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ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

**Effects of Customs Valuation Customs Risk Management and
Information technology on Trade Facilitation: The Case of Modjo Dry Port
Customs Branch Office**

By

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School of Commerce

EFFECT OF CUSTOMS VALUATION, CUSTOMS RIK MANAGEMENT AND INFORMATION TECHNOLOGY ON TRADE FACILITATION IN MODJO DRY PORT CUSTOMS BRANCH OFFICE

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DECLARATION

I declared that this thesis entitled “effects of customs valuation ,customs risk management and Information technology on Trade Facilitation ” is my original work in partial fulfillment of the requirements for the degree of Masters of Arts in Logistics and supply Chain Management at Addis Ababa University School of Commerce and all the source used in the study are properly acknowledged.

Declared By Abenet Alemu

Signature -----

Date -----

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LIST OF ACRONYMS

ARTNET:	The Asian – Pacific Research and Training Network on Trade
CVA:	Customs Valuation Agreement
E.C.C:	Ethiopian customs commission
ECVS:	Ethiopian Customs Valuation System
EPPCF:	The Ethiopian Public Private Consultative Forum
ESLSE:	Ethiopian Shipping and Logistics Services Enterprise
GATS:	General Agreement on Trade in Services
GATT:	General Agreement on Tariffs and Trade
KI:	Key Informants
OECD:	Organization for Economic Cooperation and Development
TFA:	Trade Facilitation Agreement
UNCTAD:	United Nations Conference on Trade and Development
WCO:	World Customs Organization
WTO:	World Trade Organization

ABSTRACT

Trade facilitation is the simplification and harmonization of international trade procedures and formalities involved in collecting, presenting communicating and processing data required for the movement of goods. The main objective of this study was to assess the effects of customs valuation; customs risk management and information technology on trade facilitation. the main problem was the focus of Customs commission for controlling and collecting revenue by ignoring elements that affects trade facilitation which increase the price of imported items & increasing dwell time in dry port which had a multiplier effect. There was a gap in customs valuation, customs risk assessment and information technology which imports shipment has to pass through

The researcher, before beginning the research work, strongly believes that there are challenges in current customs valuation; customs risk management & information technology at Modjo dry port. These challenges led to significant impact on Trade facilitation activates in the port.

For the study Descriptive and explanatory research designs as well as quantitative research approach were employed in conducting the study. The research utilizes both secondary and primary data as source of information. The primary data was collected through structured questionnaire distributed to 147 respondents and conducting interview with six KI. The research targeted freight forwarding companies who are working customs clearing in Modjo dry port customs branch office using systematic sampling technique. Data was collected using questionnaires and interview. For the analysis purpose we implemented both descriptive (i.e percentage, mean and standard deviation) and inferential statistics (Pearson correlation and multiple linear regressions) using SPSS.

The major finding found out from the study suggested that customs valuation; customs risk management and information technology had a significant impact on trade facilitation as the researcher hypothesized at the beginning.

Therefore; we recommend that the need to commitment and improvement in customs valuation, customs risk management and information technology services for the betterment of trade facilitation. This leads to simplification and harmonization of trade procedures and at large scale leads to reduction in the cost of imported goods, custom clearing time and storage charges.

Keywords: trade facilitation, customs valuation, customs risk management & information technology

INTRODUCTION

CHAPTER ONE

1.1. Background of the Study

Customs valuation of goods is an important aspect of trade facilitation. Walsh (2003) defines it as an important element in a variety of other aspects of international trade including statistics, quota and licensing arrangement, taxes and other charges levied on imports, and the application of preference systems. Custom duties are levied mostly on an ad-valorem basis and custom valuation is usually the basis on which tariff and tax liability is calculated. Hence it is important to establish generally acceptable rules and system for the valuation of imported goods.

In view of such an importance of valuation of goods, procedures for determining the dutiable value of imported goods have been the subject of international negotiations since the early 1920s. Rege (2002) has presented a brief account of historical development of valuation agreement. The formal history of customs valuation started from the establishment of League of Nations but the agreement between nations on customs valuation was not finalized until general conference of United Nations held on Trade and Employment in 1947. The conclusions of this conference were incorporated in Article VII of General Agreement on Tariff and Trade (GATT).

Uniform international trade is facilitated through Custom valuation. S. L. Sherman and H. Glashoff (1988) explained the advantage of uniform valuation rate of duty and value of goods. “Rates of duty are typically established on an ad valorem base (ad valorem is Latin for ‘on the value’)-for example, a 10% on the value of goods”. It thus becomes necessary to establish the value of the goods in order to determine what duty to assess. Some articles have a well-established commercial value in particular markets, but more often the proper price or value is very uncertain. Price varies from time to time, from place to place, from brand to brand, and also according to the quantity purchased and many other factors, including such considerations as how long the parties have been doing business with each other (Sherman and Glashoff 1988, p.51).

United Nations studies by the Asia-Pacific Research and Training Network on Trade (2008) “found out that the importance of efficient and transparent customs valuation processes has long

been recognized and has led WTO members to sign a separate agreement on the implementation of GATT Article VII, commonly referred to as the WTO Customs Valuation Agreement (CVA)". "The CVA is based primarily on the transaction value method (TVM), i.e., value is assessed based on the value indicated in the invoice provided by the trader" (UN, 2008) on Customs Valuation the Customs value on imported goods is determined mainly for the purpose of applying ad valorem duties. It constitutes the taxable basis for Customs duties. It is also an essential element for trade statistics, for monitoring quantitative restrictions, tariff preferences and for collecting internal nation taxes, etc.

The Agreement establishes a Customs valuation system that primarily bases the Customs value on the transaction value of the imported goods, which is the price actually paid or payable for the goods when sold for export to the country of importation, plus certain adjustments. In cases where the Customs value cannot be determined on the basis of the transaction value, it will be determined using one of the following methods:

- The transaction value of identical goods;
- The transaction value of similar goods;
- The deductive value method;
- The computed value method;
- The fall-back method.

The above valuation methods must be used in hierarchical order. This will practically use by Ethiopian customs commission based on regulation number 158/2011.

The Customs procedure (CP): The procedures of risk management have recently been published in a few papers. According to Conrow E.H (2003), a risk management frame work encompasses the scope, the process/system/procedures to manage risks and the roles and responsibilities of the individual related to risk management. Besides, Chapman C.B., Ward,S.C (2013) studied that the effective risk management framework includes the risk management policies and procedures that cover risk identification, acceptance, measurement, monitoring, reporting and control.

Conrow E.H (2003) showed that customs procedure reducing congestion cargo, passenger, and enterprises and strengthening the goods declared periodically affecting the customs risk

management. Chapman C.B., Ward, S.C (2013) claimed that customs procedure encouraging Self-assessment of enterprises and allowing enterprises (instead of customs) filing trade and many key documents affecting the customs risk management. Conrow E.H (2003) studied that customs procedure strengthening the news report and the declaration by electronic means and increasing the use of information systems affecting the customs risk management.

Vanany, I.,Pujawan, N. (2009) showed that customs procedure encouraging enterprises in complying customs law and complying new procedure affecting the customs risk

According to Anderson, K. and Terp, A. (2006): “Customs 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 every day 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. Besides, Conrow E.H (2003) claimed that customs risk management coupled with good intelligence and effective data analysis allows the profiling and targeting of cargo prior to arrival at a port so that low risk cargo. CRM can be released immediately and high-risk cargo can be diverted for physical examination by Harrison, M.(2007).

Jean-Paul Rodrigue (2013), Experience shows that trade facilitation are highly dependent on infrastructural developments. However, trade facilitation is not only about the physical infrastructure for trade. Gary Clyde Hufbauer (2012), Studies indicate now that, “only about a quarter of the [trade] delays are due to poor road or port infrastructure.” “Seventy five percent is due to administrative hurdles - numerous customs procedures, tax procedures, clearances and cargo inspections - often before the containers reach the port.” Accordingly, while undertaking the necessary infrastructural changes to implement deep trade facilitation is still important, most other measures seem to depend on strong political will. Development of this political will requires a clear understanding of the needs and benefits of trade facilitation in an economy.

This seems to be one part of the trade facilitation challenges in Ethiopia which suffers from excessive border bottlenecks, lack of reform and drawbacks in private investment. This has

affected Ethiopia's international trade relation and has hampered its trading across borders track record at the face of global competition for foreign direct investment. This article, *inter alia*, examines the extent to which reforms on import and export procedures in Ethiopia that target at reducing the cost and time needed to execute trade across border can effectively move it closer to the global economy. The focus will be on the legal, economic, political, and administrative framework, i.e. soft infrastructure, rather than on traditional infrastructural challenges. and has hampered its trading across borders track record at the face of global competition for foreign direct investment. This article, *inter alia*, examines the extent to which reforms on import and export procedures in Ethiopia that target at reducing the cost and time needed to execute trade across border can effectively move it closer to the global economy. The focus will be on the legal, economic, political, and administrative framework, i.e. soft infrastructure, rather than on traditional infrastructural challenges. (Tilahun Esmael Mizan Law Review, Vol. 8, No.1 P148)

1.2. Statement of the Problem

According to the World Bank subsequent report on doing business, Ethiopia's position on average 156 ranks. From all factors considered as ease of doing business the trade facilitation factor, the country ranked 72 in the 2019 report of the World Bank .this rank highly affecting the country suitability to attract foreign direct investment, trade negotiation and export/import business. Furthermore; the business community engaged in import and export are complaining on the trade facilitation problem they are facing.to list some of the challenges that Ethiopia business community facing while importing and exporting

- ❖ Importers are forced to pay highest custom duty fee without understanding their product nature, i.e nature of transaction ,volume of transaction, manufacturer price ,the product country of origin like technology utilized ,nature of raw material used. Simply by providing the same invoice price for all importers of similar goods.
- ❖ Due to an increase in payable customs duty inflation in the country was aggravated
- ❖ Capital out flow increasing and there is tremendous increase in balance of payment deficit
- ❖ The business community facing with an increase in ware house and demurrage costs due to pro longed customs risk management & information technology efficiency &

effectiveness, which create artificial shortage of goods. Which finally leads importers to shift the additional costs to retailers and consumers which create macro –economy instability?

All these challenges and other that aren't stated are highly linked with the two major factors i.e customs valuation, customs risk management & information technology. These three factors of challenge in the trade facilitation service are highly correlated with the Ethiopian customs commission service provision efficiency & effectiveness.

Similarly traders are not satisfied with the provisional valuation made by customs on the basis of reference values .traders complain that there is lack of transparency, fairness and competency in this area. Therefore, identification of likely problems to be in countered in the course of implementing the WTO valuation agreement, customs risk management & improving IT infrastructure and finding out the most suitable solution is very urgent and important for the trade facilitation and the economy at large. Therefore, the main purpose of this study is to identify the factors that are affecting the Ethiopian importers customs duty fee procedures i.e customs valuation, customs risk management & ICT utilization and betterment for trade facilitation at modjo customs branch office .and investigate the correlation among those factors that are affecting Ethiopian importers customs duty fee & dwell time of shipments in dry ports.

1.3. Research Question

1. How customs valuation affects trade facilitation in mojo dry port customs branch office?
2. How customs risk assessment affects trade facilitation in mojo dry port customs branch office?
3. How information technology affects trade facilitation in mojo dry port customs branch office?
4. How is the relationship between customs valuation, customs risk assessment and information technology on trade facilitation?

1.4. General Objectives

The general objectives of this study was tried to assess the effects of Customs Valuation, Customs Risk Management and Information Technology on trade facilitation

1.4.1. Specific Objectives

1. To identify effects of customs valuation on trade facilitation in moja dry port customs branch office.
2. To identify effects of customs risk assessment on trade facilitation in moja dry port customs branch office.
3. To identify effects of information technology on trade facilitation in moja dry port customs branch office.
4. To assess the relationship between customs valuation, customs risk assessment and information technology on trade facilitation.

1.5. Significance of the Study

In view of the importance of valuation to the correct assessment and application of customs duty, customs risk assessment and information technology due concern should be given to collect revenue and trade facilitation. Particularly, in developing country like ours, custom valuation, risk management & information technology utilization is a basic source of revenue for the government in the form of customs duty and penalty compared to developed countries which is for control purpose than revenue. To simplify procedures and trade facilitation, customs valuation plays great role. Good custom procedure and risk management rules with efficient IT infrastructure will help importers to be treated fairly and equally. In the absence of transparent procedures and rules of valuation importers are not secured to import goods

Importers have to be clear in advance how much to pay duty for goods before they actually import the goods. While the current customs valuation system makes unpredictable duty fees. In this regard Ethiopian customs valuation system has a lot of operational problems and risk management lacks transparency for every importer with poor IT infrastructure. This study were identified the problems in customs valuation system risk management and efficient IT infrastructure forwarded suitable remedial actions in order to alleviate the problems. The

outcome of this research project would hopefully provide substantial information to Ethiopian Customs Commission to alleviate the observed problems.

In addition, the finding would help others stakeholders and academicians who have an interest to assesses others area of customs administration.

1.6. Scope of the Study

The study has focused on the factors that affected trade facilitation, which further affects Ethiopian economy during importing of items from abroad through Mojo dry port customs branch office.

The Modjo dry port is the main dry port of the country in terms of volume and value of import which have a significant impact in customs duty fees, warehouse charges'. The major limitation for study was its scope limited to trade facilitation with respect to custom valuation practice; customs risk management and information technology. It is not the intention of this paper to study the general custom valuation system and customs modernization. Rather it focuses on the challenges faced on imports as a result of customs valuation and risk assessment. In addition to the scope limitation, this study did not include directly the whole customs clearing agents, importers and view of the importers and exporters.

1.7. Limitation of the Study

This research was limited in its design of cross-sectional. It would have been good and more reliable if the survey were taken more than one time. According to estimation to the ICT directorate of Ethiopia Customs Commission majority of importer or more than 75% of importers have been importing through Mojo customs branch office. The sample size was constrained to only these Mojo customs branch offices& focus on freight forwarders &customs commission assessors. It would have been good and made the study more reliable if those remaining branches& actors will be encompassed in upcoming future researches included in the sample.

1.8. Operational Definition of Terms and Concepts

Ad valorem duties of customs are duties levied according to the value of goods and are usually expressed as percentages of value. Such duties are distinct from specific measures of goods such

as number, weight, volume, area, capacity etc. There can also be composite duties that are partly ad valorem and partly specific. Customs tariff of a country indicates what kind of duties are levied on different kinds of goods. However, barring exceptions, most countries generally levy customs duties on ad valorem.

Risk management is defined as the “process of understanding and managing risks that the entity is inevitably subject to in attempting to achieve its corporate objectives” (CIMA Official Terminology, 2005). *It is* the process of identifying, analyzing, and communicating risk and accepting, avoiding, transferring, or controlling it to an acceptable level considering associated costs and benefits of any actions taken.

Customs Value means the value of goods for the purposes of levying ad valorem duties of customs.

Risk management is defined as the “process of understanding and managing risks that the entity is inevitably subject to in attempting to achieve its corporate objectives” (CIMA Official Terminology, 2005).

Transaction value is the price actually paid or payable for the goods when sold for export to the country of importation. It needs to be adjusted by valuation factors, Trade facilitation a narrow perspective, it could only refer to the logistics and administrative procedures, such as transport and customs that linked to the process of trade from one country to another.

Trade facilitation from a general one, it is considered to include all issues that are relevant to the trade, the trade environment, such as the efficiency of the transport, access to regulations and documents, transparency of trade policy, and application of technology to reduce cost and time.

Trade facilitation is the simplification and harmonization of international trade procedures, including activities practices, and formalities in collecting, presenting, communicating and processing data required for the movement of goods in international trade (WTO/UNCTAD,2001)

1.9. Organization of the Study

This paper is organized into five chapters. The first chapter provides introduction, background, and statement of the problem, research question as well as objectives, significance, scope and limitations of the study. In the second chapter the relevant literature that support the study are reviewed followed by the presentation of methodology in the third chapter. Chapter four deal with data presentation, analysis and interpretation; while summary, conclusions and recommendations are made in the last chapter five of the paper.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. INTRODUCTION

In this section the theoretical, empirical literature & conceptual frame work that are related with the study area by focusing on customs valuation, customs risk assessment & information technology effects on trade facilitation discussed. Customs valuation has been discussed by focusing on customs pricing system, customs procedures, tariff imposition system and inspection related issues. Customs risk assessment also discussed based on risk management process, compliance measurement and risk based compliance management. Last but not least discussed information technology was discussed. Finally conceptual frame work drawn from the literature.

2.2. Theoretical Literature

2.2.1. Customs Valuation

Customs valuation becomes an issue where import duties are calculated on an “ *ad valorem* ” basis. An “ *ad valorem* ” duty rate is one that is expressed as a percentage of the value of the imported goods. Duties may also be assessed on “specific” basis, where a fixed amount is charged on the quantity of goods imported – such as 0.2 cents per liter of imported alcohol. or, a duty rate on a particular import might be a combination of *ad valorem* and specific rates (a “compound rate”).Nevertheless, *ad valorem* rates are the most prominent in international trade, as they are used by WTO Members against all but a small percentage of goods in their tariff schedules. Thus, how customs officials determine the customs value is as important to the importer as the rate of duty specified in the tariff schedule for the goods, as both the basis – the customs value – and the rate together determine the amount of duty the importer must pay .(WTO, *Trade Profiles 2007.*)

Customs valuation systems generally followed one of two conceptually different approaches: those based on a ‘notional’ concept of customs value, and those based on a ‘positive’ concept. The ‘notional’ concept was represented by the convention on the valuation of goods for customs purposes in 1950, commonly known as the Brussels Definition of Value (BDV). Under the BDV, imported goods are valued based on their normal price, that is to say the price which

would fetch at the time when the duty becomes payable on a sale in the open market between buyer and seller independent of each other. Customs valuation officials would consider the buyer's actual invoice price paid for the imported goods, but were free to reject it in favor of the notional open market price for goods of same kind. A "positive" system custom value was generally based on the actual price paid by the buyer for the goods, rather than an abstract or fictitious or notional price that might be paid under perfect competitive market conditions (Rosenow and O'Shea, 2010, P.6-8).

In line with the above, the emergence of global value chains has been accompanied by a renewed emphasis on trade-related transaction costs and trade facilitation issues. This is testified by a recent survey of 140 African firms across 5 economic sectors: agro-food, information and communication technologies, textiles and apparel, tourism, and transport-logistics (ECA, 2013 and OECD and WTO, 2013). According to questionnaire respondents high transaction costs (due to customs procedures, delays, costly documentation, etc.) and poor business and regulatory environment are cited amongst the most binding constraints hampering the participation of African firms to global value chains, along with access to finance, and inadequate infrastructure provision. Interestingly, these issues are remarkably consistent with those highlighted by the sectoral case studies undertaken by ECA on agro food industries in Cameroon, Cote d'Ivoire, Ghana, Kenya and Nigeria, textiles and apparel industries in Egypt, and extractive industries in Nigeria, Zambia and Ghana (ECA et al., 2013).

2.2.1.1. Methods of Customs Valuation

"Customs valuation practices are subject to the WTO Agreement on Customs Valuation (ACV), which mandates that the customs value of imported goods, to the greatest extent possible, should be the transaction value, that is, the price paid or payable for the goods" (Wulf and B.Sokol, 2005). He also explain that valuation fraud is frequently reported as a major problem in developing countries, and many of them still find that implementing the ACV presents one of the most challenging aspects of customs work. "Valuation work is practically difficult in some countries in which the reliability of commercial invoices tends to be poor, and where trade undertaken by the informal sector and in second-hand goods is significant" (Wulf and B.Sokol, 2005).

Customs valuation method used to determine value will directly affect the amount of tariff duties collected on a particular import item. Due to this, “customs valuation has historically been ‘a jealously guarded function of government with regard to international trade.’ For many countries especially least developing countries the discretion given to customs authorities in valuing trade for the imposition of tariffs and duties has been a major source of government revenue. Which are often characterized by shallow tax bases” (F.A. Albuero 2006).

Walsh (2003) has explained various provisions of the WTO valuation agreement and their implementation procedure. The Agreement on Implementation of Article VII of GATT, which is now referred as WTO Agreement on Customs Valuation was one of the results of the Tokyo round of GATT trade negotiations. It officially came into force on January 1, 1981 and was adopted by various signatories from the mid-1980s onward. This agreement establishes rules for the valuation of imported goods that must be applied by all member countries. It provides, as its basis, the use of transaction value (selling price) between buyer and seller. It also specifies alternative methods to be used in sequential order for determining value when the transaction value cannot be determined under Article 1 that is read with Article 8. Article 8 provides certain adjustments to the value. These methods are summarized as follows

- ✚ Transaction value is the price actually paid or payable for the goods when sold for export to the country of importation. It needs to be justified by valuation factors, which are separately discussed below .the “price actually paid or payable ” represents the total payment made or to be made by the buyer .the payment may be made not only in the form of money but also by the way of letters of credit or negotiable instruments. Payment. Payment may also make directly or indirectly. An example of indirect payment is settlement by the buyer of debt owed by the seller .a commercial invoice usually reflects the total payment made. However, if it understates or overstates the price, or if it is misleading or fraudulent, it cannot provide a valid basis for determining the transaction value.
- ✚ Transaction value of identical goods (Article 2); this method provides for the determination of value based on the transaction value of identical goods exported at or

about the same time, in the same quantities, and at the same level of trade (retail, wholesale, and so on) as the goods being valued.

- ✚ Transaction value of similar goods (Article 3); the transaction value of similar goods produced by the same producer is used. The conditions in respect of quality, level of trade etc. are the same as in the above method.
- ✚ Deductive method (Article 5); value may be determined based on the sale price in the country of importation, less applicable deductions for costs (e.g. expenses and profits)
- ✚ Computed method (Article 6); this method provides for the determination of value based on the costs of material and production in the country of export plus certain other costs (e.g. packing, engineering and development work). In addition, amounts for profit, general expenses, and insurance are also included in the value.
- ✚ Fall-back method (Article 7); value can be determined based on any of the previous methods as adjusted in a flexible manner to account for special circumstances.

2.2.1.2. Major Factors of Customs Valuation

2.2.1.2.1. Pricing System

According to Pushpa Raj Rajkarnikar (2006 P.13) pricing system, the customs shall fix the price of goods on the basis of the recoded highest prices, previous prices of identical or similar goods, reference prices, suggested price lists of manufacturers, local markets prices ,international market prices and other available information. Implementation rules were also formulated in this regard .in order to check the commercial fraud and valuation discrepancies provision of fine and penalties for the offenders was also introduced.

2.2.1.2.2 Customs Procedure

The term procedures refer to the treatments of goods by customs administration which is protected in national legislation. Customs procedure covers the whole spectrum of the customs mandatory document requirements, customs process & customs system of control and facilitation import & export, the movement of passengers, goods & transit procedures. From a trade facilitation perspective, the world customs organization (WCO) international convention on the simplification and harmonization of customs procedure, that was extensively revised and adopted in June, 1999. Commonly known as the revised Kyoto, is acknowledged as the main international instrument covering trade facilitation as it pertains to the role played by customs

administration in the global trading system. The customs procedural issues have an impact in trade facilitation it affects customs clearing dwell time, increases storage & demurrage costs.

2.2.1.2.3 Tariff Imposition

According to WTO (2001) contracting parties to GATT 1947 has used different nomenclatures in their customs tariff before adopting the convention on the harmonized commodity description system which is called “harmonized system or HS code” draw up by customs cooperation council in Brussels” A unique feature of harmonized system stated by WTO (2001) “was that it was to be used as a basis for customs tariff as well as international trade statistics nomenclatures” in addition to the benefits for trade facilitation and its use for trade statistics, it has a great contribution in making uniformity among countries particularly in customs classification and for tariff purpose.

According to Ethiopian customs commission current proclamation tariff classification also determine the customs duty payables percentage from 0% -35% which have an impact in cost of imports & description of items this might be one of separation of importers duty payables which demands transparency.

2.2.1.2.4. Physical Inspection

Luc De Wulf B.Sokol (2004) based on customs legislation mandatory physical examination of all shipments abolished and to inspect cargo selectively on the basis of risk analysis and threat assessment this creates a drastic reduction of the rate of goods that are physically inspected so as to speed up the clearance process. This approach relies heavily on analysis of data on the importer & country of origin. In Ethiopian context, in customs service most of the time physically inspecting the importers shipments to find variation in Quantity, measurements & other parameters.

2.2.1.3. Customs Valuation Problems

“Evasion of duty through undervaluation or miss-description of imports is an acute problem for administrations in developing countries” (IMF, 2003). According to James T. Walsh (2003) “coming to terms with its provisions of agreement has often proved problematic, since they include the introduction of modern principles of tax and customs administration, such as self-assessment”.

IMF (2003) cited the GATT article which explains modern principles of tax and customs administration as next. “Importers or their agents complete the customs declaration, including the value and tariff classification of the goods, and calculate the duties and taxes owing. The custom administration verifies the information to the extent necessary (i.e., selective verification based on risk-assessment techniques”. I think it is obvious that reducing trade barrier will benefit any country. On the other hand, one of the basic problems in the least developing countries sources of government revenue customs duty fees from imports since its manufacturing sector is not well developed to produce consumable item or capital goods. Therefore it is the role of customs administration to controls fraud during valuation, and has to be managed systematically. “Developing countries are deeply concerned with revenue loss not about trade facilitation” (Wulf and Sokol, 2005).

Particularly developing countries like in our case Ethiopia, relatively in which high rate of duties are collected through import duty or valuation is a serious case and looks paradox with trade facilitation or avoiding trade barrier. Because of the high rate of duties and others ad valorem taxes in this developing countries Walsh (2003) states that “it is often exacerbated by a generally poor level of tax compliance and a tendency for many importers to deliberately maintain poor records, and the existence of special relationships with suppliers”. To show the importance of revenue collected by government and the difference duty levied by developed and developing countries Michael Keen (2003) presented the following by citing various issues of IMF (2003): “In Africa, more than one third of total revenue still comes from trade taxes, whose relative importance actually increased over the 1990s. Elsewhere in the world there is a clear down trend, but reliance still remains high: one-fifth of all revenues in Asia and the Pacific and one-quarter in middle east”. Peter J. Williams (2008) presented the duties of tariff collected by different countries which varies from smallest tariff 5.8% in the case of Chinese up to 26% in the case of Nepal.

Walsh (2003) also argues that custom valuation “apart from the obligation to generally ensure the content of the agreement, implementation requires members to make specific provision in their national legislation for the following”:

- i. Right of appeal. GATT article 11 requires that the legislation of each member provide a right of appeal, without penalty, to the importer or any other person liable for the payment of customs duty in connection with the determination of customs value. Article 11.2 provides that a final right of appeal to a judicial authority must be available. There should be an independent body to review and give fair response to the importers in case of any complaints. “an importer not satisfied with the determination of customs value by a regional office should have the right to have the determination reviewed at headquarters” (Walsh,2003). If again the importers is not satisfied with this then there should have been the right to appeal to a judicial authority.
- ii. Release of goods before final determination of customs value. Article 13 requires members to make provision in their legislation to allow importers to withdraw their goods from customs control in situation where the final determination of customs value is delayed. “Where necessary, a guarantee in the form of a surety or a deposit could be taken to cover the potential liability for customs duty as determined by the customs administration” (IMF, 2003).
- iii. Time of currency conversion. Usually payments for imported goods are described in a currency other than that of importation. The payment is mandatory to be converted to the currency of importation with equivalent amount of exchange rate. Article 9.2 of the agreement allows members to choose between the time of exportation or importation as the basis for converting currencies.

2.2.1.4. The Effects of Customs Valuation on Trade Facilitation

Customs valuation is a major feature, and concern, of modern customs tariff systems. It is important not only for the assessment of customs duties, whether for purposes of generating revenue or as a means of encouraging and protecting domestic industry but is also a significant element in a variety of other aspects of international trade such as trade facilitation, statistics, taxes and other charges levied at importation as well as in the application of preference systems (EAC custom valuation manual, 2010).

Custom valuation contributes also for trade facilitation. Harmonized system is a base for standardized valuation to achieve facilitated trade system. World Trade Organization (2002) states that a unique feature of the harmonized system was to be used as the basis for customs tariff as well as international trade statistics nomenclatures. It was widely recognized that, in

addition to the benefit of trade facilitation and analysis of trade statistics, adoption of the harmonized system would help ensure greater uniformity among countries in customs classification and enhance their ability to monitor and protect the value of tariff concession in GATT (WTO, 2002, p 124).

Custom valuation provides initial control benefits. According to East African Community (EAC, 2010) custom valuation manual the benefits of custom valuation is “viewed as it gives initial control to confirm whether the declaration of value has been completed fully and correctly, the required supporting documents are appended thereto, the details of the declaration of facts about the value correspond to the supporting documents, the entry is subject to any customs rulings, the declared value is realistic in the light of the commercial practices of the industry and identical or similar goods”.

Jovanovich J.M. (2002) mentioned the contribution of customs valuation as not to be an obstacle to international trade, simplicity, ease of trade, uniformity and avoid arbitrariness and protectionism through valuation. While in least developing countries customs valuation developed mainly to generate revenue to the government in the form of custom duty & fees. Rather than protecting local firms the above major objective of the government uses the highest price to collect highest revenue from imports while they create macro-economic instability by making inflation a normal trend capital out flow since customs set high price importers request banks a letter of credit above the invoice price. The case of developed countries customs valuation increases to protect local firms rather than generating revenues to the government.

The Agreement on Customs Valuation (ACV) provides a set of valuation rules, expanding and giving greater precision to the existing provisions on customs valuation in the original GATT agreement. The fundamental approach behind ACV is to reduce trade barriers and transaction costs arising from customs and border control practices including uniform application of the harmonized system and the valuation agreement so that they are not slow, unpredictable and non-transparent. The ACV is largely a manifestation of Article VII of GATT which was revised during the Tokyo Round of GATT Negotiations. This was substantial advancement over the Brussels Definition of Value (BDV) approach, prevalent in most of the European countries in fifties and sixties (Majumder2005). But least developing countries might not be follow the above customs valuation agreement since their macro-economic structure , level of manufacturing

sector ,the type of import & export & balance of payment and other issues should be considered.

2.2.2. Customs Risk Management

2.2.2.1. Concept of Risk management in Customs procedures

Customs controls should ensure that the movement of vessels, vehicles, aircraft, good 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 extend (WCO revised Kyoto Convention, Standard 6.4.).

Risk analysis and risk assessment are analytical processes that are used to determine which risks are the most serious and should have priority for being treated or having corrective action taken. (WCO, 2003)The development of profiles relies heavily on the gathering, charting and analysis of intelligence and the WCO has developed various tools to assist its member countries in the establishment of profiles and the management of intelligence collection. For example, the WCO Customs Enforcement Network (CEN) database can provide useful intelligence for the establishment of risk profiles. These profiles then drive inspection selectivity programmed through which data declared is analyzed on the basis of the identified risk parameters and consignments, and depending on the selected risk level, goods and persons are routed through different channels of Customs control (UNCTAD, 2008).

The concept risk management in Ethiopian case has setting its own parameters country of origin, volume, value, the nature of the item, importers trend, are some of the parameters to set risks invoice price from developed countries from Europe easily accepted while from some other countries needs to pass through detail cross checking mechanisms.

2.2.2.2 The Risk Management Process/ Steps in Customs Procedure

The risk management process constitutes the basic processes such as the establishment of the risk management context, risk identification, risk analysis, risk assessment, addressing the risks and

monitoring and reviewing the process through compliance measurement (WCO, 2003 and OECD, 2004).

(i) Establish the context

This stage defines the strategic, organizational, and risk management context, because any effort to manage customs or other risk must first establish what needs to be managed, risk management within customs can be strategic, operational or tactical.

(ii) Identify risks

Risk identification focuses on the determination of the likely sources and the magnitude of the risks which threaten the objectives of the organization .It is vital that all identified risks are recorded however small they may appear, taking into consideration what risks could arise, how they could happen and why they could happen.

(iii) Analysis risks

This step helps to analyze how likely the risk event to happen (probability and frequency) is. It also used to analyze the impact, cost or consequences of that event occurring. Customs should apply compliance measurement to support this function. If the estimated levels are low, then risks may fall into an acceptable category and action may not be needed.

(iv) Assess and priorities risks

Compare estimated levels of risk against the pre-established criteria. Rank the risks to identify management priorities. There are different types of ranking systems. The assessment into HIGH, MEDIUM and LOW is widespread.

(v) Address risks

Accept and monitor low-priority risks. For other risks, develop and implement a specific management plan which includes consideration of resources (human, financial and technical).

(vi) Monitor and review- Compliance measurement

The monitoring and reviewing stage is vital and should include all aspects of the risk management process i.e. the effectiveness and efficiency of the risk management cycle and any changes that may have occurred to the originally identified risks.

Monitoring is continuous while reviewing is periodic. Monitoring and reviewing ensures that the

risk treatment plan is adhered to and that the treatment is achieving the desired results. It is also for purposes of updating plans, dropping off some ineffective treatments and adding newly emerging risks and their treatment.

(vii) Documentation/Recording

There should be a risk register which gives the rationale behind selecting the risks, and records the assumptions on which assessments have been made, to establish an audit trail that ensures important information is not lost.

2.2.2.3. Compliance Measurement

Customs risk management process to be successful and effective it will have to consistently monitored and evaluated. One of the means for this is the use of compliance measurement. The ultimate goal of many customs administration is to achieve compliance. The measure of success is for their traders and for imported goods to be in full compliance with trade laws. Many customs have also instituted a program of “informed compliance” where their officers assist traders and industries to understand and apply the trade rules and to comply with import requirements. (WCO, 2003)

2.2.2.4 Risk Based Compliance Management

According to OECD (2004) a risk-based compliance management approach can be broadly in to four major categories: a country’s legislative framework, the administrative framework of a country’s customs organization, the type of risk management framework and available technological frameworks adopted by customs administrations. Collectively these four categories represent the key determinants of the manner in which cross-border flows may be expedited and the way customs control can be exercised by this flow.

2.2.3. Information technology in trade facilitation

According to UNCTAD (2006) Several Customs functions can readily benefit from ICT, including Customs data validation, cargo inventory control, goods declaration processing, electronic notification of release, revenue accounting and Customs enforcement. As part of Customs reform, automation stimulates Customs modernization and fosters the use of ICT by other governmental departments and private sector stakeholders involved in Customs operations. Customs automation results in increased transparency in the assessment of duties and taxes, reduction in Customs clearance times and predictability, which all lead to direct and indirect

savings for both government and traders. Automation is also an opportunity for reviewing and aligning Customs procedures to international standards, conventions and other instruments, e.g. the revised Kyoto Convention of the WCO.

According to Hossain, Uttam Deb and Al Amin (2009) one of the key requirements for effective implementation of automated customs systems is ensuring security in generating, processing, transmitting & storing information that circulates between customs authorities and economic operators. In recent years the use of modern equipment, software and information technologies has underpinned economic activities. International trade and its accompanying activities are no exceptions, as a result of which customs control bodies embark on automating most of their process.

Role of Information and Communication Technology in Trade Facilitation

- ✚ Standardization of data requirements
- ✚ Automation
- ✚ Trader interface
- ✚ Single window for all import or export related requirements
- ✚ International electronic exchange of trade data
- ✚ Risk management based on risk profiles and targeted controls (Hossain, Uttam Deb and Al Amin et al., 2009)

According to Pushapa and RajiRajkarnikar. (2006) Computerization and ICT applications that leave little or no room for negotiation, influence, or discretion in customs process, strict staff evaluation and selection procedures, professional training, good incentives, internal control, a code of conduct, enhance fairness, competency integrity in customs administration. This indicates clearly that automation of customs process leads to greater transparency, less human interaction and as a result, diminishes corruptions.

2.2.4 Trade Facilitation

Trade facilitation is the simplification and harmonization of international trade procedures, including activities practices, and formalities involved in collecting, presenting communicating and processing data required for the movement of goods in international trade (WTO /UNCTAD ,2001) it reduces transaction costs as well as ,the complexity of international trade induced by documentation ,procedures and regulations and hence ,expands trade ,resulting in both economic growth and development.

Traditionally, the meaning of ‘trade facilitation’ was delimited to border procedure facilitation to make trade procedures as efficient as possible through the simplification and harmonization of documentation, procedures and information flows. Roy and Bagai, (2005)

It referred to policies and measures aimed at easing trade costs by improving efficiency at each stage of the international trade chain. According to the WTO definition, for example, trade facilitation is the “simplification of trade procedures”, understood as the “activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade” Moi'se, E., T. Orliac and P. Minor (2011),

According to Paras & Anil (2010) An important policy implication flowing from the results is that international assistance for improving the trade performance of LLDC's as envisaged by the Almaty program of action , endorsed by the united nations general assembly , should focus on improving the trade facilitation environment in both the LLDC's and their transit neighbors . The local logistics industry in LLDCs, and the ease and affordability of arranging international shipments and logistics – related transport and information technology infrastructure in transit countries should receive high priority.

2.3. Empirical Literatures

2.3.1. Empirical Literatures on Customs Valuation & Trade Facilitation

United Nations studies by the Asia-Pacific Research and Training Network on Trade (2008) “found out that the importance of efficient and transparent customs valuation processes has long been recognized and has led WTO members to sign a separate agreement on the implementation of GATT Article VII, commonly referred to as the WTO Customs Valuation Agreement (CVA)”. “The CVA is based primarily on the transaction value method (TVM), i.e., value is assessed based on the value indicated in the invoice provided by the trader. As such, the CVA is clearly aimed at facilitating trade, considering information provided by the trader. (UN 2008) as the basis for valuation. However, the CVA allows for five other methods to be considered in a hierarchical order, should Customs have doubt about the invoice value provided. It is therefore interesting to see that, at a time when most WTO members are supposed to have fully implemented the CVA, private sector surveys in developing countries still identify customs valuation as a key issue. (see, for example, ESCAP, 2006)

To shed some light on the issue, customs valuation is examined in India, Nepal, and Fiji in chapters V, VI and VII, respectively. In chapter V, Chaturvedi reviews efforts made by India in making customs valuation more efficient and in implementing the CVA. Some of the major issues identified by traders in India regarding customs valuation are frequent rejections of transaction value, the lack of transparency, the slow processing of valuation cases by the special valuation branch and the lack of expertise among field officers. The Indian case study reveals that customs revenue declined continuously between 1999 and 2002, but has consistently increased since then. Several measures were introduced to minimize revenue loss and to tackle under-evaluation, resulting in a remarkable increase in additional revenue from the enhancement of declared transaction values. Many private sector companies indicated, however, that the additional measures imposed by the Customs Department are the results of misdeeds of a few traders - accounting for less than 18 percent of the transactions - and that those traders should therefore be specifically targeted.

The common concerns shared by the majority of developing countries such as Ethiopia regarding possible negative impact of the implementation of the WTO Customs Valuation Agreement relates to the possible reduction in customs revenues due to under-invoicing and lowered protection levels for domestic producers. This is an important concern as customs revenue still represents a significant share in its contribution to the national treasury combined with prevalent under-invoiced importation practices by the business community. In this sense under-invoicing of imported goods is an extremely serious and complex problem that negatively impacts on Ethiopia's economy in several ways. It means that the duties and taxes escape the tax net thereby resulting in gross economic distortions. This also leads to an uneven playing field, unfair competition and is disadvantageous to goods manufactured in Ethiopia. The challenges in under-invoicing are indeed issues of concern because there is no major decline in the instances of under-invoicing even if there is a general decline in the customs duties in the last two decades. (Tilahun Esmael Mizan Law Review, Vol. 8, No.1 P163 &164)

In the meantime various strategies could be designed to address the problems of directing the country's custom valuation practice to that mandated by the WTO. Perhaps the first strategy should be a comprehensive movement towards narrowing the problem. i.e. the private sector has raised the point that under-invoicing is done only in the 50-60 percent of total transactions. It is important that those firms or sectors are identified so that all do not face the same treatment. One idea is to distinguish manufacturing and trading firms separately. In this context, there may be some choice between pre-clearance control and post-clearance control. It can be suggested that the manufacturing units may find it easier to deal with post clearance audit. In the case of the traders pre-clearance control should be made more preferred choice. (Tilahun Esmael et al., 2013)

2.3.2 Empirical Literatures on Customs Risk Assessment & Trade Facilitation

According to World Customs Organization (WCO, 2010), risk management is not just having about good processes; it is a way of thinking that moves an administration towards proactive rather than reactive. It is also an effective and efficient way to deal with large volumes of people, goods and craft with limited resources and constantly changing risk without impeding legitimate trade. The current Ethiopian Customs proclamation 859/2006, under article 6 defines risk

management 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 provision and control with respect to goods brought to or taken out of customs territory.

According to Puengpradit (2010), risk management is considered a key element in facilitating international trade while at the same time ensuring customs regulatory control. The difficulties of implementation risk management also relate to customs control systems and generating more income. While the, Customs uses risk management to control fraud & generate more revenue in the form of customs duties payable or penalties, some implementation problems arise from the lack of competency of custom officers and customs control systems. It appears that customs officers have differing levels of knowledge and understanding of risk management principles as suggested by the range of explanations given by customs officers on the principles and practices of risk management. When the concept of risk management is interpreted in different ways, it can lead to a distortion of the principles when applied to practice. About the skills and knowledge of customs officers and whether these are adequate for the implementation of risk management for facilitation and control.in order to avoid accountability customs officials changes green or yellow risk to RED one hundred percent inspection this is time consuming increasing cost of storage, loading unloading, demurrage charges & increase customs clearing time.

As one customs operator note; the current use of risk management is considered to be a risk to national revenue since customs officers subjected both documents and shipments to less scrutiny in order to affect the immediate release of goods without necessarily assessing the risk. As a result, customs can only facilitate trade, but customs is quite unable to ensure regulatory control. When customs officers view risk management as a risk to national revenue, it may be because the customs department stands in contrary to risk management principles and implementation. It is observed that the knowledge of risk management principles, including profiling systems, is confined to a particular group of officers such as the customs officer appointed to the Risk Management Committee. (Mesere Girma 2018)

Luc De Wulf and José B. Sokol (2004) Even though risk management has almost similar definition when we come to practice least developing countries have set a priority in terms of

their economic structure risk mainly focused by targeting one hundred percent inspection to find mismatch or fraud in terms price, quality, quantity, certificates of origin which determines customs duty payables to increase. A strict measure can be taken if importers has been get by cheating or beyond tolerable quantity, import without bank permit supposed to pay three times of customs duty payable.

The recent introduction of risk management system at ERCA can be seen as an important step in this direction. Another important issue of concern in this line also includes the fear of consequent reduction in government revenue as Ethiopia makes a transition toward strict adherence to the valuation stages under the WTO Customs Valuation Agreement. Apparently, a review of the valuation practice dictated by various directives issued by the Ministry of Finance and Economic Development, the Ethiopian Revenues and Customs Authority etc. all have a tendency to increase the transaction value of imported goods. This has presumably inflated the transaction value consequently leading to higher taxable prices. it is from this perspective that Ethiopia would be concerned not to lose a large share of its revenue as it moves to dispel its current valuation law and move towards the more disciplined and deeply regulated valuation hierarchy. The right solution to this of course lies on the principle of aligning all trade policy instruments. The most efficient and transparent way of addressing this challenge is shifting the trade protection and revenue raising role of customs valuation to actual tariffs thus avoiding dead weight loss to the overall economy.(Tilahun Esmael et al., 2013)

2.3.3 Empirical Literatures on Information Technology and Trade Facilitation

The rapid penetration of information technologies (IT) into business has had a significant impact on the ways in which economic activities are carried out and the ways in which the procedures developed for organizational management are followed. Economic operators work in a dynamic global environment and their internal business processes are becoming more critically dependent on the timely provision and accurate processing of specific information flows. Modern channels of communication and highly developed IT have accelerated the flows and consumption of goods (Wolffgang & Harden, 2016, p. 2).

Schware and Kimberley (1995) focused on worldwide experience and identification of factors that make way for trade facilitation through the successful application of IT. The study found

that accessible information and communication technology could significantly improve trade performance. However, this technology must be accompanied by simplification of documentation, re-engineering of procedures, appropriate training and availability of local expertise, and a reliable and cost-effective communications infrastructure. Automation has, therefore, been considered to be making sense only if it serves as a tool to support customs management practices (OECD, 2005b).

Hossain, Uttam Deb and Al Amin (2009) A state-of-the-art automation system needs to be put in place to ensure customs “data mining” This is critical not only in terms of simplifying document lodgment, but also to ensure effective risk management procedures including: (a) screening shipments against predetermined risk criteria based on documents lodged; (b) identifying the nature and level of risk, and prioritizing accordingly; and (c) resolving the risk. Although the green, yellow and red channel concepts are in operation, they are mainly implemented on the basis of self-determination by the customs officials. The customs database needs to be designed in such way that it maintains historic data on importers and exporters, which will eventually help to determine the level of risk based on the compliance record of the traders.

Duval (2006) and ESCAP (2006) made similar recommendations when emphasizing the establishment of an IT-based single window system and a modern risk-management system for ensuring higher gains from trade facilitation. This holds particularly true in the context that trade and transport facilitation has become critically important for developing countries with a view to reaping the benefits from the opportunities of global production and changing trade patterns (UNCTAD, 2005).

2.3.4 Empirical literature on Customs valuation, risk management, information technology & trade facilitation

The World Custom Organization (WCO) is an organization who is responsible for trade facilitation within the customs world. Grainger (2008) states that “the WCO has drafted numerous instruments and recommendations that contain trade facilitation principles”. He cited some examples which include “the Kyoto Convention which first came into force in 1974, followed by the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures adopted in 2006 (WCO, 2006). Another, relatively recent instrument that makes direct reference to trade facilitation principles is the Framework of Standards to Secure and

Facilitate Global Trade adopted in 2005 (WCO 2005)". "The WCO is also the home for the Harmonized Commodity Code Description and Coding Systems, and in cooperation with the WTO, the WCO also helps ensure consistency in the technical interpretation of valuation rules and non-preferential origin rules" (Grainger, 2008).

Biman C. Prasad (2007) "based on case studies and private sector surveys conducted in five Asian countries (Bangladesh, China, India, Indonesia and Nepal) on the need and priorities of trade facilitation measures under negotiations at WTO, ESCAP (2006) identified customs valuation as the main trade facilitation-related concern of the private sector in those countries. This shows developing countries as well as regional economic integrations should give a priority to customs valuation due to economic structure, comparative advantages of each country in terms of labor, capital or raw material and specific issues.

To bring better valuation practices as well as to tackle the under invoicing or otherwise evading duties, modern customs administration has to consist of designing and implementing overall customs modernization program. According to Wulf and Sokol (2005) custom valuation "does not operate in isolation from the overall customs operational and management system and the ability to effectively undertake a valuation function is directly related to the administration's overall quality". The degree or priority given to customs valuation & other customs operational & management activities varies based on the level of development & economic structure of a country.

In the case of least developing countries Custom valuation is directly related to trade facilitation because of the "great concern to traders, as non-transparent valuation mechanisms in addition to this government objective to generate more income in the form of customs duty fees this leads to increase the cost of import as well as the selling price of imported goods - typically combined with inefficient or even absent advance ruling mechanisms - lead to uncertainties regarding the profitability of each trade transaction" (UN/ESCAP, 2007).

As Andrew Grainger (2008) quoted WTO (1998), trade facilitation is defined as "The simplification and harmonization of international trade procedures where trade procedures are the activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade". The following

recommendations show trade facilitation under GATT article V, VIII and X as cited by Andrew Grainger the work of WCO (2002):

Even though we have seen the above trade facilitation recommendations least developing countries particularly those who are land locked like Ethiopia should be considered and customized the above recommendations based on its economic structure and macroeconomic stability. setting medium and long term priorities to maximize the benefits from trade facilitation. From this paper's objectives customs valuation, customs risk assessment & information technology utilization should be given a priority and addressing a problem with these priorities improve trade facilitations & contribute to macro-economic stability in particular for the overall economy at large.

2.3.5. Empirical Literatures on countries experience on Trade facilitation

According to the United Nations (UN), LLDCs, as a group, are among the poorest developing countries. They face tremendous challenges to growth and development due to a wide range of factors, including weak institutional and productive capacities, small domestic markets, and high vulnerability to external shocks, as well as poor physical infrastructure and remoteness from world markets (UNCTAD 2005). Sixteen of the LLDCs, or more than half, also belong to the category of least-developed countries (LDCs). Lack of territorial access to the sea, remoteness and isolation from world markets result in substantially higher transportation costs for LLDCs and reduce their competitiveness in international trade.

Whether in terms of export or import costs, Landlocked Developing Countries (LLDCs) stand out for their disproportionately high trade-related costs, mainly on account of the significantly higher costs for inland transportation. Indeed, in the case of some LLDCs, such as Botswana, Burundi, Malawi, Rwanda, Zambia, and Zimbabwe, inland transportation costs reached such an exorbitant level, that they accounted for over 70% of the total import/export costs. In addition, geographical disadvantages are often compounded by more expensive and lengthier import/export procedures, especially in the Central African region (Central African Republic, Chad, Mali and Niger, as well as in some non-LLDCs such as Angola, Congo, Democratic Republic of Congo and Gabon). Besides, African Least Developed Countries (LDCs) appear to have more

expensive customs and terminal handling compared to non-LDCs; conversely African Small Island Developing States (SIDS), like in other world regions, appear to face significantly lower costs for exports, both in terms of overall costs and for custom and terminal handling.

Chowdhury and Erdenebileg (2006), describing why geography matters and LLDCs are at a disadvantage vis-à-vis coastal countries, argue that a lack of direct access to the sea, isolation from major economic centers, inadequate transport infrastructure and cumbersome transit procedures combine to hamper the ability of LLDCs to grow successfully, especially through the well-worn path of international trade. They contend that high transport costs discourage trade in goods and services, and LLDC transport costs are high because of remoteness and isolation from major markets, lack of direct access to the sea, infrastructure deficiencies within LLDCs, and use of multimodal transportation. An important factor contributing to high CIF/FOB margins for LLDCs is the greater economic and political risks they face, considering their absolute dependence on transit neighbors for trade flows; the uncertainty of inland road conditions and customs clearance inevitably means higher insurance premiums in addition to basic transport costs (Chowdhury and Erdenebileg 2006).

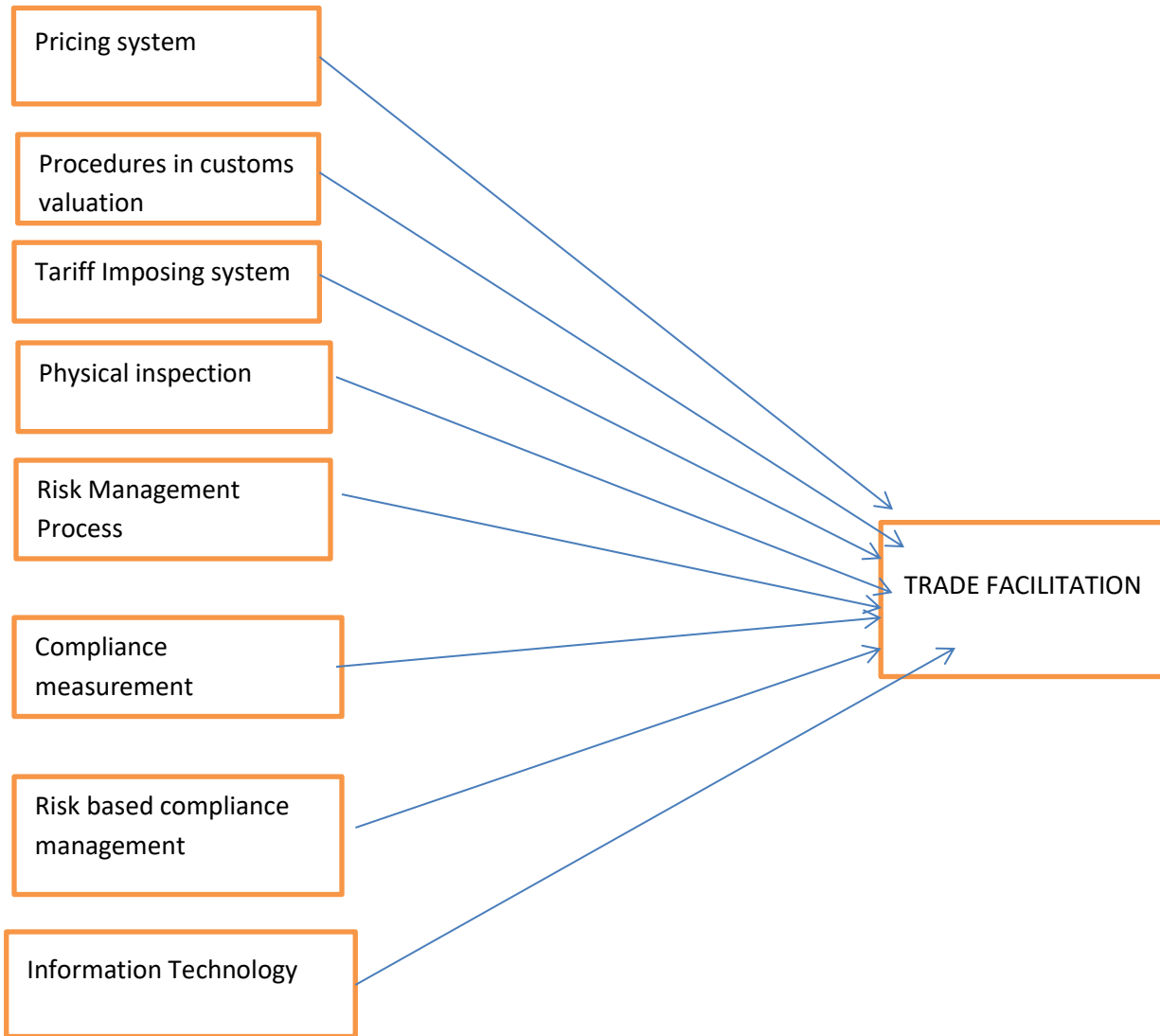
Limão and Venables (1999) show that that improving an LLDC's own infrastructure and the transit country's infrastructure from the median to the twenty-fifth percentile would reduce the cost penalty of land lockedness from 46 percent to 32 percent and 36 percent respectively. If both countries' infrastructure is enhanced at the same time, then the penalty drops even further, to 26 percent. Such improvements and cost reductions would raise the LLDC's volume of trade considerably — by 8 percent with improvements in its own infrastructure; by 2 percent with improvements in transit country infrastructure; and by 11 percent in the event of a simultaneous improvement.

Assessing the benefits of trade facilitation, Wilson, Mann and Otsuki (2005) develop four measures of trade facilitation—port efficiency, customs environment, regulatory environment and service sector infrastructure (proxied by the Internet and e-commerce use by business)—and use them in a gravity model to show that increased trade in manufacturing goods from trade facilitation improvements in all four areas yields increases in both exports and imports. Improvement in all four forms of trade facilitation of the 'below-average' countries 'halfway' to

global average yields an increase in global trade of US\$377 billion. The gains are largely through export expansion and the most important ingredient in achieving these gains, particularly to the OECD market, is a country's own trade facilitation reform efforts. Comparing South-South trade with South-North trade, the former is more affected by tariffs than the latter. The customs environment of importing country, the regulatory environment of both exporting country and importing country and the service sector infrastructure of exporting country are important factors influencing South-South trade. The study also showed that for landlocked countries, ports are as important for both import and export as in non-landlocked countries while for island countries, ports are more important for their import and less important for their export compared to non-island countries.

Empirical studies typically suggest that the benefits of trade facilitation are likely to exceed the related costs; and indeed African countries have realized this and are starting to implement trade facilitation measures to remove barriers to trade, at their own pace and with their own priorities regardless of the World Trade Organization negotiations. It is envisaged that this could strengthen national advocacy and eventually lead to concrete results. Going forward, what is needed is to scale-up the multitude of ongoing trade facilitation initiatives in Africa, at the national, sub-regional and regional levels, and to enhance the effectiveness of their implementation – where necessary. It has also been observed that many trade facilitation initiatives on the continent are funded by development partners, even though beneficiary countries do not necessarily lack resources. Against this background, for the sake of greater ownership of the trade facilitation agenda, domestic resource mobilization should be bolstered, whenever possible, in order to finance the reduction of barriers to trade. the study shows the wide variation in the costs of implementing trade facilitation assures, depending on factors such as size of economy; extent of existing systems; use of Public Private Partnerships; sophistication of design in terms of technology and equipment; and existing customs automation; among others. Generally, operating costs are perceived to be much lower than setup costs, except for measures such as online publication and national trade facilitation committees. (United Nations Economic Commission for Africa, 2013)

2.4. Conceptual Framework



Independent Variable

Dependent Variable

Figure 2.1 conceptual framework
Source Researcher

2.5 Hypothesis

This research work was based on three basic hypotheses and one strong assumption. The assumptions were the three major factors or leading independent variables has no significant correlation among each other so, the impact of one variable on the other variable pater is assumed zero.

All the hypothesis are tested against 90% standard deviation. The hypotheses we want to study are

The first hypothesis

H₁: Customs valuation has significant role in determining the trade facilitation and

H₀: customs valuation don't have any impact on trade facilitations

The second hypothesis

H₁: custom risk management has significantly affects the trade facilitation service

H₀: custom risk management has no significant impact on trade facilitation

Third hypothesis

H₁: Information Technology has significant impact on trade facilitation and

H₀: Information technology has no significant impact trade facilitation

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

As research methodology is a systematic approach through which research is undertaken, thus this chapter has detailed the methods applied that were used by the researcher from initial data collection procedure up to the analysis parts to arrive at the intended objectives of the study. It includes focus area of the study, research design, data collection methods, sample size, sampling methods, data analysis methods, validity and reliability tests, and ethical considerations.

3.2. Description of the Study Area

Modjo Dry Port is one of Ethiopia's seven operational inland dry ports along with Quality, Semera, Meqelle, Dire Dawa, Gelan and Kombolcha. Modjo dry port is the leading dry port in Ethiopia and expected to be continuing with its lion's share of facilitating Ethiopia's import – export hub, as several industrial parks and rail way of Addis- Djibouti is there in advancing.

The dry port in Modjo is located approximately 70Km from the capital and has a railway system with a capacity to move 3,500tn of cargo on a single trip. The train can make two trips a day to Djibouti, while truck transport takes more than four days for a two-way trip. As the largest port in the country, Modjo Dry Port handles more than 70pc of the nation's imports and has the capacity to hold 14,500 containers at a time. Before the train shipment began, the only other options for exporters were Quality Dry Port and the Port of Djibouti.

Now it has reached the capacity of accommodating more than 14,000 containers at a time, with 1000containers in and out per day. The port has a share of about 76 percent import-export destination of Ethiopia. That is the Modjo dry port, which was established in 2001 with the capacity of accommodating only 700 containers at once. As a land locked country, Ethiopia is using mainly Djibouti's and other neighboring countries' ports. In addition to the challenges with trade balance and the dearth of foreign currency, the payment for ports with additional cost of containers was a heavy burden for this developing country until recent time.

3.3. Research Approach

Depending on the objectives of the study both quantitative and qualitative data descriptive analysis was applied. The researcher will use a mixed (quantitative and qualitative) approach so as arrive at the final result .According to (Johan W.Creswel, 2003) states that mixed are the major approaches being used today in the social and human science with their advantages and disadvantages. Employing mixed approach helped the study to neutralize biases of applying any of a single approach as well as ways to balance the weakness inherent in a single method with the strengths of the other method .In this study the researcher employed quantitative and qualitative approach of the study focused on identifying the effects of Customs valuation, Customs Risk Assessment & IT on trade facilitation in general.

3.4. Research Design

The research design adopted by the researcher should answer the questions the study is seeking to answer or the objectives the researcher seeks to achieve by conducting the study (Mundia et al., 2015). The study examines the effect of customs valuation, customs risk management & information technology on trade facilitation on modjo dry port customs branch office. Thus, descriptive and explanatory research designs were employed to conduct the study.

The research design is intended to provide an appropriate framework for the study. A very significant decision in research design process is the choice to be made regarding research approach since it determines how relevant information for a study will be obtained; however, the research design process involves many interrelated decisions. This study employed a mixed type of methods. The first part of the study consisted of a series of well-structured questionnaires and interview for the same respondents to dig out their expertise knowledge, suggestion and practical observations about the area under investigations.

3.5. Population and Sample

3.5.1. Population of the Study

In this research the target population of the study will be 232 freight forwarders who actively works customs clearing service & freight forwarding constituted as the study population.

According Maritime affairs authority 270 freight forwarders in the country and Ethiopian Freight Forwarders and Shipping Agents Association data active freight forwarders a round 232 for this study the population size would be 232 freight forwarders & from which the sample was selected for investigation. Therefore, all freight forwarders which also work customs clearing service have been regarded as the total population of the study and represented by the sample.

3.5.2. Sampling technique and Sample Size

The sampling is the list of active freight forwarders who also works customs clearing agent service & the sample size by sampling technique, once the sample size determined the sampling units were chosen by systematic sampling methods from sampling frame.

The sample size of the study was drawn based on the formula developed by Yamane Taro (1967) since it is a simplified and a widely used formula in similar studies. The formula is given as:

$$n = \frac{N}{1 + Ne^2}$$

Where: n = Sample size

N = Population size

e = Tolerance at desired level of confidence, assumed 0.05 at 95% confidence level

Therefore, using the above formula, the sample size will be:

$$n = \frac{232}{1 + 232 * 0.05^2}$$

$$n = \underline{147}$$

Thus, the sample size was 147 from the population size of 232.

3.6. Data Sources and Types

3.6.1. Primary Source of Data

In the research both primary and secondary data sources were taken in to account. The sources of primary data were questionnaires and interviews from active freight forwarders, who work

customs clearing services at Modjo customs branch office. Since questionnaires are less costly and give sufficient time for the respondent during filling the questionnaire. Since the questionnaire is structured it avoids the researcher misquotations of respondents' opinion and respondents' subjectivity in the understanding of the problem and recommending potential solutions.

The other specific method was face to face interviewee. It is a qualitative technique designed to draw out a glowing picture of the participant's on research topic & getting a deep opinion about the subject matter. The interview also provides for the researcher chance to ask supplementary question.

3.6.2. Secondary Source of Data

The secondary data was obtained from different published sources such as books, journal articles, websites, manuals, reports, previous related studies and the like.

3.7. Data Collection Procedure

Data collection is a process of collecting information from all the relevant sources to find answers to the research problem, test the hypothesis and evaluate the outcomes.

The researcher used semi structured, self-administered questionnaire for quantitative aspect of the research methods. While a structured interview has a rigorous set of questions which does not allow one to divert, but a semi-structured interview is open, allowing new ideas to be brought up during the interview as a result of what the interviewee says so that is why the researcher used this method. A self-administered questionnaire refers to a questionnaire that has been designed specifically to be completed by a respondent without intervention of the researchers collecting the data.

The well-structured questionnaires were open-ended & close-ended questions. Closed-ended questions are those which can be answered by a simple Likers Scale which a researcher provides research participants with options from which to choose a response while open-ended questions are those which require more thought and more than a simple one-word answer. The greatest advantage of the open-ended question is the freedom the respondent has in answering.

3.8. Data Analysis

The collected data processed by editing, coding, classification and tabulation so that they are amenable to analysis. In order to make the data analysis easy, data was organized and present in the form of percentages, tables, and figures. The primary purpose of data analysis is to find evidences from the field in order to answer the research questions and objectives. Each question in the questionnaires was categorized based on the study's research objectives and finally it was grouped on the basis of common characteristic, analyzed and interpreted in chapter four of this research to arrive at conclusions.

Descriptive statistics, correlation and multiple regressions was employed to assess the relationship between the independent variables and the dependent variable. The rational to used descriptive statistics was to describe the basic features of the data in the study and to provide summaries about the sample. In order to analyze the output the researcher used frequency, percentage, mean and standard deviation. The rational to use multiple regressions was to describe features of dependent variable using independent variables & by showing the relationships between them to generalize results and make predictions. Then the data was also organized and presented using tables and the statistical package for social science (SPSS) 20 was used for quantitatively analyzing the responses from the survey.

3.8.1. Descriptive Statistical Analysis

Descriptive statistics was used to describe different characteristics. Frequencies and percentages were used to analyze general information about respondents, mean and standard deviation was used to describe effects customs valuation, customs risk assessment & information technology on trade facilitation. The mean is preferred as it considers the precise score of each case thus it incorporates more information than the median which only states a scores relative position. The standard deviation on the other hand, was used to measure variation. The results were presented using tables accompanied with explanations.

3.8.2. Inferential Statistical Analysis

In Inferential statistical analysis, correlation and multiple linear regression analysis were used to determine the relationship between the independent variable (factors affecting trade facilitation Customs valuation, Customs Risk Assessment & Information Technology) and dependent variable (Effects trade facilitation); and to test the Effects trade facilitation respectively. The results were presented using tables. Every table was accompanied by result interpretation. Correlation and multiple linear regressions are explained below.

3.8. 2.1. Correlation Analysis

Correlation may be defined as the degree of relationship existing between two or more variables (Koutsoyiannis, 1977). The correlation coefficient (r) is a measure of the degree of covariability of the variables. The values that the correlation coefficient may assume vary from -1 to +1. When r is positive, there exists a positive correlation between the variables. $r = +1$ implies that there is a perfect positive correlation between variables. When r is negative, there exists a negative correlation between the variables. $r = -1$ implies that there is a perfect negative correlation between variables. When r is zero, then the variables are uncorrelated. The closer the value of r is to one, the greater is the degree of covariability. On the other hand, the closer the value of r is to zero, the lesser is the degree of the covariability.

The quantity r , called the linear correlation coefficient, measures the strength and the direction of a linear relationship between two variables. The linear correlation coefficient is sometimes referred to as the Pearson product moment correlation coefficient in honor of its developer Karl Pearson (Samuel and Okey, 2015).

The correlation coefficient, r is calculated using:

$$r = \frac{Cov(X, Y)}{\sqrt{Var(X)Var(Y)}}$$

As statistical estimate, r is inevitably subject to some error and should be tested for its reliability by conducting some test of significance (Koutsoyiannis, 1977). While computing a correlation, the level of significance shall be set at 95% with alpha value of 0.05).

3.8.2.2. Multiple Regression Analysis

Regression analysis is concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the explanatory variables, with a view to estimating and/or predicting the (population) mean or average value of the dependent and independent variable.

The multiple regression analysis was used to determine whether the challenges will influence the organizational efficiency of trade facilitation of Modjo dry port customs branch office. The study takes the six determinant factors as independent variables and the effect of trade facilitation as dependent variable in the regression model. The study used the following multiple regression model to establish the statistical significance of the independent variables on the dependent variable.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + \epsilon$$

$$TF = \beta_0 + \beta_1PS + \beta_2PR + \beta_3TIF + \beta_4IRI + \beta_5RMP + \beta_6CM + \beta_7RBCM + \beta_8IT + \epsilon$$

Where; TF= Trade Facilitation Needs and Priorities,

- . PS = Pricing system,
- PR = Procedure related,
- TIF= Tariff Imposing System,
- IRI = Inspection related items,
- RMP = Risk management Process,
- CM = Compliance Measurement,
- RBCM =Risk Based Compliance Management,
- IT= Information Technology

In the model, β_0 = Constant, β_1 to β_8 = Regression coefficients represent the mean change in the dependent variable for one unit of change in the independent variable while holding other independent variables in the model constant and ϵ = Error term which captures the unexplained variation in the model.

A multiple linear regression analysis is carried out to predict the values of a dependent variable, Y, given a set of p explanatory variables (x_1, x_2, \dots, x_p).

The main assumptions of multiple linear regressions are:

Linear relationship, Multivariate normality, No or little multicollinearity, No auto-correlation and Homoscedasticity (<http://www.statisticssolutions.com/assumptions-of-logistic-regression/>) when assumptions are violated accuracy and inferences from the analysis are affected (Antonakis& Dietz, 2011). Statistical software packages (SPSS) allow researchers to test for each assumption. Checking the assumptions carry significant benefits for the researcher, reduce error, and increase reliability and validity of inferences.

3.9. Validity and Reliability

3.9.1. Validity

According to Kothari (2004) Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. Validity is concerned with the study's success at measuring what the researchers set out to measure.

This instrument has been well validated and used by researchers in studies of the effects of Customs valuation; customs risk management & information technology in Trade Facilitation. In addition the survey questionnaire was validated by professionals. The researcher thoroughly pursued to capture data from the right source using appropriate instruments to make them valid. Thus, in order to ensure the validity the researcher used interview in addition to the questionnaire which will be critically evaluated by the researcher and the advisor. Further consultations will also be obtained from different experts on the validity of the instrument to meet the research objectives.

3.9.2. Reliability

Reliability refers to the consistency and stability of a measurement and thus addresses to two questions, first applied to similar situation, can the measuring instrument give similar or nearly similar results in two or more time period or places; Second, the measuring devices capable of remaining stable when replicated (Kothari, 2004). Reliability refers to the stability of the measurement. Data collected from questionnaire were cross checked against those collected through interview and document review. The researcher insured the reliability of data by receiving information only from reliable authoritative sources and the results are consistent.

Coefficient alpha ranges in value from 0, meaning no consistency, to 1, meaning complete consistency (all items yield corresponding values). Generally speaking, scales with a coefficient α between 0.80 and 0.95 are considered to have very good reliability. Scales with a coefficient α between 0.70 and 0.80 are considered to have good reliability, and an α value between 0.60 and 0.70 indicates fair reliability. When the coefficient is below 0.6, the scale has poor reliability. Most statistical software packages, such as SPSS, will easily compute coefficient (Zikmund et al, 2010).

Table 3.1 Reliability Statistics

Factors	Cronbach's Alpha	No of Items
Pricing system	0.952	6
Procedure related	0.946	6
Tariff Imposing System	0.903	3
Inspection related items	0.834	4
Risk management Process	0.836	4
Compliance Measurement	0.806	4
Risk Based Compliance Management	0.703	3
Information Technology	0.90	5
Trade Facilitation Needs and Priorities	0.925	8
Total	0.979	43

Source: Computed by the researcher from the primary data, (2020)

According to the above summarized reliability statistics result; Cronbach's Alpha for this study was 0.979. scale with a coefficient α between 0.95 and 1 are considered to have very good reliability.

3.10. Ethical Consideration

In undertaking any research, there is an ethical responsibility to do the work honestly and with integrity (Adams et al, 2007:35). In order to protect the participant's secrecy and confidentiality of the information gather from them will not reveal to the third party. Hence, the respondent's rights to privacy, to be fully informed approval, confidentiality, and anonymity was addressed individually. Respondent's name and other identifying information was not use in study. Finally the researcher used many works of others and he has given proper credit to them

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

This chapter presents data analysis, presentation and delivers findings that the researcher collects from freight forwarders and shipping agents who intensively work customs clearing activity through questionnaires and interviews. The chapter also tries to show the response rate, the demographic information of respondents and the findings of the study with its detail interpretation and discussion were presented. Therefore, this section of the study contains facts and information about the impacts of customs valuation; customs risk assessment & information technology in trade facilitation in the case of Modjo Dry Port Customs Commission Branch Office.

4.1. Response Rate

The research sample size was 147 from which 141 were addressed through well-structured and administrated questionnaire. The remaining six were key informants. The questionnaire focused on freight forwarders who are working customs clearing at Modjo customs branch office. The key informants are owners of freight forwarding companies. The purpose of conducting interview with key informants was to supplement and triangulate the findings obtained from questionnaire. Above all the researcher will get meaningful details which employees not able to inform to the researcher. Out of the total 141 questionnaire distributed 134 or 95% respond the questionnaire properly.

4.2. Demographic Characteristics of the Respondents

4.2.1. Sex and Age of the Respondents

A total of 134 respondents were participated in the study. Respondents were also categorized into different age groups. As shown in table 4.1 the ages of most of the respondents were between 26-35 years which constitute 65(48.51) of the respondents. 36(26.86%) of the respondents were under 25 years and 22(16.63%) of the respondents were between 36-45. Those between 46-55 years were 8(6%). And the least number of respondent age fall above 55 years which were 3(2%) of the respondents.

Table 4.1 Sex and Age of Respondent

Category	Variables	Frequency	Percent
Sex	Male	112	83.58
	Female	22	13.42
	Total	134	100
Age of Respondents	Under 25 years	36	26.86
	26-35 years	65	48.51
	36-45 years	22	16.63
	46-55 years	8	6
	Above 55 years	3	2
	Total	134	100

Source: Computed by the researcher from the primary data, (2020)

4.2.2. Background Information

The respondents were asked to indicate their academic rank and based on their respond 99 (73.9%) of respondents were degree holders, and 35 (26.1%) of respondents were masters holders. Concerning their job position 78(58.2%) of them were operation managers 49(36.6 %) were assessor and the remaining 7(5.2%) of them are transistor's. This finding show that almost 94.8 % of the respondents are technically & practically works on customs valuation; customs risk assessments & information technology.

Regarding work experiences 36(30.25%) of the respondents have less than 5 years while 66(55.46%) of them have between 5-10 years and only 17(14.29%) of the participants have more than10 years' work experiences. This shows that more than 50% of the respondents have more than 5 years' work experiences. This implies that there is a considerable challenge and complex

situations handling experience exist among the Custom clearing agent. Table 4.2 below provides further details

Table 4.2 Background Information

Category	Variables	Frequency	Percent
educational qualification	BA degree	99	73.9
	Master's degree and above	35	26.1
	Total	134	100
Year of experience in the organization	2 - 4 years	28	20.9
	5 -7 years	63	47.0
	8 - 10 years	24	17.9
	More than 10 years	19	14.2
	Total	134	100
Form of the organization you work	Sole proprietorship	46	34.3
	Partnership	67	50.0
	Corporation	21	15.7
	Total	121	100
How long has your firm been engaged in freight forwarding & customs clearing services	2 -4 years	13	9.7
	5 – 7 Years	23	17.2
	8 -10 years	72	53.7
	More than 10 years	26	19.4
	Total	134	100
Position of respondents	Transistor	7	5.2
	Customs valuation officers	49	36.6
	Operational managers	78	58.2
	Total	134	100

Source: Computed by the researcher from the primary data, (2020)

Table 4.2 shows that 73.9% of the respondents have degree which will contribute for the best ground for further training to equip them for the needed Trade facilitation. This helped to the

researcher to have got a better and elaborated explanation as they have more understanding in the area.

In regard to Job position almost 58.2 and 36.6% respondents were operation managers & customs valuation officer's respectively .This means they have a practical experience & exposure on customs valuation; customs risk assessment & information technology and it has an impact on overall trade facilitation activities. This helped the researcher to have got a detail and full-fledged reply about the questioners.

64.9% of respondents have more than five year work experience, this also helped the researcher to have got better and reliable information.in addition to this 70.9 % of the firms have been engaged in freight forwarding & customs clearing services

4.3. Descriptive Statistics

The mean is measure of central tendency which provides general picture of the data and the result of mean of respondents in each perspective of the measures suggest that how freight forwarders who work a customs clearing activities have perceived all the challenge areas in their prospective view in conducting trade facilitation . In this case, the mean of each item together with their respective dimension overall was calculated in order to conclude the overall challenges implication on the trade facilitation. The study sought to determine the freight forwarders who work a customs clearing activities in Modjo Customs Commission Branch Office and their implication on trade facilitation. In these regard respondents were asked to indicate the degree their response using a five point likert scale where 5 represents Strongly Agree, 4 represent Agree, 3 represent Neutral, 2 represent Disagreed and 1 represent Strongly Disagreed.

Analysis of the data was done using means and standard deviations. The means recorded were interpreted as follows: the mean value 1-1.5 regarded as strongly disagrees, 1.6-2.5 regarded as disagree, 2.6-3.5 regarded as neutral, 3.6-4.5 regarded as agree and 4.6-5 regarded as strongly agree.

4.3.1. Frequency Report on Customs Valuation, Customs Risk Management & Information technology

4.3.1.1. Custom valuation system

In this research customs valuation System was taken as one of the basic component to determine trade facilitation so the researcher has tried to see that how it determine the trade facilitation the customs valuation system. In the questionnaire this variable contains four sub categories of customs valuation in related with trade facilitation. The response of respondents statistically described under.

4.3.1.1.1 Customs valuation in related to pricing system

Table 4.3 Descriptive Statistics of Custom Valuation in related to pricing system.

Item related Pricing system	N	Mean	Std. Deviation
Base price value is higher than the actual value of imported goods without considering other justifications	134	4.4	0.77
Data base price valuation method reject the “actual price” of imported goods	134	4.36	0.77
The price charged for demurrage and storage is not reasonable by customs or other government agencies such as standards, phytosanitary and health inspections	134	4.37	0.78
Customs valuation CD/data base price is not updated timely and do not consider world markets , comparative advantages of a country in terms of raw material, labor & cost of production	134	4.41	0.76
High price is considered as right price by customs officials without considering the volume	134	4.43	0.73
Penalties for minor breaches of customs regulations are high and do not consider truck record of importers	134	4.46	0.70

Source: Computed by the researcher from the primary data, (2020)

Table 4.3 show that freight forwarders respond about Base price value is higher than the actual value of imported goods, Data base price valuation method reject the “actual price” of imported goods, The price charged for demurrage and storage is not reasonable, Customs valuation CD/data base price is not updated timely, High price is considered as right price by customs officials, In case of slight description difference, customs officials charge higher price to be safe side. Used to determine the overall customs pricing system with a mean of 4.4,4.36, 4.37,4.41,4.43 & 4.46 and the standard deviation 0.77,0.77,0.78,0.76,0.73& 0.70 respectively As it can be seen from the table 4.3, the mean ranges from 4.36 to 4.46 which falling on agree state to this attribute. This indicates that all the customs valuation in related to pricing system practices had greater impact on trade facilitation.

From the interview & the open ended questions the researcher found that similar results. as most of the respondents said that Base price value is higher than the actual value of imported goods, Data base price valuation method reject the “actual price” of imported goods, The price charged for demurrage and storage is not reasonable, Customs valuation CD/data base price is not updated timely, High price is considered as right price by customs officials. So that freight forwarders who work the custom clearing service has force to time taking re work on the submitted price (price amendments), appeal procedures time taking& require paper works & documents which increasing the price in terms of hard currency which creates a delay on release of the goods, increasing customs duty fees payable, demurrage costs valuation without considering other factors like volume of shipments, comparative advantage for cost of production such as raw material, labor & energy costs. Demurrage & storage charges increases by the need of other supporting documents like phytosanitary, standard & health inspection certificates which shifts costs to end users by increasing the selling price of imported items, capital out flow due to high customs price data, which creates inflation which highly affects trade facilitation. However, the result of table 4.3 clearly indicates that customs valuation in related pricing system affects the trade facilitation. In general, the above findings proved that, the customs valuation in related to pricing system should be given an attention to improve the trade facilitation & to stable the macro economy.

According to Mersha (2016) The Ethiopia Customs valuation system does not provide reasonable and unbiased valuation and does not safeguard traders from threat of subjective

valuation by the customs officers. In addition importers are troubling in case of slight description difference, customs officials charge them higher price to be on the safe side.

According to Essete (2019)To enhance the valuation system Customs should overlook the applied ECVS(electronic custom valuation system),using ECVS created more complication to clearing agents they can't even to review the system due to this reason high tax is paid, different price given for same items moreover which leads the officers to corruption .so Customs should look other methods which can be practiced by different countries and improve the system so that fair ,neutral and uniform valuation method will be applied and traders also protect from arbitrary valuation by custom officers.

While the above decisions by customs officials may increase government revenue in the form of local currency but it aggravates inflation since the importers shift the cost to the end users. It also affects the hard currency reserve of the country as a (DPV) duty payable value increases by only increasing invoice price value this leads the importer to request the bank more hard currency than the actual he paid for the supplier this will create the capital out flow which erodes the countries hard currency reserve discouraging manufacturing sector makes the country import dependent.

4.3.1.1.2 Customs valuation in related to procedure

Table 4.4 Descriptive Statistics of Custom valuation in related to procedures.

Item related procedure	N	Mean	Std. Deviation
There is no automated procedure for electronic payments of fees, duties which is highly affected by system fluctuations.	134	4.37	0.78
Appeal procedure is too long and discouraging which requires various documents , paper works	134	4.47	0.71
Effective ruling procedures , applications for valuation are not available	134	4.23	0.82

Customs valuation system is not based on objectively stated procedure ,criteria	134	4.21	0.77
Customs valuation system applied is not create fair play ground among importers	134	4.46	0.72
Customs valuation system applied is not create fair play ground among importers	134	4.49	0.69

Source: Computed by the researcher from the primary data, (2020)

Table 4.4 show that freight forwarders respond about There is no automated procedure for electronic payments of fees and duties, Appeal procedure is too long and discouraging ,Effective ruling procedures and applications for valuation are not available, Customs valuation system is not based on objectively stated procedure and criteria,

Customs valuation system applied is not create fair play ground among importers Customs valuation system applied is not create fair play ground among importers. Were used to determine the overall customs valuation system in procedure related issues with means 4.37, 4.47, 4.23, 4.21, 4.46 & 4.49 and standard deviation 0.78, 0.71, 0.82, 0.77, 0.72, 0.72 & 0.69 respectively.

As it can be seen from the above table, the mean of procedure related issues ranges from 4.21 to 4.49 which to the agree state to the questions. This indicates that all procedural related issues to customs valuation system had greater extents of implication to trade facilitation. Since the appeal procedures must consider the time value money, seasonality of shipments & shelf life of goods in international trade buyer and seller might have their own agreements to reduce prices, label of packaging composition or ingredients of goods. seasonal variations also have great impacts in garment & textile goods. The unit price of invoice value should consider the volume of shipments due to economic of scale in cost production.

Decisions take even longer time if applications are made by forwarders & clearing agents as they often present necessary document from suppliers by courier service to the branch to make a convincing case on behalf of importers.

4.3.1.1.3 Customs valuation in related to tariff imposing

Table 4.5 Descriptive Statistics of Custom valuation in related to tariff.

Item related tariff imposing	N	Mean	Std. Deviation
Tariff classification is not updated to the international standards on time.	134	4.13	0.73
Tariff amount imposed on items are not known in advance most of the time preferred to set on the higher rates	134	4.32	0.80
Fees and charges levied on import are unreasonable and do not consider multiplier effects.	134	4.43	0.69

Source: Computed by the researcher from the primary data, (2020)

Table 4.5 show that freight forwarders respond about Tariff classification, Tariff amount imposed on items are not known in advance most of the time, Fees and charges levied on import are unreasonable. Were used to determine the overall customs valuation system in related with tariff related issues with mean 4.13, 4.32, and 4.43 and standard deviation 0.73, 0.80 &0.69 As it can be seen from the table 4.5, the mean ranges from 4.13 to 4.43 falling on agree state to this attribute.

This indicates that all the Custom valuation system in related to tariff practices had greater extents of impacts on trade facilitation. Since tariff determines the customs duty payable rate between 0-35percent. These will affects trade facilitation by discriminating the tariff classification by packaging, labeling, value, volume, brand and other parameters therefore tariff classification should be given attention with the concept of simplification & harmonization with international trade which helps to reduce unfair treatment among importers, value judgments, market irregularities which improve trade facilitation at large.

According to Paras and Anil (2010) land locked developing countries should rationalize their tariff structures, which help bring about a more efficient resource allocation, leading to increased specialization.

4.3.1.1.4 Customs valuation in related to inspection

Table 4.6 Descriptive Statistics of Custom valuation in related to inspection.

Item related inspection	N	Mean	Std. Deviation
Complex controlling mechanism takes unreasonable time for the inspection of imported items valuation	134	4.32	0.72
Physical inspection is open to the value judgment of inspector and inspectors do not have enough knowledge about the product	134	4.44	0.76
Traditional inspection mechanism incurs importers additional expense storage, loading unloading & demurrage costs	134	4.37	0.76
Physical inspection system has created bribery and others corrupt practice since there is no cross checking mechanisms	134	4.30	0.75

Source: Computed by the researcher from the primary data, (2020)

Table 4.6 show that freight forwarders respond about inspection Complex controlling mechanism takes unreasonable time for the inspection of imported items valuation, Physical inspection is open to the value judgment of inspector, Traditional inspection mechanism incurs importers additional expense, Physical inspection system has created bribery and others corrupt practice and were used to determine the overall customs valuation system in related inspection issues with mean 4.32, 4.44, 4.37& 4.30 and standard deviations of 0.72, 0.76, 0.76 and 0.0.75respectively. From the above table, the mean of risk management ranges from 4.30 to 4.44 which falling on agree state to the questions.

Inspection related issues have a great impact in trade facilitation since it is time taking procedures, open for value judgments; inspectors might not have enough knowledge about the goods they inspect, due to traditional inspection mechanism importers incur additional costs of loading un loading, demurrage, warehouse, storage costs & lost and damage costs. Therefore the costs increasing the selling price of imported items which more expensive and reduce the importers & users to maximize from benefits of trade facilitation.

4.3.1.2. Custom Risk Management

In the research questionnaire customs risk management was included as one of the challenging area which determine trade facilitation. Target group respondents were asked how they evaluated the customs risk management at Modjo Custom branch offices & how it improves trade facilitation. In the questionnaire this variable contains three sub categories of customs risk management in related with trade facilitation. The response of respondents statistically described under.

4.3.1.2.1. Customs risk management in related to process

Table 4.7 Descriptive Statistics of Customs risk management in related to process.

Item related risk management process	N	Mean	Std. Deviation
Risk identification is done in relation to where, when, how is the risk likely to be incurred	134	4.30	0.75
Analysis of risk is should done in terms of impact, cost or consequences. But in practice to find quantity, labeling & measurement differences	134	4.18	0.88
Monitoring and reviewing of all the performance, effectiveness and efficiency of the risk management process is done regularly	134	4.16	0.83
There is a risk register which gives the rationale behind selecting the risks, and records the assumptions on which assessments have been made	134	4.24	0.82

Source: Computed by the researcher from the primary data, (2020)

Table 4.7show that freight forwarders respond about risk identification is done in relation to where, when, how is the risk likely to be incurred, analysis of risk is done in terms of impact,

cost or consequences, monitoring and reviewing of all the performance, effectiveness and efficiency of the risk management process is done regularly, there is a risk register which gives the rationale behind selecting the risks, and records the assumptions on which assessments have been made. Were used to determine the overall customs risk management in related inspection issues with mean 4.30, 4.18, 4.16& 4.24 and standard deviations of 0.75, 0.88, 0.83 and 0.82 respectively. From the above table, the mean of risk management ranges from 4.16to 4.30 which falling on agree state to the questions.

When we see the risk management and the risk management process four things are vital. Risk identification, risk and its impact, frequency of risk management monitoring and evaluation and the rationale of risk register on risk selection.

From 134 respondents response we received the risk identification in relation to where, when and how the risk likely to be incurred. Accordingly the mean result is 4.3 and standard deviation of 0.75. The result implies that majority of the respondents agree that the risk identification process is done in relation to where, when and how the risk occurred. 75% of the responses are around the mean and the remaining 25% have a different view from the majority.

88% of the respondents respond that analysis of risk done in terms of impact, cost or consequences. But, 12% of the respondents' response was varied from the mean result, 4.18. On the frequency of conducting monitoring and reviewing of all performance, effectiveness and efficiency of the risk management processes. 83% of the respondents respond either agree or somewhat agree. But, 17% response a little vary from the mean result 4.16.

According to 82% of the respondents believe or agree on the presumption that risk register gives the rationale behind selecting the risks and the assumptions have been made. Unlikely to this 18% differ with the majority.

From the interview & open ended questions the researcher also found that risk management process have some problem here too, they think even if the system by itself is not bad but due to the subjectivity issue of the risks and decision makers they have facing disagreement with the officers. risk management is respected more in its absence than its use , as officials routinely override electronic “green” “yellow ” channel assessments and prefer to conduct one hundred

percent verification this creates delay in release of goods increase the storage costs and loading unloading charges.

4.3.1.2.2. Customs Risk Management In Related to Compliance Measurement

Table 4.8 Descriptive Statistics of Customs Risk Management in related to compliance measurement

Item related Compliance Measurement	N	Mean	Std. Deviation
The compliance measurement system of the authority as well as the branch supports effective implementation of risk management process.	134	4.07	0.89
It serves as a diagnostic tool to identifies areas of non-compliance	134	4.10	0.81
It is used to determine the degree to which customers/ agents, imported goods conform to customs rules and procedures	134	4.17	0.67
It provides important information to enhance the risk assessment methodologies	134	4.13	0.74

Source: Computed by the researcher from the primary data, (2020)

Table 4.8 show that freight forwarders respond The compliance measurement system of the authority as well as the branch supports effective implementation of risk management process, It serves as a diagnostic tool to identifies areas of non-compliance, It is used to determine the degree to which customers/ agents, imported goods conform to customs rules and procedures, It provides important information to enhance the risk assessment methodologies Were used to determine the overall customs risk management in related to compliance measurement issues with mean 4.07,4.10,4.17&4.13 and standard deviations of 0.89, 0.81, 0.67 and 0.74 respectively.

When we begin our research on compliance measurement the intention was to know the extent of compliance measurement implementation and its purpose/ in our research we tried to know respondents judgments about compliance measurement assistance in the implementation of effective risk management. In addition to that we had strong desire to know whether the tool serve as diagnostic tool to identify areas of noncompliance and used to determine the degree to which customers/agents conform to customs rules and procedures.

From the result summarized on table 4.8 we see the mean result for compliance measurement system supports effective implementation of risk management process is 4.07 with standard deviation 0.89. on average respondents agree that compliance measurement supports the risk management process. For other variables the results show strong relation with compliance measurement as diagnostic tool, information base and tool that assists system audit.

Though the compliance measurement provides the advantage of intensifying the information activities in customs procedures, Improve the efficiency of the customs control system & improve the working conditions of customs officers, in practice the measurement lack consistency in the compliance measurement decisions as the researcher realized from the open ended questionnaire response and from key informants.

4.3.1.2.3. Customs Risk Management In Related To Risk Based Compliance Measurement

According to Mesfin (2017) to overcome the problems of improper implementation of risk management techniques, Customs administration should have effective cooperation and coordination mechanisms through the aid of modern technology to ensure effective and efficient information flow for risk profiling and for the development of organized and updated risk profile database. This also should be supported by proper learning and training, performance evaluation programs that improve staff competency in risk management.

Table 4.9 Descriptive Statistics of Customs risk Management In Related to Risk Based Compliance Measurement

Item related Risk Based Compliance Management	N	Mean	Std. Deviation
The legislative framework provide the necessary basis in law for the achievement of the risk management strategies	134	4.07	0.95
It is builds on client service approach, education and awareness raising, consultation and cooperation and formal appeal and etc.	134	4.18	0.89
It is based on risk management framework and IT that introduces risk based decision making	134	4.16	0.96

Source: Computed by the researcher from the primary data, (2020)

The legislative framework provide the necessary basis in law for the achievement of the risk management strategies, It is builds on client service approach, education and awareness raising, consultation and cooperation and formal appeal and etc , It is based on risk management framework and IT that introduces risk based decision making Were used to determine the overall customs risk management in related to risk based compliance management issues with mean 4.07,4.18 & 4.16and standard deviations of 0.95, 0.89 and 0.96 respectively.

To evaluate the customs risk management with risk related compliance measurement we collected primary data from 134 freight forwarders. The result summarized on table 4.9. the compliance measurement focused on the legislative frame work implemented impact on risk mitigation strategies, how the management system considers client service approach, education and awareness and how IT supports the risk based decision making.

From the results summarized on table 4.9 we see only 5% of the respondents either strongly agree or disagree or indifferent that the legislative framework relation with the risk mitigation

strategies that the custom office implemented. But 95% of the respondents agree that the custom legislative frame work provide a foundation for the achievement of risk management strategies.

89% of the respondents argue that the risk based compliance management has built and will build the office client service approach, education and awareness. The IT infrastructure also supported the introduction of risk based decision making, according to the response we got from the 96% respondents.

In general only 3.79% of respondents deviate or dis agrees from the majority that the risk compliance measurement that custom implemented as custom risk management. The vast majority agrees on the hypothesis that, the custom risk management implemented at Modjo custom office can evaluate or measure issues related with risk related compliance.

When the researcher conducted a triangulation through open ended questionnaire and key informant interviews he realized that risk based compliance management process have got a legal frame work which is supported by IT infrastructure. Despite to the automation of certain parts of the customs control procedures, which saves time and resources, we noticed that there is high system failure, lack of cooperation & rigorous paper work for appeal procedure.

4.3.1.3. Information Technology

Table 4.10 Descriptive Statistics to Information Technology

Item related information technology	N	Mean	Std. Deviation
The automation of certain parts of customs control procedures save time and resources	134	4.51	0.63
From a functional point of view, the information system related to controlling the import, export and transit of goods are the most important in fulfilling customs formalities.	134	4.45	0.68
power interruption affects the assessors decisions on price, time & quality of services	134	4.64	0.58

Retrieving of data highly affected by information technology capacity in the customs activities	134	4.63	0.56
Lack of systems affects the overall activities of customs & has an impact on trade facilitation	134	4.60	0.55

Source: Computed by the researcher from the primary data, (2020)

The automation of certain parts of customs control procedures save time and resources, From a functional point of view, the information system related to controlling the import, export and transit of goods are the most important in fulfilling customs formalities, Retrieving of data highly affected by information technology capacity in the customs activities power interruption affects the assessors decisions on price, time & quality of services , Lack of systems affects the overall activities of customs & has an impact on trade facilitation Were used to determine the overall information technology in related to trade facilitation with mean 4.51, 4.45, 4.46, 4.63 & 4.60 and standard deviations of 0.63, 0.68, 0.58, 0.56 and 0.55 respectively.

The primary data collected through questionnaire on information technology is summarized in table 4.10. From the table we see that the mean result for information technology is 4.45 which means almost all respondents agree that IT and trade facilitation significant relationship.

From the analysis result we can see that out of the total 134 respondents 63% believe that IT save time and resource but 37% of the respondents don't accept this conclusion. furthermore; the relation between IT and its support in controlling the import, export and transit of goods considered as significant by respondents deviate with this result. So substantiate their deviation they mention the impact of power interruption, poor networking and high network downing and lack of awareness by users on the IT infrastructure.

In general most respondents (55%) believe that IT has a significant impact on trade facilitation (the mean result for the trade facilitation is 4.45, which implies that respondents at least agree). However, 45% of the respondents deviate or don't strongly agree on the impact of IT on trade facilitation.

From the interview & open ended questions the researcher also found that information technology utilization in the customs branch have the following limitations poor network capacity, high network downing time, electric power interruptions & user limitations to fully apply the features this limits to assessors activities & decisions due to this problems. Lack of Efficient & effective utilization of IT at the branch creates a loss of the opportunity to improve the efficiency of the customs control system, to enhance the delivery of information on customs procedures, to improve the working conditions of customs officers and to improve the relations with external organizations.

4.3.2. Trade Facilitation Mojo Dry Port Custom Branch Office

Table 4.11 Customs valuation, customs risk management & information technology on trade facilitation.

Item related trade facilitation Mojo Dry Port Custom Branch Office	N	Mean	Std. Deviation
Establishment (or improvement in the effectiveness) of an advance ruling system, which allows the importer, in advance of trade, to obtain binding rules in certain specific areas (e.g., tariff classification, Customs valuation, origin)	134	4.65	0.58
Establishment (or improvement in the effectiveness) of an appeal mechanism in & outside of the customs commission or related agencies for traders to dispute Customs and other authorities' decisions	134	4.37	0.76
Beginning and, if possible, completing clearance of goods before they have arrived physically in the Customs territory (based on advance submission of good declaration and other documents)	134	4.16	0.94
Separating release from clearance procedures, i.e., allowing goods to be released before all clearance formalities have been completed (this may be subject to providing a financial guarantee to Customs and/or post-release audit)	134	4.32	0.83
Harmonization and standardization of documentation requirements based on international standards	134	4.22	0.90

Computerization and automation of trade procedures, e.g., online submission and approval of Customs declarations, cargo manifests, including electronic payment of fees and Customs duties	134	4.19	0.87
Improvement in Customs inspection and control procedures, e.g., systematic use of risk analysis to determine which good should be examined, clearer criteria for “green” and “red” channels and special channels for authorized traders and express shipments	134	4.27	0.73
Implementation of international and regional transit systems based on international standards and practices	134	4.27	0.81

Source: Computed by the researcher from the primary data, (2020)

The trade facilitation is a dependent variable of the study. Respondents were asked to rate the points mentioned under the eight questions trade facilitation needs & priorities in Ethiopia which is improving trade facilitation of the clearance process in order to improve trade facilitation by minimize demurrage costs, customs clearing time, improving customs valuation for a reasonable customs duty fees which helps to reduce inflation, capital out flow . Each of the dependent variable questions related with each independent factors. The response of the respondents results are as seen in Table 4.9 and the mean for each dimension is provided, Establishment (or improvement in the effectiveness) of an advance ruling system, which allows the importer, in advance of trade, to obtain binding rules in certain specific areas (e.g., tariff classification, Customs valuation, origin) 4.65 ,Establishment (or improvement in the effectiveness) of an appeal mechanism in & outside of the customs commission or related agencies for traders to dispute Customs and other authorities’ decisions 4.37, Beginning and, if possible, completing clearance of goods before they have arrived physically in the Customs territory (based on advance submission of good declaration and other documents) 4.16 , Separating release from clearance procedures, i.e., allowing goods to be released before all clearance formalities have been completed (this may be subject to providing a financial guarantee to Customs and/or post-release audit) 4.32 Harmonization and standardization of documentation requirements based on international standards,4.22 Computerization and automation of trade procedures, e.g., online submission and approval of Customs declarations, cargo manifests, including electronic payment of fees and Customs duties, 4.19 Improvement in Customs inspection and control procedures, e.g., systematic use of risk analysis to determine which good should be examined, clearer criteria

for “green” and “red” channels and special channels for authorized traders and express shipments 4.27 and Implementation of international and regional transit systems based on international standards and practices 4.27 and standard deviations of 0.58,0.76,0.94,0.83,0.90,0.87,0.73, & 0.81 respectively. This implies that the all above listed practices positively influences the performance of trade facilitation in a great level.

Transit country logistics performance and aggregate government performance to impact land locked developing countries imports in a direction opposite to a priori expectations. Improving the efficiency of clearance at custom/border in LLDCs is more important than doing the same in transit countries as far as boosting LLDC import and export is concerned. But non –customs related aspects of trade facilitation in transit countries, such as transport and information technology infrastructure, remain important areas needing reform to help improve LLDC import & export.

4.3.3. Relationship Between customs valuation customs risk management & information technology and trade facilitation in Mojo Dry Port Customs Branch Office.

The fourth objective of the study was to examine the relationship between customs valuation customs risk management & information technology and trade facilitation in Mojo dry port customs branch office. Inferential statistical analysis, correlation and multiple linear regression analysis were used to examine the relationship between the independent variable (customs valuation customs risk management & information technology) and dependent variable (trade facilitation).

4.3.3.1 Correlation Analysis

Correlation is the degree of relationship between dependent & independent variables & it has a value ranging from -1 to 1. Therefore on this research, Pearson Correlation analysis is conducted to determine the relationship between the Independent variable, pricing system, procedure related, tariff imposition system, Inspection related items, and risk management process, compliance measurement, and risk based compliance management, and information technology and the Dependent variable trade facilitation.

Table 4.13: Correlation coefficients between dependent and independent variables

	v	TF	PS	PR	TIS	IRI	RMP	CM	RB CM	IT
TF	Pearson Correlation	1								
	Sig. (2-tailed)									
	N	134								
PS	Pearson Correlation	.711**	1							
	Sig. (2-tailed)	.000								
	N	134	134							
PR	Pearson Correlation	.713**	.819**	1						
	Sig. (2-tailed)	.000	.000							
	N	134	134	134						
TIS	Pearson Correlation	.796**	.822**	.919**	1					
	Sig. (2-tailed)	.000	.000	.000						
	N	134	134	134	134					
ITI	Pearson Correlation	.799**	.761**	.868**	.896**	1				
	Sig. (2-tailed)	.000	.000	.000	.000					
	N	134	134	134	134	134				
RMP	Pearson Correlation	.884**	.668**	.680**	.745**	.765**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000				
	N	134	134	134	134	134	134			
CM	Pearson Correlation	.888**	.671**	.702**	.784**	.777**	.841*	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000			
	N	134	134	134	134	134	134	134		
RBC M	Pearson Correlation	.835**	.662**	.713**	.745**	.761**	.803*	.762**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		
	N	134	134	134	134	134	134	134	134	
IT	Pearson Correlation	.543**	.531**	.400**	.424**	.454**	.498*	.513**	.431**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	N	134	134	134	134	134	134	134	134	134

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

Key : TF Trade Facilitation Needs and Priorities, PS Pricing system, PR Procedure related, TIF Tariff Imposing System, IRI Inspection related items, RMP Risk management Process, CM Compliance Measurement, RBCM Risk Based Compliance Management, IT Information Technology

As it can be seen at the above table, it was clear that among all the variables there were strong positive correlation. The correlation value for trade facilitation with Custom pricing system was 0.711, the correlation value for performance of trade facilitation with procedure related issues was 0.713, Correlation between trade facilitation and tariff imposition system with a correlation figure of 0.796, the correlation value with inspection related item was 0.799 and correlation between performance trade facilitation with risk management process was 0.884 and the correlation value with Compliance Measurement was 0.888 the correlation value with risk based compliance management was 0.835, the correlation with information technology was 0.543 from the table we have seen that there is a strong correlation between dependent & independent variables.

4.3.3.2 Regression Analysis

Regression is a technique that can be used to investigate the effect of one or more determinant (independent) variables on dependent variable.

A multiple regression analysis was carried out to determine the influence of independent variables on the dependent variable. Multiple regressions also used to determine the overall fit (variance explained) of the model and the relative contribution of each of the predictors to the total variance explained.

The correct use of the multiple regression model requires that several critical assumptions be satisfied in order to apply the model and establish validity Ballance (2004).

Before carrying out multiple regression analysis, the researcher has checked the required assumptions that the data must meet to make the analysis reliable and valid. The following assumptions of multiple linear regressions were tested using SPSS.

I. **Linearity assumption:** Linearity assumption was tested by producing scatterplots of the relationship between each of independent variable and the dependent variable. By visually looking at the scatterplot produced by SPSS, the relationship between each independent variable and the dependent variable found to be linear as shown below. Which mean linear regression model data there is linear relationship between the independent and dependent variables because there is no outlier affects.

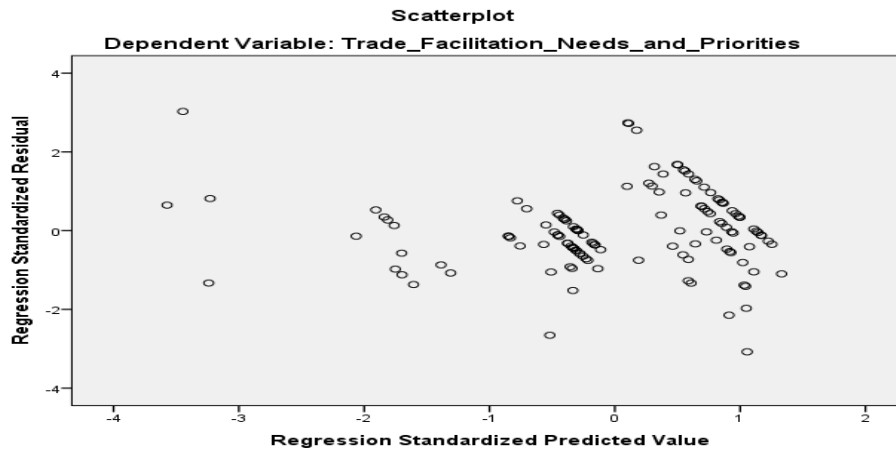


Figure 4.1 Scatter-Plot

II. **Multicollinearity assumption:** Multicollinearity is a statistical phenomenon in which there exists a perfect or exact relationship between the predictor variables. When there is a perfect or exact relationship between the predictor variables, it is difficult to come up with reliable estimates of their individual coefficients. It will result in incorrect conclusions about the relationship between outcome variable and predictor variables (Alibuhtto and Peiris, 2015). According to Reddy et al. (2013) the most widely applicable method of detecting the multicollinearity is Variance Inflation Factor and it is very accurate in determining the problem of multicollinearity. The common thumb rule is if any of the VIF values exceeds 5 or 10, it implies that the associated regression coefficients are poorly estimated because of multicollinearity.

So that us table 4.13 indicated that Variance Inflation Factor (VIF) < 10 this indication that no or little multicollinearity.

III. **Normality assumption:** Multiple regression assumes that variables have normal distributions. This means that errors are normally distributed, and that a plot of the values of the residuals will approximate a normal curve. Two common methods to check normality

assumption include using a histogram and a Normal P-P Plot. It can be concluded that normality is guaranteed as the histogram generated is normally distributed and the P-P plot follows the diagonal reference line as shown in the figure below.

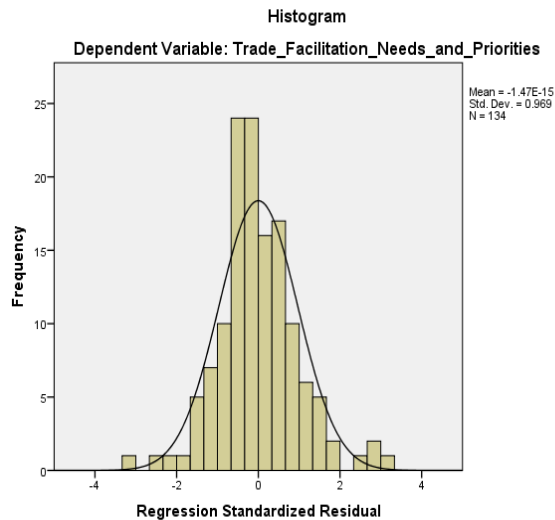


Figure 4.2. Histogram with normal distribution

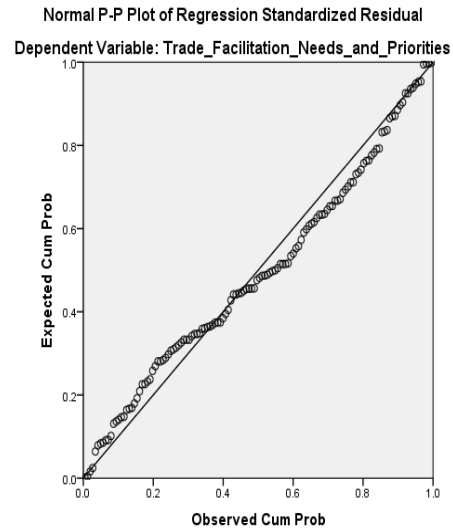


Figure 4.3. Normal P-Plot

IV. **Homoscedasticity assumption:** The assumption of homoscedasticity refers to equal variance of errors across all levels of the independent variables. This means that errors are spread out consistently between the variables. As figure 4.2 a histogram and a fitted normal curve show also all variables were normal. Also the multiple linear regression models for autocorrelation with the Durbin-Watson test result indicates 1.861 in the table 4.14 this mean the null hypothesis that the residuals are not linearly auto-correlated. While d can assume values between 0 and 4, values around 2 indicate no autocorrelation. Therefore heteroscedasticity was not a major problem as SPSS output.

After the data was checked for the above required multiple regression assumptions and confirmed that it has meet all these assumptions, multiple regression analysis was carried out to determine how well the regression model fits the data (model summary), independent variables statistically significantly predict the dependent variable (ANOVA) and statistical significance of each of the independent variables (regression coefficients).

4.3.3.2.1 Model Summary

Table 4. 14 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.941 ^a	.885	.877	1.83933	1.861

Source: Computed by the researcher from the primary data, (2020)

- a. Predictors: (Constant), Information Technology, Procedure related, Risk management Process, Risk Based Compliance Management, Pricing system, Compliance Measurement, Inspection related items, Tariff Imposing System
- b. Dependent Variable: Trade Facilitation Needs and Priorities

The value, adjusted R Square showed on the above table 4.14 as explained the significance as well as how much percent of variation in the trade facilitation by independent variable. In this model, the value was 0.877, which indicates that 87.7% of the variance in the dependent variable is explained by the independent variables in the model. The model also indicated that 12.3% of the variance can be explained by other factors.

4.3.3.2.2 ANOVA Model Fit

Table 4. 15 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3242.244	8	405.281	119.795	.000 ^b
1 Residual	422.890	125	3.383		
Total	3665.134	133			

Source: Computed by the researcher from the primary data, (2020)

- a. Dependent Variable: Trade Facilitation Needs and Priorities
- b. Predictors: (Constant), Information Technology, Procedure related, Risk management Process, Risk Based Compliance Management, Pricing system, Compliance Measurement, Inspection related items, Tariff Imposing System

Table 4.15 shows the ANOVA results of the multiple regression analysis. The p value denoted as “Sig.” in the ANOVA table tests whether the independent variables are statistically significant to predict the dependent variable. If p value is > 0.05 the model is statistically insignificant, but if p value is < 0.05 the model is statistically significant. Hence the above ANOVA table shows the regression model is a good fit of the data. (p=0.000, which is < 0.05).

4.3.3.2.3 Regression Coefficients

Table 4.15 Significance and Distribution of Coefficients

Model	Coefficients						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.356	1.538		-.232	.817		
Pricing system	.065	.078	.050	.840	.002	.257	3.892
Procedure related	-.206	.112	-.157	-1.852	.046	.328	7.792
Tariff Imposing System	.448	.252	.174	1.779	.028	.296	5.395
Inspection related items	.117	.149	.060	.784	.434	.456	6.396
Risk management Process	.551	.126	.284	4.361	.000	.218	4.592
Compliance Measurement	.711	.136	.338	5.219	.000	.221	4.532
Risk Based Compliance Management	.532	.134	.224	3.976	.000	.290	3.448
Information Technology	.136	.078	.066	1.731	.032	.634	1.578

Source: Computed by the researcher from the primary data, (2020)

a. Dependent Variable: Trade Facilitation Needs and Priorities

The regression model found is;

$$TF = .065PS - 0.21PR + 0.45TIS + 0.55RMP + 0.71CM + 0.13RBCM + 0.106IT$$

From the above table 4.--, Custom pricing system has a positive relationship with trade facilitation performance and the relationship is statistically significant at the 5% significance level ($\beta = .065$; $p = .002 < .05$). Customs procedure related issues has a positive relationship with

trade facilitation and the relationship is statistically significant at the 5% significance level ($\beta = 0.21$; $p = .046 < .05$). Tariff imposition system has a positive relationship with Trade facilitation which is statistically significant at the 5% significance level ($\beta = .448$; $p = .028 < .05$). Risk management process also has a positive relationship with Trade facilitation which is statistically significant at the 5% significant level ($\beta = .55$; $p = .000 < .05$). Risk compliance measurement system has a positive relationship with Trade facilitation which is statistically significant at the 5% significance level ($\beta = .71$; $p = .000 < .05$). Risk based compliance measurement system has a positive relationship with Trade facilitation which is statistically significant at the 5% significance level ($\beta = .53$; $p = .000 < .05$). Information technology system has a positive relationship with Trade facilitation which is statistically significant at the 5% significance level ($\beta = .14$; $p = .032 < .05$).

It is observed from the above finding, that all the coefficients are positive meaning that a change in any one of independent factors affects the trade facilitation in the same direction. Overall, the consistency of regression coefficients on the selected trade facilitation area suggests that these variables are important factors influencing trade facilitation efficiency and effectiveness at different degrees and majority of the independent variables were significant predictors of trade facilitation.

Regarding the collinearity coefficient of the independent variables, the coefficient of VIF less than 10 and the tolerance coefficient more than 0.2, therefore all variables are in acceptable range. Therefore all the variables are in acceptable range. Based on this it is possible to conclude that there is no multicollinearity effect since all variables met the criteria of tolerance should be >0.2 or VIF (variance of inflation factor) <10 .

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the researcher presented summary of the major findings, conclusions and recommendations based on the research findings.

5.1. Summary of Findings

The main purpose of this study was to assess the effects customs valuation, customs risk management & information technology on trade facilitation in the case of Modjo Dry port Customs Branch Office. Then based on research specific objectives research questions were developed with the purpose of leading and constructing this study. For the purpose of answering those research questions a questionnaire & interviewee was employed. Respondents who are freight forwarders with the position of Operation Managers, Assessors and Transistors participated in the study. Data analysis was conducted by using descriptive and multiple regression methods, with employment of frequencies and percentages and tables presentation analysis.

The study used the eight measures to assess the effects of trade facilitation in the case of Modjo Dry port Customs Branch Office to see their multiplier effects on trade facilitation in particular & in the macro economy in general. These criteria were Customs pricing system, Customs Procedure related issues, Tariff Imposing System, and Inspection related items, which are major determinants in of valuation in least developing land locked countries in addition to this Customs Risk management Process, Compliance Measurement, Risk Based Compliance Management also a major factors in risk management which affects trade facilitation in terms of customs clearing dwell time & information technology basically an infrastructural issue which need huge investment and a base for simplification & harmonization overall trade facilitation activities. Based on the discussion of data, the following summaries of findings were drawn:

- ✚ the result indicate that, customs pricing system is one of determinants of trade facilitation with a cumulative mean value of 3.905 which is show the respondent agree pricing system affects the trade facilitation. There is a huge time lag in updates, which creates different

problems among different set of importers so there is a need give apriority to dedicate resources to the maintenance and upgrading of the price data base.

In addition to this, the majority result of interview & open ended questions indicate that there is customs price adjustments due to customs price data & always consider the highest price as a parameter to set a price of goods without understanding their products nature. i.e nature of transaction ,volume of transaction, manufacturer price, country of origin and the technology utilized, nature of raw material used, simply by providing the same invoice price for all imported of identical or similar goods respectively.

- ✚ The result of the study also showed that there is customs procedure related issues which is shown by cumulative mean score value of 4.371 which show the respondent agree customs procedure related issues affects the trade facilitation. Improving procedural issues reducing customs clearing dwelling time, decreasing demurrage & storage costs, increase transparency by reducing value judgments.
- ✚ The result of the study also showed that there is Tariff Imposing System of custom commission is one of issues need adjustments. It is shown by cumulative mean score value of 4.293 which shows the respondent agree tariff imposition issues affects trade facilitation. This has an impact on description of goods, level of customs duty payables which have a similar impact like that of customs pricing system. In addition to that it can easily manipulate and exposed to officer's personal judgment due to ineffective information flows which used to develop well organized risk profile database.
- ✚ The result of the study also showed that there is Inspection related items issues which is shown by cumulative mean score value of 4.357 which show the respondent inspected related issues affects the trade facilitation. The inspection procedures are time taking and physical inspection open for value judgment & inspectors do not have knowledge about the items composition & specification of goods this creates a delay in the release of the goods.in addition to this due to inspection loading unloading, storage costs incurred which increase the price of imported items.
- ✚ The result of the study also showed that there is risk management process issues which is shown by cumulative mean score value of 4.22 which show the respondent agree risk management process affects the trade facilitation. Since the process is time taking &

dependent in a poor information technology infrastructure it creates a delay in customs clearing time.

- ✚ The result of the study also showed that there is compliance measurement issues which is shown by cumulative mean score value of 4.117 which show the respondent agree compliance measurement related issues affects the trade facilitation. Updating compliance measurement parameters based on risk trends, commodity natures, regulations & procedures to minimize the involvement of branch officials its effects by reducing clearing time to improve trade facilitation.
- ✚ The result of the study also showed that there is risk based compliance management issues which is shown by cumulative mean score value of 4.137 which show the respondent agree compliance measurement related issues affects the trade facilitation. which show the respondent agree risk based compliance measurement related issues affects the trade facilitation.in this regard customs officials change the risks from “GREEN” or “YELLOW” to “RED” which leads to physical inspection minimize the involvement of branch officials its effects by reducing clearing time to improve trade facilitation.
- ✚ The result of the study also showed that there is information technology issues which is shown by cumulative mean score value of 4.566 which show the respondent strongly agree information technology utilization related issues affects the trade facilitation the network capacity, network downing time, electric power problems & users limitation to fully apply the features affect system make it very slow and process the data very slowly.

The correlation analysis had shown that, the eight independent variables(Customs pricing system, Customs Procedure related issues, Tariff Imposing System, and Inspection related items, Customs Risk management Process, Compliance Measurement, Risk Based Compliance Management and Information Technology)have a strong positive relationship with the dependent variables (trade facilitation) at 0.01 p-value 2-tailed, by scoring a Pearson Correlation Coefficient value of 0.711**, 0.713**, 0.796**, 0.799**, 0.884**0.888**, 0.835**, and 0.543** respectively.

From regression analysis of eight independent variables with the trade facilitation, the eight independent variables are statistically significant at p-value < 0.05. The score of the R square

was 0.877, which indicates that 87.7% trade facilitation issues are expressed by the model .This also means that the remaining 12.3% is explained by other variables which are not in the model.

5.2. Conclusion

The aim of the study was to assess the effects of customs valuation; customs risk assessment& information technology on trade facilitation. And based on the study, it can be concluded that all the eight independent variables Customs pricing system, Customs Procedure related issues , Tariff Imposing System, Inspection related items, Customs Risk management Process, Compliance Measurement, Risk Based Compliance Management, information technology plays a significant role on trade facilitation needs and priorities.

According to the R square value, the factors considered in this study contribute to the trade facilitation representatives 88.5% which is by explained by the eight independent variables. The researcher believes the rest 11.5% may be explained by other factors variable.

Thus, based on the findings of this study, the research question of this study was answered, and the conclusion is that there are so many challenges in trade facilitation which led to continuous increase on customs duty payable & capital out flow since customs uses the highest price of identical commodities for customs duty payables , increasing demurrage charges due to prolonged transit time, increasing the price of imported items which will have an inflation since importers shift the price to end users this has a greater impact on trade facilitation.

In general, it can be concluded that the combinations of the eight independent variables have a greater impact and affected trade facilitation in terms of time, cost & quality of service delivery. Thus, improving the implementation on these & other related areas will improve the trade facilitation and reduce the negative multiplier effect in the economy.

5.3. Recommendation

Based on the study findings the following recommendations are forwarded to help and improve the trade facilitation in Modjo Customs Commission branch office so that a trade facilitation service will have a multiplier effect in the economy in general and in customs valuation & risk assessment in particular.

- ✚ To overcome the problems of current pricing system the commission should consider the advantages and disadvantages and revise its current pricing system since one of the major

corruption risk is a high rate of duty be paid. to create a faire playing ground to importers, to reduce customs clearing time, reduce demurrage & storage costs. The branch should create a congenial environment to the importers in order to declare the price actually paid or payable for the goods imported. Considering the volume of imports, specific export countries comparative advantages, international market price considerations and other variables might create Transparency, fairness and competency in valuation process will develop a voluntary compliance culture in the business community.

- ✚ the procedural related problems will be solve by consultation with all relevant stakeholders which will help to realize the known problems & benefits of procedural issues by then revising current policies, rules , regulations and manual in order to rationalize its decisions to deliver effective & efficient services. In addition to this procedural issues should not be time taking must have seen a nature appeals specifically.
- ✚ To improve Tariff Imposing System the customs commission in general the branch in particular should rationalize their tariff structure and announce any amendments and tariff classifications which will help bring about a more efficient resource allocation, leading to increased specialization and import tariff harmonization to international standard, reducing discrimination among importers ,dwell time of customs clearance & tariff classification gaps.
- ✚ To improve inspection related issues and a void value judgments and corrupted practice it would be better to develop a technical manual, provide tailor made trainings & assigned skilled staffs on specific goods will create Transparency, fairness and competency in inspection process & decisions.in addition to this customs should work together & set a time over the activities of other government agencies responsible for checking goods standards, phytosanitary and health inspection. This will reduce the delay in customs clearing dwell time, demurrage & storage charges.
- ✚ To improve the Risk management Process Customs should update the system of procedures, regulations, and guidelines on risk management based on the risk nature & data, international practice to meet trade facilitation objectives.
- ✚ To improve Compliance Measurement the system managed centrally based on fixed parameters such as tariff classification, price, country of origin, importers truck record and

other variables. Reducing compliance measurement parameters .customs should have been done post clearance-inspection process.

- ✚ Establish a mechanism for connecting risk management information between custom clearance and post- custom clearance. Develop and implement mechanisms to ensure the quality and effectiveness of physical examinations. Officials should avoid routinely override “green Channel” or “yellow channel” assessments and preferring to conduct one hundred percent verifications.
- ✚ To maximize the benefits from information technology improving the IT infrastructure which to increases network capacity, reduce network downing time & using heavy duty automatic generators to avoid electric power problems, providing tailor made trainings to overcome user’s limitation to fully utilize the features.

5.4. Limitation of the Study

The study had its own limitations. This study is limited to the modjo customs commission branch office and as such the findings will not be generalized to all other customs branches procedures since they have their own specific nature. Other researchers could also take other additional variables which can be determinants of the trade facilitations. In this research customs valuation system, customs risk assessment & information technology have significant effect in influencing the trade facilitation. So that it could be possible for adding another variable in order to reach in a better conclusion.

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Questionnaires for freight forwarders

Addis Ababa University

Faculty of Business and Economics

Department of logistics and supply chain management

Questionnaire to be filled by assessors of Customs Clearing Firms

This project is entitled “**Effects Customs valuation, Customs Risk Assessment & Information Technology on trade facilitation the case of modjo dry port customs branch office**”. The investigator is AbenetAlemu who is currently an MA (logistics and supply chain management) student at Addis Ababa University.

The aim of this project is to assess the customs valuation, risk assessment & information technology systems applied in Ethiopia Customs Commission Modjo branch office and to pinpoint the pitfalls of the system. To supplement the data obtained from in-depth interview with transistors, assessors and operation managers of freight forwarding companies and documentation analysis, the investigator seeks to gather relevant information from a sample of freight forwarding companies owners by interview. Participation in this project is completely voluntary.

The questionnaire results will be recorded anonymously and strict confidentiality will be maintained. Individual responses will not be identified in the investigator’s MA thesis.

For further information, please contact ABENET ALEMU by the following address: Tel.: 0911 202182 E-mail: abenet16alemu@gmail.com

Part one: Background information

1. Your educational qualification

College diploma ¹ BA degree ²
Master's degree and above ³ Others ⁴

Please specify _____

2. Your year of experience in the organization

Less than 2 years ¹ 2 - 4 years ² 5 - 7 years ³
8 - 10 years ⁴ More than 10 years ⁵

3. Form of the organization you work in:

Sole proprietorship ¹ Partnership ² Corporation ³ Others ⁴

Please specify _____

4. For how long has your firm been engaged in customs clearing services?

Less than 2 years ¹ 2 - 4 years ² 5 - 7 years ³
8 - 10 years ⁴ More than 10 years ⁵

5. Who is directly responsible for customs valuation duties in your firm?

Transistors ¹

Customs valuation officers ²

Operation managers ³

Others ⁴

Please specify _____

- Key 1. Strongly disagree
 2. Disagree
 3. Neutral
 4. Agree
 5. Strongly agree

s/n	Description	Rate				
		5	4	3	2	1
I	Customs valuation					
1	Pricing system					
1.1	Base price value is higher than the actual value of imported goods without considering other justifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	data base price valuation method reject the “actual price” of imported goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	The price charged for demurrage and storage is not reasonable by customs or other government agencies such as standards, phytosanitary and health inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Customs valuation CD/data base price is not updated timely and do not consider world markets , comparative advantages of a country in terms of raw material, labor & cost of production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	High price is considered as right price by customs officials without considering the volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	Penalties for minor breaches of customs regulations are high and do not consider truck record of importers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Procedure related					
2.1	There is no automated procedure for electronic payments of fees and duties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Appeal procedure is too long and discouraging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

s/n	Description	Rate				
		5	4	3	2	1
2.3	Effective ruling procedures and applications for valuation are not available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Customs valuation system is not based on objectively stated procedure and criteria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.5	Customs valuation system applied is not create fair play ground among importers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.6	Customs valuation practice is open for the value judgment of the valuator than specific rules and regulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Tariff Imposing System					
3.1	Tariff classification are not update with the international standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Tariff amount imposed on items are not known in advance most of the time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Fees and charges levied on import are unreasonable do not consider multiplier effect.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Inspection related items					
4.1	Complex controlling mechanism takes unreasonable time for the inspection of imported items valuation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Physical inspection is open to the value judgment of inspector and inspectors do not have enough knowledge about the products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Traditional inspection mechanism incurs importers additional expense of storage ,loading un loading &demurrages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Physical inspection system has created bribery and others corrupt practice since there is no cross checking mechanisms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
II	Risk management Process					
1.1	Risk identification is done in relation to where, when, how is the risk likely to be incurred fixed parameters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Analysis of risk is should done in terms of impact, cost or consequences but in practice to find slight quantity, labeling differences.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

s/n	Description	Rate				
		5	4	3	2	1
1.3	Monitoring and reviewing of all the performance, effectiveness and efficiency of the risk management process is done regularly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	There is a risk register which gives the rationale behind selecting the risks, and records the assumptions on which assessments have been made	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Compliance Measurement					
2.1	The compliance measurement system of the authority as well as the branch supports effective implementation of risk management process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	It serves as a diagnostic tool to identifies areas of non-compliance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	It is used to determine the degree to which customers/ agents, imported goods conform to customs rules and procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	It provides important information to enhance the risk assessment methodologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Risk Based Compliance Management					
3.1	The legislative framework provide the necessary basis in law for the achievement of the risk management strategies are not updated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	It is not builds on client service approach, education and awareness raising, consultation and cooperation and formal appeal and etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	It is based on risk management framework and IT that introduces risk based decision making but officials change the automated risk to RED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
III	Information Technology					
1.1	The automation of certain parts of customs control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

s/n	Description	Rate				
		5	4	3	2	1
	procedures save time and resources					
1.2	From a functional point of view, the information system related to controlling the import, export and transit of goods are the most important in fulfilling customs formalities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	power interruption affects the assessors decisions on price, time & quality of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Retrieving of data highly affected by information technology capacity in the customs activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5	Lack of systems affects the overall activities of customs & has an impact on trade facilitation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IV	Identifying Trade Facilitation Needs and Priorities in ETHIOPIA					
1.1	Establishment (or improvement in the effectiveness) of an advance ruling system, which allows the importer, in advance of trade, to obtain binding rules in certain specific areas (e.g., tariff classification, Customs valuation, origin)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Establishment (or improvement in the effectiveness) of an appeal mechanism outside of the authority of Customs or related agencies for traders to dispute Customs and other authorities' decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Beginning and, if possible, completing clearance of goods before they have arrived physically in the Customs territory (based on advance submission of good declaration and other documents)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	Separating release from clearance procedures, i.e., allowing goods to be released before all clearance formalities have been completed (this may be subject to providing a financial guarantee to Customs and/or post-release audit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

s/n	Description	Rate				
		5	4	3	2	1
1.5	Harmonization and standardization of documentation requirements based on international standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6	Computerization and automation of trade procedures, e.g., online submission and approval of Customs declarations, cargo manifests, including electronic payment of fees and Customs duties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7	Improvement in Customs inspection and control procedures, e.g., systematic use of risk analysis to determine which good should be examined, clearer criteria for “green” and “red” channels and special channels for authorized traders and express shipments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8	Implementation of international and regional transit systems based on international standards and practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part two: relevant Issues

1. Can you mention some of the main problems related to customs valuation system in Ethiopia?

2. What are the Customs valuation system impacts in trade facilitation?

2. Do you face any arguments with Custom officers due to valuation (over valuation)? Yes []
No [] If your answer is 'Yes', please explain how it was finalized? & how much time it adds
up on the trade facilitation

4. How do you evaluate the current Risk Management practice applied at Customs in general?
Does it facilitate the trade facilitation? The inspection time & procedure affect trade facilitation
or not?-----

5. how do you evaluate current information technology implementation & capacity in Modjo
Customs branch office and its impacts on trade facilitation ?-----

6. Do you face delay for clearance of goods because of other agencies? Yes [] No [] trade
facilitation process?-----

7.Any additional point you want to mention on trade facilitation process especially with respect to trade facilitation ?-----

Thank you very much

Interview guide line

On effects of Custom Valuation, Risk Management, Information technology on Trade Facilitation

1. What are the common challenges in relation to Custom Valuation System?
2. Customs valuation is efficiently providing fast custom clearance process in time and cost?
3. Can you mention some of the main problems related to customs valuation system in Modjo Custom's branch office?
4. What possible solutions do you recommend to resolve the above mentioned problems?
5. How do evaluate the Risk Management system? Is it applied in all declared documents?
6. What are the major problems in the risk management process to have efficient & effective trade facilitation?
7. How do you see the cooperation between custom & other stakeholder and their impact on trade facilitation? Please explain?
8. does the supporting infrastructures for Customs Valuation and risk management is efficient for trade facilitation? What are the problems?
9. How do evaluate the information technology infrastructure to trade facilitation?
10. 10. Are the Modjo Customs Officials & Officers willing to help & solve any problems arising with custom valuation, customs risk assessment ?
11. If you have any comment, please mention it here.

Thank you very much