traditional way of perception of intervention and facilitation, which has been seen as a "zero-sum" game, it is now changed to a balanced approach. That means an increase in one would not necessarily imply a decrease in the other. Thus it is important to understand that control and facilitation are not mutually exclusive goals rather are mutually reinforcing objectives and it is possible to achieve optimal levels of both (De Wulf and Sokol, 2005).

Implemented risk selectivity and targeting is not the ultimate solution for the challenges most customs administrations face. However it is well recognized that a modern risk management strategy, while continuing to embrace these techniques, must go beyond selection and targeting and introduce new ways of working. This will increasingly lead administrations to adopt a holistic, risk-based compliance management approach allowing Customs to allocate its resources more effectively and efficiently on behalf of the government.

# 2.1.2.2 Achieving Balanced Approach (Facilitation VS Controlling)

The traditional way of managing risk has been primary targeted at the controlling aspect. On the contrary, a risk management style that emphasizes only on the facilitation aspect at the expense of appropriate regulatory control is also another extreme. Furthermore, the one that lies inbetween the two approaches tries to compromise facilitation and controlling but still is not effective and efficient. A Modern risk based management which is also called the balanced approach system is different from the above three approaches. It applies risk management principles in a more sophisticated and systematic ways.

Such a system is built by the support of top level officials, workable legislation, and it is also supported by necessary facilities like ICT, skilled expertise, intelligence etc (Lane, 1998).

In this case, it is very dynamic, networked to all reliable information sources, thus it becomes a dependable system that enable customs administrations optimize the two key objectives – facilitation of international trade and ensuring regulatory controls.

In a modern sense of risk management system, the commonly held belief that it is a paradox to achieve both of the customs objectives is changed. That means higher facilitation is possible in the presence of higher controlling.

However, it is worthwhile to note that ensuring higher controls of movement of goods and passengers is not to mean that majority of the transactions are subjected to customs check;

instead it is about targeting at few selected potentially high risk consignments but have significant impact in the economy. For instance, if we consider those developed countries' like Canada and USA customs services they only focus on 5% and 10% of the shipments. This leads to effectively deploy resources so that enforce laws and regulations without disrupting the facilitation. In other words trade facilitation is not necessarily to be realized by loosening control and vice versa; rather it is possible to ensure both simultaneously. In fact, this is the most important and unique feature an effective risk management practice in customs (De Wulf and Sokol, 2005 pp 92).

## 2.1.2.3. Ensuring Compliance in ERCA

Risk management is about identifying areas of potentially non compliance areas and applying relevant management approach to considerably reduce possible threats. By doing so effective and efficient risk management can highly assist customs properly allocate its resources towards high risk areas while expediting most consignments. This means customs can be able to enforce illicit trade activities by which it can discourage fraudulent activities. Therefore, this can indirectly create positive influence up on compliance SARS, (2013).

#### 2.2. Pillars of Risk Management in Customs

Many scholars and writers argue with regarding to the role of risk management in customs operations. But some important concepts are well incorporated in the books and literatures of Wulf and Sokol, (2005), Lane, (1998), and WCO customs modernization. In those books, it is suggested that there are some unique features of modern risk management. These can be summarized into four main pillars as; (1) holistic approach (2) compliance measurement and continuous improvement (3) human resource development and (4) maximum utilization of information technology.

## 2.2.1. Holistic Approach (Comprehensive)

Risk management could not be fruitful if all stakeholders are not taking part. Related parties such as trading community, regulatory agencies and the security need to be actively involved in the risk management process. For this reason, risk-based compliance management should starts with robust legislation that incorporates areas such as acknowledgement of the respective responsibilities of government and industry, includes regulations for electronic communication, provides sanctions for non-compliance and provisions to break the nexus between physical movements and processing, reporting and revenue liability, and, finally, allows for flexible and tailored business solutions. Moreover, it is essential to mainstream the principles of risk management into all activities of the organization so that each activity can be done in accordance to risks De Wulf and Sokol, (2005).

According to New Zealand customs (2010) risk management, a robust approach to risk management requires three types of thinking to nearing the end of its useful life.

- Responsible thinking—taking action to manage risk, avoid or reduce adverse exposure, and maximize the potential of identified opportunities.
- Balanced thinking—striking a balance between the costs and benefits of managing risk. A risk-free environment is impossible (if not uneconomic) to achieve, so the administration needs to decide what level of risk is acceptable.
- Forward thinking—managing proactively rather than reactively. Risk management is about identifying and being prepared for what can happen.

## 2.2.2. Human Resource Development

Generally, it is commonly held belief that customs staffs have a pivotal role in any customs administration. Furthermore, when we think of modern customs risk management, it is well recognized that the primary role lies on the shoulders of risk management officers. Consequently, the WCO customs modernization and. Lane, (1998) suggests that, these staffs are required to have multi disciplinary knowledge in areas such as intelligence, statistics, and classification of goods, valuation and other international trade practices. In addition to this, it is necessary to equip inspection officers with modern inspection equipments in order to make them effective and efficient in their endeavors. According to WCO safe frame Standards, customs need to apply modern Non-intrusive inspection (NII) equipment and should be available and used for conducting inspections, where available and in accordance with risk assessment. This equipment

is necessary to inspect high-risk containers or cargo quickly, without disrupting the flow of legitimate trade. Uniquely customs is an institution that is responsible to accomplish national law and international agreements and as well as conventions in one hand, and facilitate trade in the other. For this reason, it has been persistently said that Customs administration demand integrity, dedication as well as more professionalism than any other government organization or agency

#### (WCO, 2007).

Different writers put reasons for this argument but it is best explained by Wulf and Sokol, 2005 as:

"Customs is a unique organization among government agencies in that it is neither a domestic nor an international agency. It is poised on the inter-national borders, not only as an expression of a nation's sovereignty, but also as the nation's guard against external threats to health, safety, and the environment; protecting (for better or for worse) domestic industry and collecting revenue to support the government" (Wulf and Sokol, 2005).

#### 2.2.3. Maximum Utilization of Information Technology

Modern risk based management system depend much on electronic communication and data interchangeable WCO customs modernization program mainly focus on the implementation of electronic customs services. On top of this, much of the exchange of information, profile development and implementation of selectivity system requires a networked system. Risk management is one of the areas where the application of computerized system is highly required. In fact, in a customs modernization process, it is considered as an enabling tool. IT plays pivotal role in area like the collection of data intelligence and analyzing profiling. The Customs administration should require advance electronic information on cargo and container shipments in time for adequate risk assessment to take place WCO (2007 pp 12).

In a title" The Role of Information Technology in Customs Modernization" Wulf and Sokol (2005) have discussed the importance of IT by categorizing in to three stages. The first stage is characterized as that, customs administrations concentrate on the physical control of goods, relying heavily on high levels of physical examination and on the submission and inspection of paper-based documentation. In such cases, the main purpose is to merely replicate existing manual systems. Since data entry took place after submission of paper based documentation, which means application of the IT is not as such value adding one. Furthermore, the use of such systems is typically applied after the goods have arrived in the country of import. Equally

important, limited attention is often paid to research and analysis of the trader population, and risk management-based targeting of suspect consignments is often limited or nonexistent. The focus is on maximizing revenue yield and little attention is usually paid to developing trade facilitation initiatives. Quite a few customs administrations in developing and transition economies appear to lie on this stage.

In stage two, IT supports customs decisions. The main focus lies on the collection and analysis of information, with decisions on admissibility, revenue assessment, and intervention made on a risk management basis. Such approaches require significantly more sophisticated IT infrastructure, both within customs and within the wider trading community.

In stage three, customs administrations rely heavily on information and accounting systems, and on following the processes that constitute a trader's total activities. All information is exchanged electronically, decisions on treatment of consignments are made on a risk management basis, and the compliance record of traders becomes a key consideration. The focus is on informed compliance, intervention by exception, and rationalization of service delivery (for example, the single window concept). In this stage customs become effective in both trade facilitation and controlling; is being practiced in customs administrations of developed economies (De Wulf and Sokol, 2005).

Customs resources are moved from resource intensive; low-value activities at the time of arrival of the consignments, to low-resource, high-value pre-arrival clearance and post event, systems based audit activities. All customs administrations in developed economies are now working toward achieving these methods of operation. Each stage in this evolutionary model requires increased use of IT combined with the adoption of modern administrative systems and procedures.

#### 2.3. Modern Approaches of Risk Based Controls in Customs

Today customs modernization entails the introduction of different controlling tools which can substantially support trade facilitation. In fact all of the methods explained below can be applied with the help of dependable risk management practice. By doing so both customs and the business can be benefited. Now let's analyze some of the commonly practiced approaches.

## 2.3.1. Simplified Procedures for AEO

As one of trade facilitation tool, the issue of Authorized Economic Operators (AEO) is becoming the major focus area of WCO. It is a process of authorization of a special privilege to traders who satisfy some predetermined requirements by customs. The general frame works that guide are designed by the WCO in the module of safe frame work of standers. The authorization process mainly is done based on the historical records (risk status) of clients among other criteria. While there is possibility of difference in criteria from country to country, the following are important points to be considered as suggested by WCO, 2007;

- Compliance history in tax and customs
- Contribution to national agenda
- ➢ Financial solvency
- Management of commercial resources
- > Information management and system computerization
- ➢ Logistical frame work of compliance
- Education, training and awareness
- Compliance in relation to partners

To sum up, the granting of AEO status substantially depends on the effectiveness of a risk management system of a given country. The better the system the more effective achieved the objective will be. In fact, once the privilege is offered it needs a close cooperation and auditing which in turn demands qualified auditors and analysts of risk. Currently ERCA has already granted AEO for forty nine companies operating in the country. Meanwhile, some customs experts recommend that less developed countries not to apply such system as they usually are unable to establish a good controlling mechanism supported by auditing and computerized communication system.

## 2.3.2. Audit Based Controls

Most modern Customs administrations in this century apply best practices focused on company profiles other than transaction based controls. The use of risk management techniques in clearance procedures allows the majority of shipments to be released with minimal checking. Post Clearance audit (PCA) is one of the most effective measures for improving compliance among traders, so an effective post clearance audit prevents and detects commercial fraud. Given the increasing volume of imports, coupled with the pressure to facilitate the movement of goods,

PCA provides customs with another tool to enhance existing tools, and also provide assurance to compliant importing community that customs are taking appropriate action against those that do not comply.

Consequently, PCA is one of the most effective measures for improving compliance among persons which in turn help customs prevent and detect commercial fraud.

Due to minimum percentage of the goods examined under efficient risk-based clearance implies that Customs can concentrate on this minor part of imports and release the vast majority of shipments immediately after the clearance document has been lodged with Customs. This contributes to cost savings for businesses as well as for customs. In general, it is a common practice that, the improved efficiency in Customs together with the traders' incentive to achieve faster release of goods brings about better compliance on the part of the traders. This has a further positive impact on those non compliers as a result of enhanced collaboration between customs and traders as well as effective enforcement capacity.

## 2.3.3. Pre-Arrival Lodgment and Processing of Data

Pre-arrival lodgment and processing of data is about receiving and processing data related to import or export process. In the presence of a good customs management in general and risk management system in particular, information is gathered and processed before goods or passengers arrive at the customs stations. In other words having the necessary data in advance enable customs to pro-actively manage significant risks. This requires the establishment of a system for cooperation and exchange of information among all regulatory agencies within a country.

#### 2.3.4. Separation of Release from Clearance of Goods Functions

This is about the separation of duties in a manageable manner. It is advisable to classify the functions in customs process based on the actual and potential risks associated with the activities. The release section may mainly focus on processing of active declarations with little intervention. On the other hand clearance may require some longer time because of auditing and other verification.

## 2.4. Benefits of Risk Management

An effective risk management in customs is believed to play a very critical role in the modernization of customs administration. It has two interrelated and basic contributions; enable

customs ensure both expedite services for legitimate traders while ensuring regulatory controls. In general, according to Getu, 2011, Hintsa, J., et al., (2011), WCO, 2007 application of a modern risk management results in the following benefits:

- Better resource allocation
- Increased revenue
- Improved legislative compliance
- Reduced release times
- Lower transaction costs
- Improved cooperation with business
- Improved reputation and professionalism
- More intelligent approach

Even though different writers have described the benefit of advanced practices in customs differently, it can be concluded that collectively all the benefits can be achieved mainly if a risk management system effectively help customs to properly provide services legitimate traders while targeting controls at the high risk one. In other words, it seems that other trade facilitation factors must be depending on risk management. For instance, in the presence of effective risk management system, trade costs can considerably be reduced because of the better services given to customers. This in turn encourages others to come to the right track. Similarly, if the risk management is able to effectively target the high risk traders or passenger, it is simple to properly allocate resources towards the prioritized area. Put it in other words, by the help of advanced risk management system customs administration can bring more compliant customers on top of the other benefits.

#### 2.5. Compliance Management

Compliance management is an integral part of risk management. It is a systematic approach of determining whether an entity or transaction is acting in conformity with law or regulations. In doing so there are four determinant factors: a country's legislative frame work, administrative frame work of a country's customs organization, the type of risk management frame work adopted and the available technological frame work. These frame works collectively determine trade facilitation and compliance (controlling) aspects of any customs administration Wulf and Sokol, (2005 pp 93-94).

Any organization is it business or non business seeks to achieve maximum compliance with its law(s), regulations, norms and other requirements. Some literatures show that the issue of compliance has been existed with the establishment of governments.

Compliance is simply being obedient to what someone is expected to observe in performing its activities. On the other hand non compliance can be defined as a violation of laws, rules, procedures or requirements set by an organization as a precondition to be followed by all customers. Consequently, noncompliance occurred customs when someone fails to discharge mandatory obligations related to duties and taxes knowingly or unknowingly (ERCA, 2012).

Furthermore, compliance is defined as the degree to which taxpayers and traders along with intermediaries like practitioners and clearing agents meet their obligations (SARS, 2013).

#### 2.5.1. Factors Influencing Compliance

As a strategy, there are various approaches followed to ensure compliance. For example the Australian consumer law follows two approaches namely risk based approach, and outcome focused approach. The methods used to bring compliance affects significantly the behavior of traders. Consequently, there are different guiding principles adopted by different nations. Some emphasize on enforcing the law, some give priority for education, creating enabling environment, and some apply both. In relation to this issue, Widow son (1998) tend to underline the need to emphasize on improving situations with a special attention to incentive schemes instead of trying to apply enforcement strategy. He further noted that it is possible to encourage taxpayers to be compliant by changing their perception that:

- ➤ The tax system is unfair;
- Illusion about what everyone is really paying; and
- Nobody pays the right amount.

According to the SARS (2013), the important principles that help enhance compliance level of taxpayers lie into four pillars applied sequentially. The first one deals with awareness creation and education. Secondly, there should be enabling environment by which customers could be empowered to properly comply with the laws. The third pillar focus on providing every taxpayer with the right incentive. The Last pillar goes with effectively enforcing the law.

In a similar fashion many other literatures also emphasize that social factor remains influential factor to encourage or discourage taxpayers' behavior on their compliance level. Having agreed with this concept, a study conducted to identify influential factors of tax compliance suggests

three factors namely economical, political and socio-psychological. This study also noted that the last factor is most influential (Estonia, 2010).

## 2.5.2. Compliance Measurement Areas

In an attempt to measure the compliance status of clients, it is advisable to concentrate on those giant traders as they bear potentially high risk to the nation. Experiences of those countries which have established effective risk management system shows that they tend to focus on the top 5-10% of these highest volume manufacturers, importers, exporters and commodities but they account for over 80% of imports and exports. This approach enable customs to ensure that those which have the most significant impact on the national economy are being reviewed more effectively (WCO, customs risk management compendium). According to this compendium, compliance measurement areas include:

- 1. Documentary issues;
- 2. Revenue issues;
- 3. Transport issues and ;
- 4. Specific concerns:
- > Compliance by tariff number or range of tariff numbers;
- Public health and safety issues;
- > Intellectual property rights and copyright issues;
- Compliance with trade agreements;
- Proper country of origin marking on goods; and
- High revenue commodities;

According to these compliance concerns, Customs clients can be divided into four broad based categories: they are: those who are voluntarily compliant; those that try to be compliant but do not necessarily always succeed in their endeavors; those who will avoid complying if possible; and those that deliberately do not comply.

An effective risk-based compliance management strategy acknowledges that the client categories outlined above require different responses. Incentives and simplified procedures should be applied to those who are voluntarily compliant (low risk), assisted compliance to those who try to be compliant but do not necessarily always succeed, directed compliance to those who try to avoid following the letter of law, and enforced compliance to those who are deliberately non-compliant (high risk) (Wulf and Sokol,2005).

#### 2.5.3 Compliance Measurement and Continuous Improvement

When there is an effective measurement and management of compliance it is obvious that there is also successful risk management practice provided that it is constantly monitored and evaluated. One method for this is the use of compliance measurement. "Compliance measurement" is a phrase used when statistically valid random sampling techniques are employed to determine the degree to which traders, carriers, imported goods, etc. conform to Customs rules and procedures (WCO, customs risk management compendium). The compendium further emphasizes on the fact that compliance measurement system would be effective when it is applied in conjunction with risk assessment, profiling and other targeting procedures. Used strategically, compliance measurement becomes at the center of effective risk management which in turn is paramount crucial to continuously improve customs performance.

According to Widdowson(1998), risk based compliance system includes various strategies including non enforcement strategies such as self assessment involves four steps; establishing an effective legislative base; an appropriate rage of clients services strategies; compliance assessment-including risk based physical and documentary checks, auditing and investigation activities are designed to determine whether a trader is complier to the set laws and rules or not; and strategies to address both identified non compliers and recognized compliers.

The fourth strategy is a key component in compliance management process. The handling mechanisms of both compliance and non compliance which comprises of awareness creation, advises, warnings and finally penalties according to the severity of violations or frauds highly matters. In fact, the strategy and implementation capacity is a determinant factor to enhance voluntary compliance of traders. In this regard, Widdowson, (1998) who have contributed literatures in risk management advises customs to apply a 'more carrots' and 'less stick' strategy. He further argues customers should at first be assisted made aware of their duties and responsibilities. Moreover, simplifying procedural requirements, minimizing penalties and sanctions are the important measures to bring clients more compliant. As a final resort, however, Corrective enforcing measure is also paramount crucial to ensure compliance (Widdowson, 1998).

## 2.6 Empirical Review on application of Risk Management System

The essence of Customs risk management for Customs administration is reported in some studies empirically. Accordingly Baker (2002) claims that custom's understanding of impossibility of checking all shipments, however, has caused it to formulate programs to evaluate and manage the risk to any non compliance with laws and regulation which could end up with loss or injury to trade, industry, or public. Similarly, Widdowson (2003), states that as customs around the world are highly regulated authorities to fulfill their responsibilities while ensuring compliance with laws and regulation, they must prepare for potential risks of non compliance by developing various risk treatment strategies. He also states that risks to the achievement of customs organizational objectives include both the potential for non compliance with customs laws and failure to facilitate trade. According to him, the objectives of control and facilitation, often seen as being mutually exclusive, could be answered with proper risk management.

Deloitte and Touche (2003) have indicated that broad level of accountability and stakeholder involvement along with transparent communication are considered as integral parts of modern risk management programs.

According to Harrison (2007), "risk management has always been at the core of customs administration and is a fundamental discipline enshrined within the WCO's revised Kyoto convention on the simplification and Harmonization of customs procedures. It has proven to be the most effective means of managing the huge volumes of cargo that enter the country everyday of the week because it allows an administration to concentrate resources on areas of high-risk while allowing low-risk cargo to flow unimpeded into the commerce of the country. In short, risk management coupled good intelligence and effective data analysis allows the profiling and targeting of cargo prior to arrival at a port so that low-risk cargo can be released immediately and high-risk cargo can be diverted for physical examination."

Fraser and Simkins (2007) have proposed that risk management comprises a set of basic activities, such as initial identification and assessment of risks followed by prioritization and coordinated allocation of resources. According to them, the objective is to minimize the probability and/or impact of undesired events and seize auspicious opportunities.

Stomski M. (2007) have explained the fulfillment of the determinant factors such as: political will, historical records; benchmarks; adequate IT systems; cooperation with trade; goals and training and awareness for effective execution of risk based approach in compliance management. ERCA's strategic plan envisaged to achieve compliance through the substantially

minimizing level of interventions on trade. Specifically, in the risk management policy and strategy, which is developed in 2010, it is stated that the organization has planned to reach at red channel 20%, green 40% and yellow lane to be 40% by the end of the strategic period. Currently (2012), after five year of the plan the red lane is well above 60% which mean majority of the shipments are subjected to full physical examinations (ERCA, 2010). Similarly, the amount of consignments released without any intervention (green channel) is about 3% while the yellow which is accompanied by documentary scrutiny is 35%. Of course, the intervention level has decreased when compared to the 96% inspection (physical checking) during the inception period of the selectivity system in the years 2009.

However, there are two important points we need to note. First, the level of intervention itself is high even when compared to neighboring countries such as Uganda. Secondly, reduction of the level of intervention is not sound measurement of the effectiveness of risk management unit; rather the success rate is a critical indicator. Put it in other words, even though customs interruption level declined somehow, the current examination result shows that only 14% of goods are found with fraud (Getu, 2011). This means most of the human resources are ineffectively utilized. Suggestions from the WCO, shows that customs need to focus on few but high risk areas when measured in terms of likelihood and impact of the offenses. In this case inspection officers can target only on some and most risk shipments while leaving the rest move freely provided that there is effective post clearance controls.

Now let's analyze the status of ERCA by considering some of the important indicators of a good risk management system.

#### 2.6.1 Automation and Utilization of IT

Using the AYCUDA++ system, the Tax Compliance Risk Management Directorate has automated the selectivity system which has avoided the manual system at least partially. However, there are critical obstacles in risk management. First most of activities are being carried out manually. Secondly, there is loose cooperation among the enforcement departments. Currently, the directorate is mainly dependable on manually collected data or information from the branches and the enforcement departments such as clearance, post clearance audit, investigation, intelligence and prosecution. This shows there is lack of electronic data exchange and interdependency among the departments mentioned above.

## 2.6.2 Staff Composition

The numbers of staffs within the directorate at the head quarter are few in number that there are a process owner, four heads of departments, one senior and three junior officers. In addition to this most of the staff members are new to the department which means they are fresh graduates or transferred from other department. The same holds true in the branches. According to some writers like Lane, (1998) and De Wulf and Sokol (2005), the profession of risk management requires multidisciplinary knowledge and experience.

#### 2.6.3 Risk Assessment System

According to the ERCA risk management policy and strategy, the number of assessment criteria are five namely, traders, clearing agents history, value and tariff, origin of goods and customs procedure code even though currently anther three assessment criteria are added. The number of risk assessment criteria in other countries such as India and Israel are more than 2000 indicating the fact that ours is incomparably lagging behind. Meanwhile, the most striking problems with regarding to this issue are; ineffective compliance measurement, lack of utilization and application of IT (Tekleweyni, 2012).

#### **2.7 Conceptual frameworks**

This study deals with Deterrence theory associated with the Fischer's Model by considering economic, social and psychological factors in determining compliance level among taxpayers. The models which have been based on compliance level generally focus on deterrence. Deterrence can be achieved through a number of approaches such as controlling, and trade facilitation and shape taxpayer compliance attitudes and behavior. That is, deterrence may take on the form of increasing the probability of detection which is controlling such like, increasing the tax rate or by the imposition of tougher penalties. Alternatively, it may take on the form of better education, increased advertising/publicity and incentives. The focus will be upon the punitive impact of penalties, sanctions and other enforcement factors which shape taxpayer compliance attitudes and behavior. According to this theory, the relationships between determining factors of customs risk management and compliance of level of taxpayers can be illustrated in the forms controlling the risk management system and trade facilitation forms as well as shaping attitude and behavior through educating taxpayer about tax administration system in customs administration. Some researchers propose that individuals are expected to

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weigh 'the uncertain benefits of successful evasion against the risk of detection and punishment. Consequently, controlling can be in the form of penalty structure which is a part of the punishment, and is a critical factor in an individuals' choice to evade tax. Based on this theory the proposed relationship between dependent (compliance level of taxpayers) and independent variables (determinant of customs risk management includes controlling risk, trade facilitation and education about tax) researcher proposed conceptual framework for the current study as illustrated in figure.

#### **Conceptual framework**



**Fig 1**: Conceptual framework showing the proposed relationship between independent and dependent variables. In order to deal with second research question hypothesis of the thesis is as follows:

## Hypothesis

Ho<sub>1</sub>: The higher trade facilitation leads the higher compliance level of tax payers

Ho<sub>2</sub>: The higher controlling of all imported goods the higher compliance level of tax payers

 $H_{03}$ : The more educating taxpayer the more compliance level of tax payer

# **CHAPTER THREE**

# **3. RESEARCH METHODOLOGY**

#### 3.1. Research Design

Research design is a blue print used as a road map to carry out a research. Kothari, (2004) defined research design as a way of systematically solving a research problem. Concerning research design the researcher employed both correlation and descriptive analysis. The researcher used two approaches that are both quantitative and qualitative. The study involves survey of different document and questionnaire and an interview with concerned management and head of department.

#### 3.2. Research Approach

The qualitative and quantitative researches are widely applied approaches in most studies. Regarding this study the researcher employed combination of both qualitative and quantitative research approaches. These approaches are selected mainly because of the fact that this research contains both primary and secondary sources of data which incorporate quantitative data as well as qualitatively described events or phenomenon.

## 3.3. Description of the Research Areas

While conducting the study, the researcher specifically focus on some parts of ERCA namely Tax Compliance Risk Management team and employees of Modjo Custom's branch office. These areas are selected based on the factor that Modjo custom branch offices is the largest office, most of the customs duties and taxes are collected and has most potential respondents of the study area. Finally, based on the above mentioned fact these areas are found to be mostly convenient, relevant, and appropriate and cost efficient to the study.

## 3.4. Data Sources

### 3.4.1. Primary Sources of Data

Primary sources are first hand information or data which can support and strengthen the study. Unlike the cost and time such type of source of data is believed to be more reliable compared to secondary one. This data gathered from external respondents which is clearing agent and internal respondents which is employees of ERCA Modjo branch.

## 3.4.2. Secondary Sources of Data

The researcher collected data and/or information from secondary sources such as reports and studies of Ethiopian Revenues and Customs Authority (ERCA), books, research papers and different websites. The most important website to the study in consideration are the WCO and related research papers. Meanwhile, it is worthwhile to note that the researcher gathered considerable amount of statistics related to duties and tax evasion from the Automated System for Customs Data (ASYCUDA++) as well as from other offices of ERCA. The ASYCUDA++ and TPRDP system is the principal source of database system in ERCA specially designed for the management of customs related operations and profile of importer and exporters. Accordingly, ASYCUDA++ has different modules frequently used for various purposes.

#### 3.5. Population and Target Respondents

The potential population of this study is officers and customers of ERCA Modjo branch. They are directly or indirectly relevant to the study in consideration. That means they have a stake on the issue of risk management and compliance. Accordingly, the sample frames of this study have two categories- internal and external respondents. The first group includes tax compliance risk management employees and operational departments comprising of valuation, inspection, and post clearance audit and intelligence officers. These departments are selected by considering their relevancy to the research that they are closely to the study concern. The second group contains clearing agents. They are not only representatives of the trading community but also they are directly or indirectly affect or affected by and as well as concerned with the services of the study organization. The total population is about 512 which contain both employees and clearing agents. From this total population the researcher targeted 125 respondents.

## 3.6. Sample Size and Methods of Sampling

Sample size this research determined based on the above sample frames. In the first place, the respondents are categorized into four strata. These are:

- 1. Clearance officers comprising of inspection (examination) and valuation in the branch;
- 2. Post clearance audit;
- 3. Intelligence and;
- 4. Clearing agents.

To represent the sample size from the total population, the researcher employed Naresh, (2005) Sample determination methods. Based on this explanation, the sample size determination table is presented below.

#### Table 2 Sample Size Determination

Population size	Sample size		
	Low	Medium	High
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1200	32	80	125
1201-3200	50	125	200
3201-10000	80	200	315
10001-35000	125	315	500
35001-150000	200	500	800

**Source:** (Naresh,( 2005), sample determination, Marketing research, an applied research) Determining sample size based on such classification will ease and simplify the sampling process as well as ensure accuracy of the research. The sample size from each stratum determined based on the above table using simple random probability sampling methods. The following table shows summary of the respondents and sample size using Naresh sample size determination.

Respondents			
Categories	Population size	Proportion of Sample	Sample size for strata
Clearance officers	162	0.32	40
Post clearance audit	34	0.07	9
Intelligence	16	0.03	4
Clearing agents	300	0.58	72
Total	512	1.0	125

Table 2 sample size determination

The total numbers of population is about 512. From this total population the researcher take 125 sample sizes by using Naresh (2005) sample determination method. Regarding to the allocation of this sample size to each stratum the researcher used proportionate sample allocation method

by using the formula as follows.

Proportionate Sample size =X/N\*n

Where X=Population of each strata

N=Total population n=sample size

In the first group, stratum which constitutes about 162 employees, proportionately the research take 40 of them selected purposively using judgmental sampling. This category is uniformly arranged so that there is little or no accuracy problem. Concerning the second group which constitutes 34 employees 9 of them selected randomly. Similarly, 4 employees are selected purposively from the third group.

Finally, concerning to the last group, in a similar fashion to the above methods, respondents of this stratum are mostly uniform. As a result, seventy two (72) respondents are selected. Here, it is important to note that the number of actively operating clearing agents are about 300 (three hundred) in the branch; but the total number of clearing agents is more than one thousand (1000). The sample size that taken based on Naresh table is high sample size because of to increase accuracy of data for the research study.
In general, the study considered 125 (40+9+4+72) respondents from the above specified groups and the confidence level is considered at 95% with sampling error to be not more than 5%.

#### **3.7. Data Collection Methods**

The collection of data is an important aspect of a research design. The method of collection of data could directly affect the credibility (reliability) of a research. While collecting primary data, the researcher employed two of the collection techniques namely interviews and questionnaires. Considering the research problem under discussion, the researcher believes that the above two technique is more helpful in gathering as well as analyzing data and or information. To this end the researcher carefully address the questions as appropriate to each of the strata. In addition the researcher conducted personal interviews and discussions with selected heads, employees and customer of ERCA Modjo branch.

#### 3.7.1. Questionnaire

In conducting this study, questionnaires are mostly used as a means of gathering data. Questionnaires are prepared with five-Point Likert-scale questionnaire, which was quantitatively, analyzed using multiple linear regression models and much of the primary sources gathered through mixed type of close and open ended question. Questionnaires are prepared with the slight different approaches to four categories of the respondents. The questions that are prepared for the clearing agents and operational officers are entertained which focus on the compliance level with the current risk management system as well as on operational and tactical risks.

#### 3.7.2. Personal interview

The researcher has conducted personal interviews with some judgmentally selected individuals from Tax Compliance Risk Management, Intelligence and Post Clearance Audit department. These departments are considered as relevant sources of information to the study. Accordingly, one team leaders of tax compliance risk management and two team leaders from each of intelligence and PCA department were interviewed. Generally, about three individuals were interviewed. This was done in order to find supportive information which otherwise could not be reached through the rest of the methods.

#### 3.8. Reliability and Validity Test

To estimate the reliability of the variables measured was done through Cronbach's Alpha.

Cronbach's alpha estimates the internal consistency of variables in a scale pilot sample of 30 respondents was selected for each variable and Cronbach's Alpha was computed by SPSS software. Table 3 shows both the total and the pilot sample test result of reliability in the questionnaire.

Variables	Cronbach's Alpha	N of Items
controlling	0.759	30
facilitation	0.75	30
education	0.71	30
compliance	0.73	30

 Table 3: Reliability Statistics Cronbach's Alpha Coefficient

From the above Table 3.2, Cronbach's Alpha coefficient which is greater than 70% it showed that the better reliability of the questionnaire because Cronbach's alpha ranges from r=0 to 1, when applied to all 30-items provide better and with r=0.7 or greater considered as sufficiently reliable and acceptable.

#### **3.9. Data Analysis and Interpretation**

Regarding the presentation of data, the researcher used different charts, tabulations, diagrams and graphs. Following this, data analysis is done based on the relationship between roles of customs risk managements and compliance level of taxpayers. That means the effect of major factors (independent variables) including roles of customs risk management upon compliance level of taxpayers (dependent variables which is compliance level of tax payers) is described. In other word the researcher employed both correlation and regression analysis. The first and third question of research question is analyzed through descriptive study and the second question of research question is analyzed using correlation and regression. This study analysed the relationship between independent variables and dependent variable using the pearsons correlation coefficient.

The Regression equation,  $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \epsilon$ 

Where y=compliance leve(dependent),

- X1= facilitation(independent),
- X2= controlling (independent),

X3= attitude and perception toward tax(independent)

ε=error.

 $\beta 0 - \beta 3$ =correlation coefficient.

The SPSS version 20 for windows is processed primary data which is collected through questionnaire. Finally, interpretation is done in accordance to the result of the analysis.

### 3.10 Ethical considerations

The researcher obtained data from the respondent after the necessary explanation about the objective of the study. Respondents treated with dignity and informed about the purpose of the questionnaire and interview, and assured of anonymity and confidentiality of the information they supplied. They also informed about oral and written data that the study used purely for academic purpose and handled with the highest order of confidentiality and does not affect their life in any way and anytime.



# **CHAPTER FOUR**

# 4. PRESENTATION OF FACTS, ANALYSIS AND INTERPRETATION

### 4.1. Introduction

Nowadays, because of the fact that the flow and volume of international trade is ever rising, fueled by a higher demand for fast services for clearance process, the demand for having reliable risk-based management system is critically important. Indeed, customs administration is established to accomplish mainly two objectives i.e. facilitating international trade in one hand while ensuring compliance on the other. For this reason, the effective customs risk management in customs becomes particularly important. What is most important is that the system is instrumental to differentiate compliant from that of non-compliant traders which is the heart of customs risk management function. In this case, it becomes simple to devise a system that can help to address the possible treats without affecting compliant traders.

This thesis tries to analyze the Roles of customs risk management of ERCA Modjo customs branch in view of optimization of trade facilitation, regulatory control and attitude of taxpayers toward taxation system with a particular emphasize on compliance level. That means, the research has analyzed the linkages between roles of customs risk management and Roles in compliance level of taxpayers in general.

Besides, some of the major factors that affect compliance behavior of taxpayers are also addressed. The point is that when customs is able to strike a balance between two of its principal objectives, it means that there is high possibility of compliance with laws and regulations.

As a consequence, the demand for having effective and efficient risk management practice in customs is now the top agenda. Therefore, through the application of risk management system customs can be able to positively influence taxpayers" behavior.

Meanwhile, ERCA as a whole used to ensure compliance by applying the traditional style which is called non discriminatory controlling to all shipments. Hence, before 2008, customs risk management system was said to be insignificant in neither trade facilitation nor controlling illegal trade. Unless inspection is done according to systematically calculated potential risk, obviously it is hardly possible even to effectively control fraudulent activities in customs. But recently, the importance of effective customs risk management system is recognized though practically remains a lot to be done. As a result, currently ERCA"s motto is "compliant taxpayer fast service" implying the fact that more focus is geared to boost the level of voluntary compliance. This in turn has required for the implementation of more effective risk management practice.

In this chapter all the primary and secondary data are, analyzed, interpreted and discussed in detail. Besides, supportive conceptual and empirical analysis and arguments are also embodied. For the purpose of clarity and ease of understanding, points are analyzed based on the order of objectives of the study. Let's now first consider the general information about the respondents and proceed to the main body of the analysis.

#### 4.2. Profile of the Respondents

The general background information about the responds is summarized in the following consecutive tables. Researcher distributes about 125 questionnaires for respondents. Among this questionnaires some respondents do not return back .From employee respondents about 6(six) respondents is not returned and also from clearing agents about 7(seven) respondents is not return back questionnaires to researcher. Researcher used only returned questionnaires which constitute about 112 respondents only. Now let starts with general background of respondents which helps to know their characteristics such as qualifications, age, experience, sex etc.

Gender		Frequency	Percent	Valid Percent	Cumulative
					Percent
Valid	Male	34	72.3	72.3	72.3
	Female	13	27.7	27.7	100.0
	Total	47	100.0	100.0	
Age		Frequency	Percent	Valid Percent	Cumulative
					Percent
Valid	<25	10	21.3	21.3	21.3
, and	years	~~			

	26- 30years	17	36.2	36.2	57.4
	31- 40years	11	23.4	23.4	80.9
	>40	9	19.1	19.1	100.0
	Total	47	100.0	100.0	
Experi	ience	Frequency	Percent	Valid Percent	Cumulative Percent
	2-4 years	17	36.2	36.2	36.2
	5-6years	19	40.4	40.4	76.6
Valid	7- 10years	6	12.8	12.8	89.4
	>10years	5	10.6	10.6	100.0
	Total	47	100.0	100.0	
Quali	fication	Frequency	Percent	Valid Percent	Cumulative
					Percent
	Diploma	5	10.6	10.6	10.6
Valid	First degree	39	83.0	83.0	93.6
v allu	Second degree	3	6.4	6.4	100.0
	Total	47	100.0	100.0	

Source: Compiled from Field Survey and analyzed by using spss v.20, 2018

As analyzed in table 4.2.1, it is clearly indicated that majority of the respondents (72.3%) are male and the rest are female. Meanwhile more than 35.2% of them fall in the age range of 25 to 30 years indicting the fact that most of them are young. Similarly, about 21.3% of the respondents fall in the age range below 25 years. Regarding to qualification, about (83.0%) of them qualify first degree while the remaining qualifies for second degree and college diploma.

Finally regarding to their work experience, substantial number of the respondents (40.4%) has served for about 5 to 6 years while those who worked for 7 to 10 years account for about 12.8%.

Gender		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	Male	43	66.2	66.2	66.2
Valid	Female	22	33.8	33.8	100.0
	Total	65	100.0	100.0	
Age		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	<25 years	5	7.7	7.7	7.7
	26-30years	43	66.2	66.2	73.8
Valid	31-40years	13	20.0	20.0	93.8
	>40	4	6.2	6.2	100.0
	Total	65	100.0	100.0	
Exper	ience	Frequency	Percent	Valid	Cumulative
				Percent	Percent
	2-4 years	11	16.9	16.9	16.9
	5-6years	19	29.2	29.2	46.2
Valid	7-10years	28	43.1	43.1	89.2
	>10years	7	10.8	10.8	100.0
	Total	65	100.0	100.0	
Quali	fication	Frequency	Percent	Valid	Cumulative
				Percent	Percent
	Diploma	27	41.5	41.5	41.5
Valid	First degree	31	47.7	47.7	89.2

 Table 4.2.2: Background Information of External Respondents (Customs Clearing Agents)

Second	7	10.8	10.8	100.0
degree	,	10.0	1010	10010
Total	65	100.0	100.0	

Source: Compiled from Field Survey, 2018

Table 4.2.2 shows majority of the respondents (66.2%) are male and the rest are female. The distribution of age shows that about 66.2% and 20.0% of them fall in between the age range between 25 to 30, and 31 to 40 years respectively. Similarly, about 6.2% of the respondents fall under the age range of above 40 years. Similar to the first group of (table4.2.2), most of this group of respondents (47.7%) has also qualified first degree. The rest accounts 41.5% each for diploma and about 10.8% are second degree.

Finally, concerning the work experience 2 to 4 accounts 16.9 % and 5 to 6 years of work experience account 29.2% while those who worked for about 7 to 10 years account 43.1% and also above 10 years account about 10.8%

Generally, the work experience of the respondents is fairly distributed among the given options.

Before we discuss in detail about the roles of customs risk management in making taxpayers more compliant, let us now have a look at some of the factors that can affect compliance level of taxpayers. In other words, we need to identify the reasons why customers fail to comply with the customs laws and procedures particularly by assuming the situation in ERCA Modjo branch.

#### 4.3. Factors that Affect Compliance

Depending on the trading environment, there are different types of factors that can affect compliance rate of taxpayers. For instance, loopholes with the customs law, unethical behavior of officers, and lack of modern infrastructure which supports trade facilitation may worsen commercial frauds. Furthermore, there are different literatures which deal with causes of non-compliance. In most of the cases, taxpayers make a cost benefit analysis by considering the detection rate and its consequent penalty.

It means economic benefit is among the most driving factors of non-compliance. As a result, the higher the detection rates with corrective measures, the lesser the possibility of number of frauds and Visversa (Wulf and Sokol 2005). This indicates an effective enforcement system can significantly improve compliance behavior of taxpayers because of its deterrent effect. However, scholars argue that an effective enforcement system alone is not sound means to ensure

compliance. Rather there are also other factors that need to be strategically considered. The level of awareness of taxpayers (customers) regarding the laws and regulations, the cooperation and consultation between customs and taxpayers and the overall of compliance culture of the society are also crucial factors as far as compliance is concerned. In this regard Widdowson (1998) underlines that customs need to implement enforcement action only after all motivating factors are exhaustively applied. In addition to this he also noted enforcement practice has to be based on sound risk management system.

Having understood a general concept about factors that affects compliance level of taxpayers, it is necessary to consider the realties in Modjo customs branch including the extent of noncompliance and major factors attributed to the problem. To this end, the researcher has made a survey with regarding to the level of compliance as well as the major reasons for the non-compliance as summarized in figure 4.3.1 and table 4.3.2 respectively.

Table 4.3.1 Percentage Distribution of Respondents abouttaxpayer's compliance

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	39	82.98	82.98	82.98
Valid	No	8	17.02	17.02	100.0
	Total	47	100.0	100.0	

Source; compiled from field survey and analyzed using spss v.20, 2018

The staff respondents were asked to express their opinion regarding whether taxpayers comply with laws and regulations in most of the times. According to the survey, 82.98% of them said "Yes" indicating the fact that most customers (clearing agents, importers and others) usually do not properly comply with laws and regulations. Meanwhile 17.02% of the respondents replied "No" implying their disagreement with the fact that customers are usually non-compliant. Therefore, it means that most of the internal respondents who are also believed to know more about the issue agreed with the fact that many customers are not in position to comply with the customs laws and regulations.

In relation to this, it is important to note that the type and extent of violations are different demanding for different corrective measures. Some of them happen because of lack of awareness while others are deliberate. In fact, according to the customs verification report of ERCA(2012), most of the fraud are medium and minor that are usually managed administratively based on

directive number 46/2002. In this directive, frauds are clearly classified as minor, medium and sever offenses along with the respective penalties which in turn have positive contribution

towards the enhancement of compliance behavior of taxpayers. Respondents were also asked to point out the major reasons why customers fail to comply with customs laws (see questions 2.2 and 2.3 in the annex). The distribution rates of both types of

customs laws (see questions 2.2 and 2.3 in the annex). The distribution rates of both types of respondents are summarized in table 4.3.2 and 4.3.3.

Table 4.3.2: Distribution of Response of Respondents about cause of non-compliance of internal respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
	Economic factors		-		
	(higher tax and duty	18	38.3	38.3	38.3
	rates)				
	Lack of awareness and	4	8.51	8.51	46.81
	incentives				
	Weak enforcement	9	19.15	19.15	65.96
Valid	capacity				
	Poor compliance	10	21.28	21.28	87.24
	culture				
	Poor risk management				
	system and other	6	12.76	12.76	100.0
	services				
	Total	47	100.0	100.0	

#### Source; compiled from field survey and analyzed using spss v.20, 2018

The analysis in table 4.3.2 shows the respondents" distributions of response regarding to the important factors that can influence compliance level of taxpayers. The respondents were requested to mention the factors based on their order of importance to affect compliance.

Accordingly, most (38.3%) of the internal respondents have prioritized economic factors as the crucial factors attributed to the factor of non-compliance in Modjo customs branch. On the other hand, about 21.28% of the same group of respondents ranked poor compliance culture as second factors that cause non compliance of tax payers and also respondents ranked others in order of

their impact on compliance level of tax payers. As we can observe from table 4.3.2 above, those factors are mentioned by most of the respondents but with varying ranks. Therefore, taxpayers fail to comply because first, the tax due is usually high as the tax and duty rates are high.

Second, taxpayer's low compliance culture contributed to non-compliance. Third, customs lack good enforcement capacity and the risk management practice is not effective to properly differentiate compliant from that of non-compliant taxpayers. Finally customers lack awareness about the laws and regulations of ERCA.

Table 4.3.3: Distribution	of R	Response	of	Respondents	about	cause	of	non-compliance	of
external respondents									

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
	Economic factors				
	(higher tax and duty	23	35.38	35.38	38.38
	rates)				
	Lack of awareness and incentives	11	16.92	16.92	52.31
	Weak enforcement				
Valid	capacity	8	12.31	12.31	64.62
	Poor compliance	13	20.0	20.0	84.62
	culture	15	20.0	20.0	04.02
	Poor risk management				
	system and other	10	15.38	15.38	100.0
	services				
	Total	65	100.0	100.0	

Source; compiled from field survey and analyzed using spss v.20, 2018

Table 4.3.3 shows majority (35.38%) of the external respondents consider economic factors, as the crucial factors. In addition, about 20% of the same respondents have mentioned poor compliance culture of taxpayers and 16.92% Lack of awareness and incentives are the most important factors that holdup compliance. The remaining respondents also pointed out the same factors with varying sequential orders. Therefore, both groups responded similarly except the

fact that the first one has given more emphasis weak enforcement capacity as third factors while the second group give emphasis lack of awareness's and also the first group ranks the fourth and fifth poor risk managements and lack of awareness' respectively while the second group mentioned lack of awareness and incentives as third factors and also poor risk management and weak enforcement capacity as fourth and fifth factors respectively.

In conclusion, the compliance problems in Modjo customs branch are mainly happened due to

- (i) Economic benefits (because of duty and tax rate is higher)
- (ii) Lack of awareness
- (iii) Poor compliance culture of customers
- (iv) Poor risk management practice and
- (v) Weak enforcement capacity.

The nature of these factors is highly correlated each other requiring comprehensive effort to improve the adverse effects. For instance, poor compliance culture can be shaped through intensive promotion, communication and awareness creation followed by effective law enforcement. These in turn demand for detail understanding of the behavior of taxpayers which is central to positively influence up on non-compliance (OECD, 2010). But this cannot be realized without having well structured risk management system. It is for this reason that effective customs risk management is a fundamentally crucial instrument to know behavior of taxpayers thereby to design appropriate mitigation strategies.

Consequently, the next section deals with how roles of customs risk management can help customs to enhancing compliance level of taxpayers.

#### 4.4. Roles of customs Risk Management to Enhance Compliance

# 4.4.1. The correlation between customs risk Management and Compliance level of taxpayers

The researcher used both descriptive and correlation analysis to show the relationship between roles of customs risk management and compliance level of taxpayers. Primary data is analyzed by describing their relationship. Respondents were asked about the roles of customs risk management in general and its effects on compliance level of taxpayer. The distribution of their responses is shown in table 4.4.1.1below.

Table 4.4.1.1: Percentage Distribution of Respondents regarding roles of customs Risk Management

		strongly disagree	Disagree	Neutral	Agree	Strongly agree
ERCA's incentive system is	Frequency	1	18	24	52	17
encouraging taxpayer						
	percent	0.9%	16.1%	21.4%	46.4%	15.2%
Trade facilitation is properly	Frequency	9	17	18	46	22
implemented in Modjo customs						
branch	percent	8%	15.2%	16.1%	41.1%	19.6%
Certifying green channel reduces	Frequency	5	11	18	56	22
time delay of goods in Modjo						
custom branch	percent	4.5%	9.8%	16.1%	50%	19.6%
Enforcement system is effectively						
implemented in Modjo	Frequency	33	42	15	16	6
customs branch						
	percent	29.5%	37.5%	13.4%	14.3%	5.4%
When there is a suspect detection of	Frequency	1	22	60	29	
all shipment physically is						
applied in the branch	percent	0.9%	19.6%	53.6%	25.9%	
Modjo customs branch effectively	Frequency	6	15	31	56	4
controlling every activity of customs	percent	5.4%	13.4%	27.7%	50%	3.6%
Modjo customs gives training about	Frequency	8	14	36	47	7
tax system to taxpayers						
	percent	7.1%	12.5%	32.1%	42%	6.3%
More of Taxpayer know about	Frequency	8	24	27	51	2

clearance procedure	percent	7.1%	45.5%	24.1%	21.4%	1.8%
Taxpayer get support from Modjo	Frequency	15	31	27	31	8
custom branch concerning tax						
system of ERCA						
	percent	13.4%	27.7%	24.1%	27.7%	7.1%
Tax payers often undervalue the price of imported goods	Frequency	2	11	13	43	43
price of imported goods	percent	1.8%	9.8%	11.6%	38.4%	38.4%
Tax payers change country of origin	Frequency	5	11	18	56	22
of goods they import.	percent	4.5%	9.8%	16.1%	50%	19.6%
Tax payers often engage in	Frequency	4	16	21	43	28
misdescription of goods for tariff						
purposes						
	percent	3.6%	14.3%	18.8%	38.4%	25%

Source: compiled from questionnaires, 2018

The analysis in table 4.4.1.1 above shows the degree of agreements and disagreements with some generic concepts concerning customs risk management. With regarding to the first issue in table 4.4.1.1, majority of respondents about 46.4% and 15.2% of the respondents agreed and strongly agreed that ERCA incentive system is encouraging taxpayers." while 0.9% and 16.15% of the respondents disagreed and strongly disagreed", about 21.4% of the respondents remain neutral. This implies that most of the respondent believes ERCA incentive system is encouraging taxpayer. This shows that if ERCA incentive system encourages taxpayer they have a probability of compliant to the law. However, the one in Modjo customs risk management is not yet effective to realize the intended benefits since the trend shows most of shipment subject to physical examination rather than facilitating.

Considering statement two in table 4.4.1.1 we can see that the summation of respondent fall within "Agree" and "Strongly Agree" which account for 19.6% and 41.1%. Mean while about 8% and 15.2% strongly disagreed and disagreed about the statement respectively. This analysis indicates that that trade facilitation in Modjo customs branch shows somewhat improvement since most of the respondents strongly agreed and agreed about implementation of trade facilitation in Modjo customs branch. Similarly, regarding statement three, most respondents reply fall within "Agree"(50%) and "Strongly Agree(19.6%)" indicating the fact that certifying

taxpayer green channel reduces delay of time of good Modjo customs and also reduces cost incur

during delay in customs .

Regarding statement four in the same table above, the analysis shows that most responses 37.5% and 29.5% of respondents replied as disagree and strongly disagree about issue of enforcement system in Modjo custom branch while the rest respondent agree and strongly agree with the statement. This shows that enforcement system in Modjo custom branch is very low. Regarding detection of goods in Modjo customs branch most the respondent agree (25.9%) with the statement while other portion of respondents disagree (16.7%) and strongly disagree (13.7%) while 53.6% respond neutral and this shows about half of respondent do not know about detection of all imported goods in ERCA when there is a suspect on goods. Regarding effective controlling system most the respondent fall within "Agree" (50%) implying the fact that Modjo customs branch's controlling system is effective in controlling fraud on shipment while controlling everything in custom administration need high costs, difficult and makes customs performances ineffective. Concerning educating tax payer about tax system in Modjo customs branch most of respondent agree (42%) and this indicate the fact Modjo customs branch give training to tax payers. From the above table it clearly shows that most of the respondent disagree (45.5%) about knowledge about clearance procedure. This shows most of tax payers do not know about clearance procedure this indicate they need training about tax clearance procedure. Regarding supporting taxpayer about 27.7% of respondent agree and disagree to the statement. This show that there is a gap whether Modjo customs branch is supporting tax payer or not it needs another investigation. Finally regarding compliance level of taxpayer most of the respondent agree and strongly agree (38.4%) that indicate taxpayer often under value the price of goods and also most of respondent agree (19.6%) and strongly agree (50%) which indicate that taxpayer often changes country origin of the imported goods. About 38.4% and 25% Of respondent agree and strongly agree concerning taxpayers misdescribe imported goods for tariff purpose. Most of the time tax payer engages in fraud type like undervaluation of price, country of origin and misdescription as well as misclassification of tariff as most the respondent indicates by agree and strongly agree to the statement.

Now let make analysis correlation between roles of customs risk management and compliance level of taxpayer. Researcher makes analysis by using spss v.20 software. Here the following table shows the result and summary of data analysis.

Table 4.4.1.2: Correlation between customs risk management and compliance level of tax	
payers	

		Facilitation	Education	Ũ	Compliance
	Pearson Correlation	1	.107	.419**	.284**
Facilitation	Sig. (2-tailed)		.264	.000	.002
	Ν	112	112	112	112
	Pearson Correlation	.107	1	244**	203*
Education	Sig. (2-tailed)	.264		.009	.032
	Ν	112	112	112	112
	Pearson Correlation	.419**	244**	1	.802**
Controlling	Sig. (2-tailed)	.000	.009		.000
	Ν	112	112	112	112
	Pearson Correlation	.284**	203*	.802**	1
Compliance	Sig. (2-tailed)	.002	.032	.000	
	Ν	112	112	112	112

#### Correlations

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

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

From the table it clearly shows all variable positively correlated to each other except correlation between controlling and education as well as education and compliance but degree of their strength of correlation are different. Since correlation extends from +1 to -1and also variable which has correlation +ve 1has perfect correlation while a variable which –ve1 has inversely related to each other but when there is correlation coefficient is zero there is no correlation between the variable. From this point of view when we look at the above table correlation between controlling and facilitation has a correlation coefficient of positive 0.419 while correlation coefficient between controlling and education is positive 0.264. Finally Correlation coefficient between facilitation and compliance is positive 0.284.In contrast to above, correlation coefficient between education and compliance is negative 0.203and also correlation coefficient of controlling and

education is negative 0.244. From the above discussion we can conclude that degree of correlation between controlling and compliance is high and they are highly correlated.

Thus the discussions to follow are done based on the researcher's feedback of respondents and understanding from different literatures. Let us now pose a question and go through the discussions made to clarify it.

How can practice of customs risk management affect the compliance rate of traders? The concept is that when there is an effective risk management practice, it means that customs is able to identify high risk areas which need priority focus while at the same time compliers are given fast services. In this case most customers possibly become encouraged to be more compliant so as to enjoy the special services to be offered by customs. On the other hand, it means customs is in a position to deploy its limited resources towards the most high risk channeled shipments for effective controlling. Obviously, this can be resulted in not only successfully detecting economically major offenses but also has deterrent effect up on other illegal traders. This in turn enforces them to come to the compliance.

Therefore, in the presence of customs risk management it is possible to boost compliance in three ways: first by providing exclusive services to the legitimate traders in one hand, secondly by building effective enforcement capacity which is supported by intelligence driven information on the other which is controlling risk. Thirdly, educating taxpayers how they are benefitted from compliance to the law and procedure.

On the contrary to the above argument, if a risk management is not effective enough to differentiate compliant from that of non-compliant traders (customers) then the possibility of non-compliance rate becomes obviously high. In this case, we can understand that both the fraudulent and loyal traders are equally served and this discourages to the loyal one while encouraging to illegal one. Ultimately, such kind of situations could further worsen non-compliance implying a strong correlation between customs risk management and compliance. It is mainly due to this fact that the emphasis being given to risk management in general particularly in customs is ever rising.

# 4.5. Extent to which customs risk management system affects compliance of taxpayers in ERCA

#### 4.5.1. Inferential Analysis

To establish the relationship between the independent variables (controlling, facilitation and education ) and the dependent variable ( compliance level of taxpayers) of the study, an inferential analysis which involved a coefficient of determination and a multiple regression analysis were carried out. The Inferential analysis was utilized in this study to determine if there was a relationship between the variables, as well as extent to which changes in the dependent variable can be explained by the change in the independent variables and the strength/significance of that relationship. The inferential statistics analysis aimed to reach conclusions that extend beyond the immediate data alone between the independent variables in this study.

#### • Regression Analysis

Multiple regressions are a statistical technique that allows the study to predict a score of one variable on the basis of their scores on several other variables. The main purpose of multiple regressions is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variables.

#### 4.5.2. Coefficient of Determination

The coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (compliance level of taxpayers) that is explained by all the three independent variables (controlling risk, trade facilitation and education).

#### Table 4.5.2: Coefficient of Determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804 <sup>a</sup>	.647	.637	.49531

a. Predictors: (Constant), education, facilitation, controlling

Source: compiled from questionnaires, 2018

The model's three independent variables (controlling risk, trade facilitation and educating taxpayers) that were studied explain only 64% of the effectiveness of compliance level of taxpayers as represented by the Adjusted R<sup>2</sup>. This denote that the three independent variables only contribute about 64% to compliance level of taxpayer at the Mojdo Customs Branch Offices while other factors not studied in this research contribute 36% of the compliance level of taxpayer at the branch. Therefore, further research should be conducted to investigate the other factors (36%) that affect compliance level of taxpayers.

#### 4.5.3. The analysis of variance

Table 4.5.3 Analysis of	of Variance Test	(ANOVA) Result	ts for Regression Model

Ν	Iodel	Sum of Squares	df	Mean Square	F	Sig.
	Regression	48.488	3	16.163	65.880	.000 <sup>b</sup>
1	Residual	26.496	108	.245		
	Total	74.984	111			

a. Dependent Variable: compliance

b. Predictors: (Constant), education, facilitation, controlling

Source: SPSS output, 2018

#### • Significance of the regression model

From Table 4.5.3the analysis of variance results predicted the dependent variable by illustrating how the regression best fits the model. The results showed that the significance probability value of P=0.000 of the regression model was less than the level of significance of 5% at 95% confidence levels indicating that the regression model is significant.

### **4.5.4.** Significance of the Variables in the Model

 Table 4.5.4 Significance of the independent Variables in the Model

	Coefficients <sup>a</sup>								
Moo	del	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Colline Statis	•	
		В	Std. Error	Beta			Tolerance	VIF	
	(Constant)	.838	.448		1.868	.064			
1	Controllin g	.782	.063	.831	12.496	.000	.740	1.352	
	facilitation	081	.081	065	-1.004	.318	.778	1.286	
	Education	.012	.109	.007	.114	.909	.887	1.127	

... .

a. Dependent Variable: compliance

b.Source: SPSS output, 2018

The study conducted a multiple regression analysis to determine the relationship between independent variables and dependent variable. The regression equation was

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon)$ 

Where  $\beta 0$  is the regression intercept;  $\beta 1$ - $\beta 3$  are the regression coefficients while Y is the dependent variable (Compliance level of taxpayer)

X1 is the controlling risk,

X2 is trade facilitation,

X3 is education,

And  $\boldsymbol{\epsilon}$  is error term.

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \varepsilon)$ 

Y = 0.838 + 0.782X1 - 0.81X2 + 0.012X3

Consequently, the effects of each of the independents variables on dependent variables discussed as follows:

The data findings analyzed showed that taking all other independent variables at zero (constant), a unit increase in controlling will lead to a 0.782 increase in compliance level of tax payers, a unit increase in trade facilitation 0.81 decreases in compliance level of taxpayers, a unit increase in educating taxpayers will lead to a .012 percent increase in compliance level of taxpayers.

From above regression Table 4.5.4 the p-values of independent variables (controlling is 0.000, trade facilitation is 0.318, educating taxpayers is 0.909, since their p-values of controlling less than  $\alpha$  (5%), we reject Ho<sub>2</sub> (null hypothesis) and fail to reject Ho<sub>1</sub> and Ho<sub>3</sub>

Therefore, at 5% level of significance we can conclude that controlling and educating taxpayers are significantly affects current compliance level of payers with positive relation, and facilitation significantly affects with the negative relation. Hence the most significant factors are controlling and educating taxpayer, where as trade facilitation is major significant factors that negatively affect with at least significant factors.

#### 4.6. Roles of customs risk management in enhancing compliance of taxpayers

#### 4.6.1. Trade Facilitation

According to the information received from tax compliance risk management department of ERCA in 2009 Ec, almost all import goods were subjected to 100 percent inspections. This shows the traditional style of controlling trade risks. However, risk management has been under structural changes since the reform program was launched. As a result, trade facilitation also has shown relatively good improvements as indicted in table 4.6.1.1 below.

Table 4.6.1.1: Modjo customs branch Risk Level of Import Goods for the Last FiveConsecutive Years

Year	Total	declarati	ons pro	ocessed	Percent	tage share	per cha	nnel (%)
	during	the year						
	Red	Yellow	Green	Blue	Red	Yellow	Green	Blue
2013	8475	5403	441	20	59.10	37.68	3.07	0.14
2014	14977	8353	1338	13	60.68	33.84	5.42	0.05
2015	16382	12351	2411	8	52.59	39.65	7.74	0.02
2016	16145	12730	3594	18	49.70	39.18	11.08	0.05
2017	18015	15875	3488	0	48.20	42.47	9.33	0

Source: ASYCUDA++ Data base system

The analysis in table 4.6.1.1 clearly depicts that in the year 2013 by which the automated selectivity system was began in the branch, the size of red channel account for 59.10% with the

remaining about 37.68% yellow. It means that most of import shipments into branch were subjected to full physical inspections as well as documentary checks. In the year 2014, the size of red channel has steady increased slowly throughout the last five years reaching about 61%. As opposed to the level of red channel, the size of yellow declarations which were subjected to only documentary scrutiny has shown considerable growth i.e. from about 37.68% in 2013 to about 42.47% in 2017.

Despite the positive progresses registered in the last five years, the service delivery (facilitation) is still low mainly because the intervention is significantly high when compared to the intervention level in Kenya which is about 25% and for USA is about 10% (US international trade commission 2012). Meanwhile, the size of green channeled consignments which were immediately released after documents are lodged to the face vet is very small comprising on average about 7.33% for the last five years. But under efficient customs administrations about 80% to 90% of consignments are released in few hours UNCTAD (2008). The secret of having less intervention on trade is obviously achieving maximum compliance through implementation of effective customs administration in general sound risk management system in particular. In this case customs becomes effective and efficient in targeting most high risk shipments while at the same time expediting legitimate trade.

Considering the blue channel which is supposed to be checked by the PCA after goods are released; it is said to be very insignificant mount i.e. on verge 0.05%. This shows that Modjo customs branch has not been properly applying the blue channel as means to facilitate trade. On the other hand this is an indication of loose cooperation between PCA and tax compliance risk management directorate. Because according to the BPR study, it is assumed that the blue channel are to be channeled to wards PCA. The other important indicator concerning trade facilitation is the success rate of inspection result. Most inspection results (both physical and documentary) show no difference. Moreover, the current statistics of 2018in Modjo customs branch is about 21% which indicates that most of the consignments are subjected as high risk but vitally small amount of discrepancy. As result, taxpayers are incurring unnecessary additional warehouse and other cost which ultimately has national wide effect. On the other hand, customs officers are also unproductively deployed. In general, had the risk management system been effective in assessment and profiling supported by reliable and up-to-date data, most shipments would have been facilitated than the present one. This in turn also implies the absence of having proper

compliance history of customers as well as lack of properly reviewing and updating risks. In this case even compliant customers could not get fast service which they deserve while at the same time illegal traders cannot be targeted effectively.

#### **4.6.2.** Controlling Illegal Trade (Ensuring Compliance)

One of the main objectives of customs is to make sure that customers are complaint with national and international laws and regulations. But because the volume of import and export trade is ever rising up fueled by the demand for fast services in one hand; and the complexity of organized commercial frauds on the other make controlling most challenging. These require customs to build very effective and dynamic risk management system that could encourage customers to voluntarily comply with the laws and other requirements (UNCTAD, 2008). And this must be accompanied by effective profiling and weighing, prioritizing and treatment of risks based on combination of possible likelihood and its consequential economic impact. Therefore, the best way to make taxpayers compliant is influencing them indirectly by creating enabling environment to voluntarily comply with the laws and regulations. Indeed, this is the base for effective law enforcement. In light of these perspectives, it is necessary to evaluate the customs risk management so far. Consequently, customers (taxpayers) were asked to reflect their opinion regarding to the effectiveness of the risk management specially in making them compliant. And about 66% of them said "No" indicting the fact that the current risk management is noteffective to encourage customers to come to the compliant while those who said "Yes "account about 34.% indicting that the current risk management practice of ERCA is effective. Nevertheless, as we have mentioned in the above, even though there is relative improvement in trade facilitation as a result of improvement in the risk management practice, but it is still poor when compared to some best practices even in the neighboring countries. The basic thing that needs focus in effective risk management system is to be able set a recycling process of identification of major limitations, design strategies to solve them and improve performances sustainably in a comprehensive manner (Widdowson, 1998). Ultimately, this is the way that helps customs know and influence taxpayers" behavior.

Furthermore, those who responded "No" was also asked for the major factors that make it ineffective and their responses are summarized in table 4.6.2.1

Description of factors	Frequency	Percentage (%)
Lack of reliable data	5	7.69
Lack of incentives	23	35.38
Lack of fairness	12	18.46
Lack of effective compliance	6	9.23
management		
Lack of fairness and compliance	8	12.31
management		
All are the major factors	11	16.92
Total	65	100

Table 4.6.2.1: The Main Factors that Make Risk Management Ineffective

Source: Compiled from Field Survey, 2018

The analysis in table 4.6.2.1 depicts the distribution of respondents concerning the major problems of the customs risk management in Modjo customs branch. Consequently, lack of incentives and lack of fairness constitute for about 35.38% and 18.46% respectively. Similarly, about 16.92% of the respondents believe that all the problems listed in table 4.6.2.1 are equally important.

Therefore, even though all the specified factors are considered as bottlenecks to encourage compliance, but lack of incentives which can attract customers to be compliant is the most crucial one. Incentive schemes include, simplification of clearance process, offering faster services for compliance, consultation, etc. According to Widdowson (1998) creating enabling environment to self comply with laws is the most basic motivating factor to make customers voluntarily compliant.

#### 4.6.3. Balancing the Two (Enhance Compliance and Facilitation)

In a modern sense of risk management system, the commonly held belief that it is a paradox to achieve both of the customs objectives has been changed. That means higher facilitation is possible while also there is higher controlling. However, it is worthwhile to note that ensuring higher controls of import and export of goods and passengers does not to mean that majority of the transactions are subjected to customs check; instead it is about targeting at few selected

potentially high risk consignments believed to have significant impact in the economy (Wulf and Sokol,2005).

For instance, if we consider those developed countries' like Canada and USA customs services they only focus on 5% and 10% of the shipments ERCA (2012). That means 85% up to 90% of the shipments are made free of physical and documentary inspections or may be checked in simple and fast way. In this case both facilitation and controlling could be successfully achieved which we call it ,,the balanced approach. To this end, however, effective risk management practice becomes critically essential. Apart from this, the general economic development and the effectiveness of customs administration of given nation are also crucially important factors.

As we have seen in the above, the situation in Modjo is said to be unbalanced since most of the shipments (on average more than 61%) must be subjected to physical and documentary checks. Nevertheless, checking most shipments do not necessarily guarantee maximum compliance; instead is mostly ineffective because of lack of focus in one hand and limitation of resources on the other. Thus, if there is effective customs risk management system, the possibility of having balanced approach is very high which intern means higher compliance rate. The next section deals with main challenges (problems) of customs risk management system of ERCA as a whole specifically Modjo customs branch.

#### 4.7. Challenges of Customs Risk Management

This part tries to identify and analyze the major challenges of the risk management in ERCA specially Modjo customs branch. Here we shall see the fundamentals of risk management along with the essential challenges. But before, we directly deal with the challenges, it is necessary to begin with by evaluating the current risk management in terms of balancing facilitation and controls. In relation to this issue respondents were asked about effectiveness of risk management particularly in optimizing both facilitation and control.



Fig4.7.1: Effectiveness of Risk Management in Facilitation and Controlling

#### Source: Compiled From Field Survey, 2018

The analysis in fig. 4.7.1 shows that more than 65% and 61% of the internal and external respondents respectively said "No". This shows currently the risk management system is not in a position to maximize facilitation and controlling. This can further imply despite the due emphasis given to the controlling aspect at the expense of facilitation, even the former objective is not satisfied. It is important to note that to control effectively, one must be able to target at the most high risk shipments or passengers so as to dedicate the required human and material resources. But if there is lack of focus as to which consignment is most high risk to be examined in detail, it becomes difficult to control most transactions given limited resources. Indeed, this not only create unnecessary burden upon customers but also is usually ineffective to ensure compliance. Therefore, in such cases as observed in Modjo customs branch, obviously none of the objectives of customs can successfully be accomplished.

The main issue here is to investigate the challenges of risk management. As a result, those who said "No" (fig.4.7.1) were also asked to point out the major challenges of customs risk management and their feedback is summarized in table 4.6.1

Lists of limitation in ERCA	Internal respondents		External respondents	
	Frequencies	percentage	frequencies	Percentage
Lack of modern IT	5	10.64	8	12.31
Lack of effective compliance	14	29.79	14	21.54
management				
Lack of adequate data base system	6	12.76	11	16.92

 Table 4.7.1: Major challenges of ERCA's Risk Management

and experienced human resource				
Lack of top management focus and modern data base.	5	10.64	9	13.85
Lack of effective compliance management, experienced HR and modern data base		14.89	10	15.38
All are the equally important	10	21.28	13	20
Total	47	100	65	100

Source: Compiled From Field Survey, 2018

Table 4.7.1shows most of the respondents of internal and external; have mentioned all the factors listed in the table being the main problem of risk management. More specifically, both respondents emphasized on lack of effective compliance management which account about 29.79% and 21.54% .As a second rank both respondents explained that all of the above challenges are equally important challenges for risk management system. And also experienced human resource and modern database system which account for about 16.92% for external and Lack of effective compliance management, experienced HR and modern data base for about 14.85% for internal is another challenges. In general, all of the above challenges are a big issue for effective implementation and normal function of customs risk management system. Now it is worthwhile to examine and discuss in detail the extent of these problems as far as risk management is concerned.

Most of the next discussions are supported by information gathered from the interviews made by the researcher.

#### 4.7.1. Compliance Risk Assessment and Management

Compliance risk assessment is a key element in risk management process. It is the process of evaluating the degree of compliance risks level of taxpayers based on some set of criteria. This in turn paves the way to apply appropriate customs risk mitigation strategies. In other words compliance assessment is simply the process of checking traders" level of obedience to the laws and rules using different techniques such as physical and documentary checking of goods and passengers, post clearance auditing, random sampling and different investigations.

Finally, profiles of traders (customers) can be updated upon which new risk status is also to be assigned. This is the process how compliance and non-compliance customers are identified. However, it is important to note that the effectiveness of compliance assessment and management does solely depend on the quality and adequacy of collected data as well as qualified risk analysts. Unlike this general principle, the compliance management practice in Modjo customs branch is generally poor (see fig4.7.1.1 below). In an attempt to evaluate compliance assessment system, the external respondents (customers) were asked about whether the risk assignment system is based on the actual track records.





As indicted in fig.4.7.1.1, most (70.15%) of the respondents replied "No" while those who said "Yes" account the remaining balance. That means majority of the respondents do have complain with the risk management system since risk level is assigned not based on the actual profiles of traders. Similarly, according to the report from ERCA, the trends of physical examination result for the last two budget years have indicated the presence of lack of effective targeting. On average more than 88% of red and yellow channeled import documents show free of any fraud.

#### 4.7.2. Lack of Data and Application of IT

Data is the basic element of risk management system. As a result, the source and qualityof data has to be reliable and up-to-date Braga (2001). However, according to the interview made by the researcher, currently, the only reliable source of data to the directorate is ASYCUDA++ system. But still there are important data which are not being captured by this system. For instance, history of most administratively managed cases are not available in ASYCUDA++system. Besides, findings from post clearance audit, intelligence and investigation have not been important sources of risk management. It means that there is lack of well established system that

enables to capture each piece of data from within as well as outside of Modjo customs branch. Moreover, the medium of communication is another problem. Unlike the recent establishment of web based database called "Traders" Risk Data Profile system", data and or information exchange has been done manually and semi manually.

Generally, there is not only shortage of adequate data, but also it is not supported by modern information communication technology. This in turn has negative impact on the overall effectiveness of risk management system.

#### 4.7.3. Lack of Skilled Human Resource

Risk analysis in customs requires experienced staff with multi disciplinary skills. Lane, (1998) suggests that, customs staffs are required to have multi disciplinary knowledge in areas such as intelligence, statistics, and classification of goods, valuation and other international trade practices. This day, since the nature and types of tricks of commercial fraud are varying with the support of sophisticated technology, it means customs need to be equipped sustainably with adequate and skilful risk analysts so as to coup up such challenges.

The situation in Modjo customs branch is, however, different from this fact. According to the interview and currently, the total staff of the tax compliance risk management team in Modjo custom branch is about two employees only. But the problem is not only shortage of employees but also most of them lack experience in customs operations such as valuation, classification, intelligence.

Furthermore, recruitment is done not based on some specific requirements of the task rather officers are assigned using the usual practice. Therefore, it is clear that an effective risk management which must be in place to support trade facilitation and regulatory control could not be realized without giving due emphasize to human power development.

#### 4.7.4. Lack of Integration and Cooperation

Effective Customs control depends on a good cooperation and comprehensive information flow between various Customs units. For instance, the performance result of post clearance audit is critically important source of data for risk management to effectively measure compliance level of customers. In the same fashion, the output of risk analysis has to be the bases for PCA works. Moreover, there shall be similar correlations with intelligence, investigation of both customs and domestic tax. According to the WCO, one of the principles of risk management is to properly allocate responsibilities among stakeholders. The integration between risk management and other departments within and outside the organization is mostly required for the exchange of data and other purposes. However, according to the interviews made with heads of PCA, intelligence, and investigation and risk management, there is no formally established integration among them. In the first place, in contrary to the BPR study, those departments perform not based on the output of risk analysis. Their integration is particularly important for the successful risk assessment and profiling in one hand, and effective and efficient controlling non-compliance on the other. In short strong correlation among these departments enables customs to effectively deliver fast services without compromising at regulatory control.

Generally, even though there may be other problems which can negatively affect compliance, but those which were discussed in the above are the most important once. The central argument of the whole analysis part is that; because of those problems customs of risk management has been insignificant when measured in terms of in improving customs activities in general and making customers compliant in particular.



# **CHAPTER FIVE**

# 5. CONCLUSION AND RECOMMENDATION

#### 5.1. Conclusion

In customs where the burden of responsibilities to facilitate international trade and regulatory controls is ever rising, the customs risk management is obviously very much important. However, contribution of customs risk management system in the view of achieving of these objectives has been less despite some improvements in the trade facilitation aspect. The risk management system is generally characterized by lack of qualified and experienced human power, lack of support of IT to collect required data and lack of system of cooperation with other departments of the authority. As a consequence, the current compliance problem could be mainly attributed to the poor risk management practice which Modjo customs branch has been experienced with.

The central issue here is that while risk management is expected to be instrumental in differentiating compliant from that of non-compliant along with the cause of noncompliance, but its role has been very low. And the basic reason behind this is that ineffective risk management practice. In other word, the contribution of risk management system is measured in terms of enabling customs identify compliant from that of noncompliant on the basis of reliable and up to date source of data and information.

Apart from this, the study has pointed out some major factors that affect compliance level of taxpayers in Modjo customs branch. Accordingly, these include:

- (i) lack of awareness of the rules and regulations
- (ii) Poor compliance culture of taxpayers;
- (iii) Economic rational (because the amount of duties and taxes is high)
- (iv) Poor risk management practice and
- (v) Weak enforcement capacity.

This implies the demand for having comprehensive strategies including better service delivery, consultation and cooperation with customers as well as effective enforcing capacity.

But it is important to note that each activity in customs needs to be backed up by effective risk management system. That means in order to establish and apply the appropriate strategies; first

we must be able to differentiate the compliant from that of non-compliant taxpayers. Thus, effectiveness of service delivery and degree of compliance is directly related with the type of risk management being practiced. In other word, in the presence of systematic and disciplined risk management practice which is supported by application of modern IT like the one in the developed countries, customs become able to successfully optimize both facilitation of trade and regulatory controls. Optimization of the two objectives could be realized as far as resources are deployed towards the highest risk by making most taxpayers compliant with the law. In this case, controlling becomes most successful since risk analysis is believed to be done based on customs risk management practices. In contrast, where there is ineffective risk management practice like the one in Modjo customs branch, it becomes difficult to optimize even neither of the two objectives.

Therefore, effective customs risk management system can be considered as critically important method to enhance compliance which in turn paves the way for substantial improvement in customs performance.

Once we conclude that Modjo customs risk management practice is generally poor in light of optimization of both trade facilitation and regulatory controls in general and ensuring compliance in particular, it is necessary to stress on some of its major challenges. In fact, those problems basically reflect the overall situation of ERCA particularly customs administration. Meanwhile, some improvements have been registered following the establishment of risk based management practice since 2008. Despite this, however, the risk management directorate which is responsible to assist customs operations is still weakly organized. In the first place, there is no well established system to collect data from internal and external sources. In addition, the means of collection is not supported by IT instead it is usually done through manual and semi manual means. In general, the finding of this study has indicted the following points as the main challenges of customs risk management of Modjo customs risk management. These are:

i) Lack of compliance measurement and management

- ii) Lack of support of comprehensive and reliable data regarding importers and clearing agents;
- iii) Lack of support of infrastructure (information technology) which is consistent with activities;
- iv) Lack of experienced and adequate risk analysts;
- v) Lack of integration and cooperation in exchanging data between risk management and post clearance audit, intelligence and investigation as well as with external sources of information.

Indeed, these are the basic components of risk management where one has to give particular emphasis upon. The main point is that we cannot think of enhanced compliance as well as best customs administration unless there is effective customs risk management system and practice.

And the branch is not in a position to support and enhance compliance with laws and regulations due to the different reasons already mentioned in the above discussions.

#### **5.2. Recommendations**

Based on the conclusions above, risk management system is an important tool to create enabling environment for compliance in one hand and to manage non-compliance on the other. Because where there is effective customs risk management practice, customs can be able to manage factors of non-compliance which in turn pave the way to enhance compliance.

Currently, however, Modjo customs branch is not in a position to properly differentiate the compliant from that of non-compliant taxpayers mainly because of ineffective customs risk management system. In the presence of effective customs risk management practice, the other compliance problems could have been curved. For this reason, customs risk management has been less towards achieving a balance between trade facilitation and regulatory control. Consequently, the controlling and trade facilitation of customs risk management in making customers compliant was also very low. Therefore, in light of this perspective, the researcher has suggested some recommendations as follows.

ERCA and Modjo customs branch should enhance awareness creation programs to its customers; simplify clearance procedures, encourage compliant taxpayers and strengthen enforcement capacity. To this end, however, it needs to thoroughly assess and categorize its customers" level of compliance along with their respective reasons for non-compliance. Again this must be supported by effective risk management system.

Despite the fact that, the general agreement on the importance of risk in customs administration, it is not yet effective in optimization of trade facilitation and controlling which is the basic one to enhance compliance. Therefore, to tackle this problem and optimize benefits out of risk management thereby to enhance compliance level of taxpayers, the branch is advised to primarily strengthen its risk management practice by focusing on the following points.

I. Since reliability of risk profiles solely depends on data, it has to improve the quality and adequacy of data used to analyze compliance risk. Besides, it has to further broaden the sources

of data from external sources such as federal police, investment agency, ministry of trade, national intelligence and security services, etc.

ii. It has to strictly implement designed web based software system "Taxpayers risk data profile (TPRDP) effectively. The quality of data entered into the system should be protected and give awareness about the system application for employees of ERCA and Modjo customs as well. This needs an intensive communications with all customs branches.

iii. The Tax Compliance Risk management team has to improve integration and cooperation with customs procedure verification units, intelligence, post clearance audit (PCA) and tax compliance directorates so that it will be possible to collect reliable data through a system instead of semi-manually.

Iv. Modjo customs branch has to expand a system that enables receive data as well as information from and forward to these departments.

v. Lastly but not least, Modjo customs branch has to strengthen the team by deploying adequate number of employees who have multidisciplinary knowledge and experience in areas such as inspection, valuation classification and intelligence. To wind up, while there are different factors that could adversely affect compliance, it is highly recommended that the branch should improve its customs risk management process by particularly focusing on the source and quality of data, risk assessment and measurement, capacity building on expertise skills of risk analysts and proper utilization of IT since these are the essential components which would fundamentally improve risk management thereby to substantially enhance compliance level of taxpayers.

Finally, during the study period, the researcher conduct detail correlation analysis between customs risk management and compliance level of taxpayers using regression analysis and correlation analysis and suggest degree of influence of each variable between them.

The study found out as the model of regression showed that significance of independent variables (Controlling is 0.000; trade facilitation 0.318, education is 0.909, p-values of controlling are less than  $\alpha$  (5%).Therefore, at 5% level of significance we can conclude that controlling, educating taxpayers are significantly affects current compliance level of payers with positive relation, and facilitation significantly affects with the negative relation. Hence the most significant factors are controlling and educating taxpayer, where as trade facilitation is major significant factors that negatively affect with at least significant factors.

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#### Annex I

# RIFT VALLEY UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF MANAGEMENT

#### Questionnaires' filled by employees of ERCA and customs clearing agents

#### **Dear Respondents**

My name is Jemal Abduro a prospective graduate of this academic year in Master of Art degree in Business Administration from Rift Valley University Bishoftu campus. Currently, I am conducting research on **"Roles of Customs Risk Management in enhancing compliance of taxpayers the case of Ethiopian revenues and customs authority Modjo branch**" as a partial fulfillment of Master of Art degree in business Administration. Now I'm gathering data for the research. The objective of this questionnaire is to gather necessary and relevant first-hand data which will be used to prepare the thesis. Therefore, your response in this regard is highly needed for the successful accomplishment of this research. The result of this survey will remain confidential and will be strictly used for academic purpose only. The researcher thus appreciates in an advance your cooperation and sparing your valuable time in filling this questionnaire.

#### **Instruction**

Writing your name is not needed

> The time needed to fill this questionnaires' is not more than five minute

Thank you

#### **1. General questions**

Female 1.1. Sex: Male <25 years 25-30 1.2. Age range: 30-40 >40 2-4 years  $\square$ 4-6 years □ 1.3. Work experience 6-10years >10years 1.4. Qualification: Certificate Diploma First degree [ Second degree

**Section One:** 

Note: ERCA represents Ethiopian Revenues and Customs Authority

#### Questionnaire prepared for clearance officers, post clearance audit and intelligence officers

of ERCA and clearing agents: Please put (X) mark in the boxes provided.

#### 2. Issues regarding factors that affect compliance level of tax payers

**2.1**. Do you believe most of the cases; customers fail to comply with customs laws, rules and procedures?

 $\Box$  Yes  $\Box$  No.

**2.2**. If your answer is "yes" for question number **2.1** why do you think it happens? Because of (possible more than one option)

- Economic factors (higher tax and duty rates)
- Lack of awareness and incentives
- Weak enforcement capacity

Poor compliance culture

Poor risk management system and other services

Opportunities (loopholes with rules and regulations)

High compliance cost

Other factors please mention it -

**2.3**. From question number.2.2 which one of them do you think are most important reasons? Please list three of them in rank;

1	
2	
3.—	
2.4. Do you think that effective risk management system of ERCA is encouraging c	ustomers to

become complaint with law and procedure?

🗀 Yes 🗀 No

**2.5** If your answer for question number"2.4" is "NO", what do you think are the major reasons? Because of,

The risk management system lacks reliable and accurate data	
Other motivating factors are not properly addressed,	

The risk managemen	it system is n	ot fair to all custo	omers			
Compliance measure	ement is not e	effective,				
Others						
2.6. How do you rate	the effective	eness of risk man	agement of	ERCA?		
Good		Very good			Eutral	Poor
very poor						

3. Issues related to Roles of customs risk management

A. How far do you agree or disagree with statements in the table about trade facilitation of your organization? Please mark "X" on each below.

Statement about customs risk management	Possible solutions				
	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
(C) (-	1	2	3	4	5
ERCA's risk management is effective to ensure trade facilitation			2		
ERCA's incentive system is important factor to make customers compliant.					
Effective trade facilitation is important factors to ensure compliance level of taxpayers					
Green and Blue channel facilitation type is make customer complaint with customs law and regulation					
ERCA's trade facilitation is fairly treating customers.					
ERCA's compliance management is effective					

**B.** How far do you agree or disagree with statements in the table about controlling of risk in your organization? Please show "X" mark on each space below.

Statement about customs risk management	Possible solutions				
	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5
ERCA's risk management is effective to ensure					
controlling of risk					
Punishment is important factor to make customers					
compliant.					
Effective controlling is important factors to ensure					
compliance level of taxpayers					
Red channel of controlling type is make customer					
complaint with customs law and regulation					
Red channel is fairly treating customer to make complaint					
ERCA's enforcemecent system is effective					

C. How far do you agree or disagree with statements in the table about attitude and perception of taxpayers toward tax system? Please show "X" mark on each space below.

Statement about customs risk management		Possi	ble solu	itions	
	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
	1	2	3	4	5
ERCA's risk management is effective to ensure compliance of taxpayers by bringing positive attitude about tax.					

Changing attitude of taxpayer toward positive			
perception is important factor to make			
customers compliant.			
Training about taxation system is important factors			
to ensure compliance level of taxpayers			
Attitude and perception about tax does not affect			
compliance level of tax payers.			
ERCA's customer is happy about taxation system			
ERCA's risk management is treating the customer			
fairly.			

# 4. Issues related to challenges of customs risk management

4.1. Do you think that the current risk management is effective to maximize facilitation and
control? Yes No
4.2 If your answer is to question number 4.1 is "No", what do you think is (are) the major
challenges?
Lack of top management focus
Lack of application of modern Information Technology (IT)
Lack of adequate and experienced human power
Lack of effective compliance management system
Lack of modern database system
Other reasons please specify
4.3. Do you think that the current risk management is able to identify compliant from non
compliant customers?  Yes  No
<b>4.4.</b> If your answer to question number 4.2 is "No", what do you think are reasons? Because the
Lacks adequate and reliable data about customers;
Lacks intelligence driven information;
Lacks flexible and up-to-date profiles reviewing process;
Lacks communication with the enforcement and other department;
Other, please specify it

<b>.5.</b> Do you think that ERCA apply risk management system in daily activities?
Yes No
<b>4.6.</b> If your answer/reply is "Yes" for question number 4.4, how do you evaluate its effectiveness
n terms of achieving objective of ERCA?
Effective Very effective
☐ Very ineffective ☐ less effective
Neutral
.7. Does your activity depend on the output of risk management?
Yes No
<b>.8.</b> If your answer is "Yes" for question number 4.8, how much do you need it?
Always Sometimes Rarely
.9. Do you think is effective risk management practice is required?
For
<b>.10.</b> If you have additional suggestion, please explain.



#### Annex II

#### Section Two

# Questionnaire prepared for customs clearing agents of ERCA Modjo Branch: Please put mark in the boxes provided.

Note: ERCA represents Ethiopian Revenues and Customs Authority

#### 2. Issues regarding factors that affect compliance

2.1. Why do you think your customers fail to comply with customs laws, rules and procedures?

Because of (possible more than one option)

Economic factors (higher tax and duty rates)		
Weak enforcement capacity		
Poor compliance culture		
Poor risk management system and other services		
Lack of awareness and incentives		
Other factors please specify —		
<ul> <li>2.2. From question number 2.1 which one of them do you non compliance of taxpayer? Please list three in rank;</li> <li>1</li> <li>2</li> </ul>	think are	most important factors for
3		
2.3. Can we think that effective risk management system ca	an make cu	stomers compliant?
Yes No		

3. Issues related to roles of customs risk management

**3.1** How far do you agree or disagree with statements in the table? Please mark on each below.

	Positive Statement about customs risk	Possible solutions				
	management	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
		5	4	3	2	1
	Issue related trade facilit	ation				
3.1.1	ERCA's incentive system is encouraging taxpayer					
3.1.2	Trade facilitation is properly implemented in					
	Modjo customs branch					
3.1.3	Certifying green channel reduces time delay of					
	goods in Modjo custom branch			.		
	Issue related Controlling	of risk				
3.1.4	Enforcement system is effectively implemented in		•			
	Modjo customs branch					
3.1.5	When there is a suspect detection of all shipment					
	physically is applied in the branch					
3.1.6	Modjo customs branch effectively controlling every					•
	activity of customs					
	Issue related to education	n of tax	payer	1	1	
3.1.7	Modjo customs gives training about tax system to					
	taxpayers					
3.1.8	Taxpayer in ERCA as whole know about clearance					
	procedure					
3.1.9	Taxpayer get support from Modjo custom branch			•		
	concerning tax system of ERCA					

	Issues related compliance of tax payers					
3.1.10	Tax payers often undervalue the price of imported goods					
3.1.11	Tax payers change country of origin of goods they import.					
3.1.12	Tax payers often engage in misdescription of goods for tariff purposes					

4.1. Do you think that the current risk management system of ERCA is encouraging customers to become compliant with laws and procedures?

Yes No
4.2. If your answer is "No" for question number 2.4, what do you think are the major reasons?
Because of
The risk management system lacks reliable and accurate data;
Other motivating factors are not properly addressed;
The risk management system is not fair to all customers;
The risk management system lacks clarity
Compliance measurement is not effective;
Other please mention it
4.3. In general, how do you rate the effectiveness of risk management of ERCA?
Good Ury good Neutral
Poor Very poor
<b>4.4.</b> How do you rate the current control and facilitation?
Low facilitation and low control High facilitation and low control
Facilitation and high control High facilitation and high control
5. Issues related to challenges customs of risk management
5.1Do you think that the current risk management is effective to maximize facilitation?
Yes No
5.2 If your answer to question number 4.1 is "No", what do you think is (are) the major
challenges?
Lack of top management focus;

Lack of application of modern Information Technology;

Lack of adequate and experienced human power;

Lack of effective compliance management system;

Lack of modern database system;

Other reasons, please specify

5.3 Do you think that the current risk management is able to identify compliant from non compliant customers?

Yes	No	

5.4 .If your answer to question number 4.2 is "No", why? Because the branch (possible more than one option);

Lacks adequate and reliable data about customers;

Lacks intelligence driven information;

Lacks flexible and up-to-date reviewing process;

Lacks communication with the enforcement and other department;

Others please specify-----

5.5. How do you rate the effectiveness of compliance management in terms of achieving fairness among traders?

Effective Very effective Neutral

Less effective Very ineffective

5.6. What type of risk level do your clients face most of the times?

Red	Yellow	
Blue	Green	

5.7. Do you think the risk level is based on your truck records of your customers?

Yes 🗆 No 🗆

5.8. Do you think that ERCA's risk management encourages compliant clearing agents?

Yes D No D

5.9. Do you think that effective risk management practice required in ERCA? Why?

5.10. If you have additional suggestions regarding the risk management, please explain

Thank you

#### Annex III

# **Interview Questions**

## **Major Interview Focus Points**

1. How is the risk management process going on? What major changes have been made since the last two to three years? (Risk management team)

2. How do you collect data and information for risk analysis from different sources? Do you have IT supported network system? (Risk management team)

3. How much does your department use the output of risk management directorate as an input for your activities? (PCA and intelligence)

4. What are the major challenges in the tax compliance risk management team?

(Risk management team)

5. How do you evaluate the cooperation and integration risk management and other enforcement departments (PCA, intelligence, investigation and prosecution) (for all?)

6. How do you correlate risk management and compliance level of tax payers? (For all)

7. What must be done to enhance compliance level of taxpayers? (For all)