

OPEN ACCESS

*CORRESPONDENCE

Aga Tuto Roba

Works Cited

Aga Tuto Roba (2025). Procedure of Customs Import effect on Trade Facilitation in One Stop Border Post (OSBP) Customs Branch in Ethiopia., Journal of Current Research and Studies, 37-47.

*COPYRIGHT

© 2025 Aga Tuto Roba. This is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms

Procedure of Customs Import effect on Trade Facilitation in One Stop Border Post (OSBP) Customs Branch in Ethiopia

Aga Tuto Roba*

*MA, Department of Logistics and Supply Chain Management, College of Business and Economics, Bule Hora University, **Ethiopia**

Abstract

The aim of this study was to examine how import customs procedures impact trade facilitation at the One Stop Border Post (OSBP) Moyale Customs Branch. To address this main objective, the researcher employed both descriptive and explanatory research designs, utilizing a quantitative research approach. The study's population included employees from the Moyale customs branch, importers, and customs clearing agents. For sampling, both probability and non-probability techniques were applied. Simple random sampling was used for the probability technique, while convenience sampling was chosen for the non-probability method. After gathering the necessary data, the analysis was performed using descriptive statistics, specifically mean and standard deviation, as well as inferential statistics, including Pearson correlation coefficient and multiple regression analysis. The regression results indicated that aspects of import customs procedures have a statistically significant impact on trade facilitation at the Moyale customs branch. The R^2 value for the regression model was determined to be 59.60% ($R^2=0.596$). The study concluded that the independent variables positively and significantly influence trade facilitation. Consequently, it recommended improvements in customs automation, risk management, and tariff classification to enhance trade and reduce delays in import customs procedures.

Keywords

Customs Procedure, Customs Risk, Customs Coordination, Tariff Classification and Trade Facilitation

1. Background of the Study

Customs regulations refer to the complete customs system that controls and facilitates the flow of imported and exported commodities, as well as people and items in transit. These operations often involve transit, storage, and clearance for both imports and exports. Modern customs administrations must adapt to developments in international commerce by improving trade facilitation while retaining enough control to generate revenue and protect national security (Desta, 2018). The concept of trade facilitation is gaining significant attention and is central to many initiatives within the customs sector.

The term "trade facilitation" is often used by organizations aiming to improve the regulatory interactions between government entities and traders at national borders. Customs plays a crucial role in trade facilitation globally. When customs control systems are more stringent than facilitation efforts, trade activities can become severely hampered (Grainger, 2019). Effective customs practices can enhance a country's competitiveness, enabling timely international trade with reduced transaction costs (Tamene, 2021).

According to the World Trade Organization (2015), trade facilitation refers to the simplification and organization of export and import procedures, which include the activities and formalities related to the collection, sharing, and management of information necessary for exporting goods to foreign markets. For developing nations, trade facilitation enhances their ability to integrate into global supply chains (van der Marel, 2020). Many African countries, including Ethiopia, face challenges in achieving sustainable economic development. A growing consensus suggests that effective trade management can help address these challenges. Unfortunately, customs delays in Sub-Saharan Africa are among the longest in the world, with an average wait of 12 days, compared to 7 days in Latin America. In Ethiopia, traders often endure customs clearance delays exceeding 30 days on average (Kassahun, 2014), indicating significant issues within the Ethiopian customs process.

The Ethiopian Customs Commission (ECC) is the government body responsible for enforcing customs laws and collecting import and export duties and taxes. It also oversees the application of other regulations related to the importation, transit, and exportation of goods (Kassahun, 2014). The ECC was established to generate government revenue through customs duties and taxes as outlined in Customs Proclamation No. (1160/2019). Previous studies have identified various dimensions of import customs procedures, including human resource development, valuation systems, and automation systems. Following a thorough literature review, this study selected customs automation systems, risk management systems, coordination with other agencies, and tariff classification as key factors to assess. The purpose of this study was to examine how customs import procedures affect trade facilitation at the Moyale Customs Branch, particularly in relation to improving effective clearance processes.

1.2. Statement of the Problem

Various studies have been conducted to address trade facilitation issues both globally and specifically in Ethiopia across different regions. According to Mesfin (2017), trade facilitation and regulatory control present significant challenges in many African countries, leading to delays and increased transaction costs. The implementation of trade facilitation is hindered by numerous challenges originating from customs and other regulatory governmental bodies. Additionally, trade facilitation can yield spillover benefits by reducing hidden trade costs. Simplifying customs procedures—such as providing advance information and streamlining legal processes—can also help mitigate customs evasion (Ticku, 2022).

In landlocked countries like Ethiopia, the movement of goods across borders faces obstacles due to stringent controls on imports and exports, resulting in longer delivery times. Despite the Ethiopian government's efforts to reform and enhance the efficiency of border control agencies, including customs, to meet the demands of rising trade volumes, challenges persist (Bank W., 2023). While trade facilitation aims to reduce red tape, tariff reductions can sometimes provoke protectionist reactions, leading to an increase in bureaucratic barriers (al M. e., 2022). East African nations face difficulties due to a lack of simplified and harmonized customs procedures, ineffective use of information technology, and inadequate risk management (Degefa, 2013).

The significance of trade facilitation on African trade flows cannot be overstated, as many African countries are plagued by ineffective trade facilitation factors, including excessive customs delays, poor administration, excessive documentation requirements, bureaucratic inefficiencies, and corruption (Sakyi et al., 2017).

Recent studies by Desta (2018) and Girma (2016) focused on the practices of import customs procedures and their impact on trade facilitation. Their findings indicated that an inefficient automation system and a lack of skilled human resources are key factors affecting trade facilitation. In the fiscal year 2016 E.C., the Moyale Office of the Ethiopian Customs Commission utilized modern technology to support income and expenditure trade services. The office aimed to meet its revenue targets by making operations more convenient and cost-effective for users. It planned to collect a total of 1,701,729,038.09 birr within five months of the fiscal

year, achieving 622,847,629.05 birr, or 36.60% of its income target. However, this represented a decrease of 647,052,954.95 birr, or 50.95%, compared to the same period in the previous fiscal year. Data from the Moyale Customs branch indicated a significant decline in customs duty tax revenue from international trade over time, attributed to trade facilitation challenges.

Despite the seriousness of these issues, there remains a gap in empirical research regarding the underlying reasons in the Ethiopian context. This study aims to address this knowledge gap and raise awareness about the challenges of trade facilitation related to customs import procedures and their causes at the Moyale Customs Branch. The researcher's daily observations have highlighted these issues, prompting the need for this investigation. The study will examine the effects of customs procedures on trade facilitation, focusing on critical variables such as customs automation systems, risk management systems, coordination with other agencies, and tariff classification at the Moyale Customs Branch.

1.3. Specific Objectives

In line with the main objective, this study aims to address the following specific goals:

- To assess the impact of the customs automation system on trade facilitation at the Moyale One Stop Border Post Customs Branch in Ethiopia.
- To outline the influence of the customs risk management system on trade facilitation at the Moyale One Stop Border Post Customs Branch in Ethiopia.
- To analyze the role of customs coordination with other agencies in enhancing trade facilitation at the Moyale One Stop Border Post Customs Branch in Ethiopia.
- To explore the effect of customs tariff classification on trade facilitation at the Moyale One Stop Border Post Customs Branch in Ethiopia.

1.4. Theoretical Framework

Resource-Based View Theory

Initially proposed by Wernerfelt in 1984 and later expanded by Helfat in 2003, the Resource-Based View (RBV) theory emphasizes the significance of organizational resources as key factors in determining

efficiency. According to this theory, organizations must identify, develop, and utilize their resources sustainably to achieve high productivity. RBV operates under two main assumptions regarding sources of competitive advantage (Barney, 1991). First, it posits that firms within an industry can differ in terms of the resources they possess. Second, this resource heterogeneity is believed to be maintainable over time, as the resources utilized to execute a firm's strategy are not easily transferable between firms. The uniqueness or heterogeneity of resources is viewed as essential for a resource bundle to effectively contribute to competitive advantage (Bridoux, 2004).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was introduced by Fred Davis in 1989 to evaluate how individuals adopt technology (Amin, 2010). Specifically designed to assess user acceptance of information systems or technologies, TAM focuses on two primary beliefs: perceived usefulness (PU) and perceived ease of use (PEOU) (Lai, 2017). Thus, an individual's acceptance of technology is influenced by these two factors—perceived usefulness and perceived ease of use (Amin, 2010). According to Davis (1989), perceived usefulness refers to the subjective likelihood that users will employ the system to enhance their work or life efficiency, while perceived ease of use pertains to the degree to which users anticipate that the new system will require minimal mental effort to operate.

Heckscher-Ohlin Theory

The evolution of trade theory, regarded as the foundational theory of international trade, began in the 17th century with the publication of Adam Smith's *Wealth of Nations*. However, the theories put forth by Smith and Ricardo do not provide guidance on which products would be advantageous for specific countries. In the Heckscher-Ohlin (H-O) model, it is suggested that countries that utilize their abundant resources more intensively are likely to export those goods (Kalu, Nwanosike, & Ogbuabor, 2016). This model assumes that countries and producers leverage free and open markets to determine which products they can manufacture most efficiently. Known as factor proportion theory, it posits that countries produce and export goods for which they have an abundance of resources or factors, resulting in lower production costs (Leamer, 1995).

2. Empirical Literature Review

2.1 Customs Procedure and Trade Facilitation

Today, customs administrations are focusing on trade facilitation to meet the needs of the trading community while also ensuring adequate regulatory control in line with government requirements. To achieve this, many customs departments have sought to simplify and harmonize their systems and procedures for the efficient and swift clearance of consignments, adhering to international standards, guidelines, and recommendations. The World Customs Organization (WCO) International Convention on the Simplification and Harmonization of Customs Procedures, commonly referred to as the revised Kyoto Convention, serves as the global framework for modern, efficient, and effective customs processes. When properly implemented, these standards and conventions can establish a foundation for efficient and effective customs procedures that support both trade facilitation and regulatory control (Gnangnon, 2017).

2.2 Customs Automation System and trade facilitation

Automated systems within customs are crucial tools for facilitating trade procedures. Customs automation enhances transparency in duty and tax assessments, significantly reduces customs clearance times, and improves predictability, resulting in both direct and indirect savings for governments and traders. A higher level of automation in customs procedures increases the likelihood of thorough inspections, fraud detection, and decisive actions, including legal prosecution (WCO, 2015). Automation, which involves the use of information and communication technology, is a key component of modern customs administration. It supports the entire customs clearance process, encompassing the lodging, acceptance, and processing of cargo and goods declarations for import, export, and transit, as well as the payment of duties and taxes and the release of goods from customs control. The most commonly used ICT system in many countries is the electronic customs management system, which categorizes imports based on their risk levels into Green, Yellow, Blue, and Red classifications (ERCA, 2017).

2.3 Customs Risk Management and Trade facilitation

Risk management in customs refers to a systematic approach for identifying and implementing necessary measures to reduce the likelihood of risks (USAID, 2012). By gathering data and information, analyzing and assessing risks, recommending actions, and monitoring results, both international and national strategies can be effectively executed. To minimize risks, customs can utilize risk management to prioritize tasks and allocate resources more efficiently. When applied correctly, risk management techniques can yield advantages such as improved allocation of human resources after implementing risk-based customs clearance and enhanced compliance with laws and regulations. This is largely due to the fact that increased efficiency in customs, coupled with traders' motivation to achieve quicker releases through the green channel, leads to better outcomes (Tamene, 2021).

2.4 Customs coordination and agencies on trade facilitation

International trade encompasses various stakeholders, including manufacturers, suppliers, customers, exporters, importers, freight forwarders, carriers, banks, insurance companies, transport operators, customs, health authorities, port authorities, licensing authorities, and inspection agencies. These stakeholders can be categorized into three main groups: government agencies, service providers, and traders (USAID, 2012). For instance, to obtain customs clearance, goods may require permits from other regulatory bodies, such as those governing standards, health, agriculture, and telecommunications. According to research by Temisan (2015), effective border management by various control agencies is essential for fostering better coordination among these agencies at borders, thus enhancing security. Successful joint patrols have historically relied on collaboration and coordination among control and security agencies within partner states (Chan, 2018). There is a critical need for coordinated efforts among border control agencies. Joint patrols between enforcement and surveillance units should collaborate to strengthen border security. Such joint controls facilitate resource sharing, such as aircraft and One-Stop Border Posts (OSBPs), among the agencies involved in trade, ensuring comprehensive protection within the partner state.

2.5 Conceptual Framework

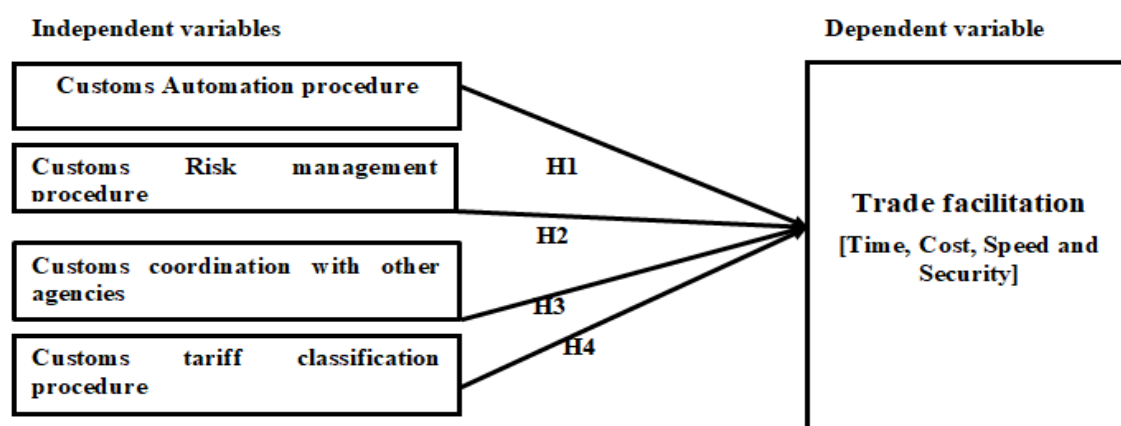


Figure 2.1 Conceptual framework of the study

3. Research Design

The most effective way to classify research design is by the research objectives, which can be explanatory, exploratory, or descriptive (Creswell, 2014; Kothari, 2004). Descriptive research focuses on providing a narrative account of a study, while exploratory research is aimed at uncovering reasons and exploring new ideas. In contrast, explanatory research is designed to assess the cause-and-effect relationships among constructs (Kunc et al., 2016). This study employed both descriptive and explanatory survey research designs to gather data addressing the formulated research questions. These designs were chosen because the study aimed to evaluate respondents' opinions on import customs procedures and their impact on trade facilitation. Additionally, the study aimed to elucidate the causal relationship between import customs procedures and trade facilitation at the Moyale One Stop Border Post customs branch office.

3.1 Research Approach

The research study employed a quantitative method, focusing on numerical data for analysis, which is especially useful for managing large datasets (Snyder, 2019). This approach was selected because the research problem required measuring variables associated with import customs procedures and assessing their effects on trade facilitation. According to Dane (2000:88), quantitative methods entail a thorough review of existing literature to help shape the research questions. The collected quantitative data will be analyzed using descriptive statistics and inferential analysis with the Statistical Package for Social Sciences (SPSS) version 25.

3.2 Sample Size

Cooper and Schindler (2014) suggest that a sample size consists of a group of respondents selected from the target population to accurately represent that population. To determine the sample size, the researcher utilized simple random sampling to select 130 individuals from a total target population of 193 employees, along with 16 frequent importers and 10 permanent customs clearing agents working at the Moyale customs branch. To calculate the sample size, the researcher applied Taro Yamane's (1967) simplified formula for sample size determination, assuming a 95% confidence level and a margin of error of 5%. This approach resulted in a sample size of 130, as detailed below:

$$n = \frac{N}{1 + N(e^2)}$$

Where: n = sample size; N = population size; and e = precision level/sampling of error. Note: with a precision level (sampling error) of e = 5%, it yield (95%) confidence interval and N= 193 employees. Therefore, the sample size (n) of Moyale customs branch employees were 130 sample respondents were selected. For importers and customs clearing agents, it is difficult to imagine the number of regular importers and clearing agents in the branch because they are free to declare at any customs branch of the Ethiopian Customs Commission. Therefore, the researcher selected 16 most frequent importers and 10 Permanent customs clearing agents who are working there and get a legal gate pass into the OSBP to render service to respond the questionnaires. Therefore the sample size for this study is 156.

The summary of target population and Sample size shown below in table 3.1;

Table 3.1: The corresponding samples size of the respondents

No	Research participants	Target Population	Sample Size
1	Employees of Moyale customs branch	193	130
2	Most frequent Importers	16	16
3	Permanent Clearing agents	10	10
	Total	219	156

Source: June, 2024 Monthly Report of Moyale customs branch Human Resource Team and Customers service business process department.

3.3 Reliability

Table 3.2 Reliability coefficients of Variables

No.	Variables	No. of Items	Cronbach's Alpha coefficient
1	Automation of customs procedure	5	0.907
2	Customs Risk management procedure	5	0.810
3	Customs Coordination with other agencies	5	0.864
4	Customs Tariff classification	3	0.746
5	Trade Facilitation	3	0.870

Source: Source: Own Survey and IBM SPSS Output, 2024

A reliable instrument consistently yields the same results when used repeatedly to collected data from the same sample drawn from a population (Kothari, 2004). Reliability is therefore the degree to which research instruments yields consistent results when administered a number of times. An instrument is reliable when it measures a variable accurately and consistently used repeatedly under similar conditions. Reliability of a questionnaire is concerned with the consistency of responses to the researcher's questions. The most popular method of testing for internal consistency in is Cronbach's coefficient alpha. Cronbach's Alpha (α) is the most common measure of

scale reliability. Cronbach's alpha was developed by Cronbach (1951) to provide a measure of the internal consistency of a test or scale, it is expressed as a number between zero and one, the acceptable values of alpha, is greater than or equals to 0.70. As shown in table 3.2 for all variables were more significant than 0.7, which means acceptable with the internal consistency and reliability. Hence, there was no item from each variable need to be deleted, and it can proceed to the primary respondents' distribution for this research. As a result, 21 statements remained in the final questionnaire.

Correlation Analysis

Table 4.13 Correlation coefficient

		Customs Automation System	Customs Risk Management System	Customs Coordination with Stakeholders	Tariff classification	Trade Facilitation
Customs Automation System	Pearson Correlation	1	.249**	.401**	.385**	.708**
	Sig. (2-tailed)		.002	.000	.000	.000
	N	150	150	150	150	150
Customs Risk Management System	Pearson Correlation	.249**	1	.316**	.369**	.389**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	150	150	150	150	150
Customs Coordination	Pearson Correlation	.401**	.316**	1	.547**	.489**
	Sig. (2-tailed)	.000	.000		.000	.000

with Stakeholders.	N	150	150	150	150	150
Tariff classification	Pearson	.385**	.369**	.547**	1	.496**
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		.000
Trade Facilitation	Pearson	.708**	.389**	.489**	.496**	1
	Correlation					
	Sig. (2-tailed)	.000	.000	.000	.000	

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

Source: Field survey data 2024 and IBM SPSS output

The Pearson Product-Moment Correlation Coefficient is a statistic that indicates the degree to which two variables are related to one another. The sign of a correlation coefficient (+ or -) indicates the direction of the relationship between -1.00 and +1.00. Variables may be positively or negatively correlated. A positive correlation indicates a direct positive relationship between two variables. A negative correlation, on the other hand, indicates an inverse, negative relationship between two variables (Ruud et. al. 2012). As described by Andy (2006), the correlation is a commonly used measure of the size of an effect: values of ± 0.1 represent a small effect, ± 0.3 is a medium effect and ± 0.5 is a large effect. In this section, a Pearson product-moment correlation analysis was used to investigate the relationship between customs import procedure and trade facilitation variables in the case of Moyale One Stop Border Post Office. The variables were customs automation system, customs risk management system, customs coordination with other stakeholders and customs tariff classification and trade facilitation. The following table 4.13 had shown the bivariate correlation of customs import procedure variables and trade facilitation variable.

From the above table 4.13 the bivariate Pearson product-moment correlation coefficient value of customs automation system has a significant effect relationship with trade facilitation ($r=0.708$, $p < 0.01$), customs risk management system has a relationship with trade facilitation ($r=0.389$, $p < 0.01$), customs

coordination with stakeholders has also correlate with trade facilitation ($r=0.489$, $p < 0.01$) and customs tariff classification has a significant relationship with trade ($r=0.496$, $p < 0.01$). The correlation coefficient value among the import customs procedures variable indicated that customs automation system has been the highest correlation with trade facilitation ($r=0.708$, $p < 0.01$) whereas the lowest correlation with trade facilitation was customs risk management system ($r=0.389$, $p < 0.01$).

3.4 Regression Analysis

The study involved to determine the effect of customs import procedure Dimensions and Trade facilitation on the basis of customs automation system, customs risk management system, customs coordination with other stakeholders, customs tariff classification and trade facilitation. The study used correlation analysis to measure the direction and strength of the relationship between independent variables and dependent variable. The multiple regression analysis established the relative significance of each of the variables on trade facilitation. The equation of multiple regressions on this study is made on around two sets of variables, namely dependent variables and independent variables. The basic objective of using regression equation on this study is to make the researcher more effective at describing, understanding, predicting, and controlling the stated variable (Faizal and palil, 2015).

Model Summary

Table 4.17 Model summary and Coefficient of determination results

Model Summary ^b					
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Durbin-Watson
1	.772 ^a	.596	.584	.429	1.881
a. Predictors: (Constant), Customs Automation system, Customs Risk Management system, Customs coordination with other stakeholders, Customs tariff classification					
b. Dependent Variable: Trade Facilitation					

Source: Field survey data 2024

Multiple R is the correlation between the observed and predicted values of outcome by the multiple regression models. The large values of the multiple R represent a large correlation between the predicted and observed values of the outcome. A multiple R of 1 represents a situation in which the model perfectly predicts the observed data. R square (R^2) is the coefficient of determination that indicates the proportion of variance in one variable explained by a second variable. And the adjusted R^2 tells us how much variance in the outcome would be accounted for if the model had been derived from the population from which the sample was taken (Field, 2009).

The coefficient of determination $R^2=0.596$ means that customs import procedure variables explain 59.6% of the variability of trade facilitation. And 40.4% (100%-59.6%) of the variation is caused by factors other than the predictors included in this model. Adjusted R Square (adj. R^2) =0.584 indicates true 59.6% of variation explained only by the of customs import

procedures that actually affect the trade facilitation. Therefore a one unit of change in customs imports procedure 59.6% increases in trade facilitation. In order to see the effect of customs import procedure on trade facilitation at Moyale One Stop Border Post Office, multiple linear regression analysis was employed. The regression model presents how much of the variance in trade facilitation is explained by customs import procedure of the Moyale One Stop Border Post Office. Linear regression was calculated to predict trade facilitation. The above table 4.9 shows that the multiple correlation coefficient $R=0.772$ measure of the quality of the prediction of trade facilitation. It shows a strong positive relationship between dimensions of customs import procedure and trade facilitation. Therefore the four independent variables of customs import procedure (customs automation system, customs risk management system, customs coordination with other stakeholders and customs tariff classification) in aggregate are significant predictor of trade facilitation.

Analysis of variance (ANOVA)

Table 4.18 ANOVA for Regression analysis

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.296	4	9.824	53.371	.000 ^b
	Residual	26.690	145	.184		
	Total	65.986	149			

a. Dependent Variable: Trade Facilitation

b. Predictors: (Constant), Tariff classification, Customs Risk Management System, Customs Automation System, Customs Coordination with Stakeholders

Source: Field survey data 2024

The Analysis of Variance table examines our model's ability to explain any variation in the dependent variable without directly addressing the strength of the relationship. It is a method where results of an experiment are tested for significance of import customs procedure. The value of F test explains the overall significance of a model. It explains the significance of the relationship between dependent variables and all the other independent variables (Anderson et al. 2007). The F-ratio in the ANOVA (Table 4.17) tests whether the overall regression model is a good fit for the data. The table shows that the customs

import procedure variables statistically significantly predict the trade facilitation, $F(4, 145) = 53.371$, $p(.001)$ less than the level of significance of 0.05 with 95% confidence interval. (i.e., the regression model is a good fit of the data). The calculated F value (the F statistic) was found to be ($F = 53.371$) at (4,145) degrees of freedom, an indication of statistical significance of the model. These results imply that independent variables were statistically significant in explaining Trade Facilitation at Moyale Customs Branch.

Regression Coefficients

Table 4.19 The Coefficients of the regression analysis

Coefficients ^a								
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1 (Constant)	.763	.229		3.330	.001			
Customs Automation System	.446	.047	.558	9.414	.000	.793	1.261	
Customs Risk Management System	.148	.056	.152	2.632	.009	.838	1.193	
Customs Coordination with Stakeholders	.109	.053	.135	2.066	.041	.649	1.542	
Tariff classification	.141	.062	.150	2.269	.025	.634	1.577	

a. Dependent Variable: Trade Facilitation

Source: Field survey data 2024

Table 4.18 revealed that Statistical significance of each of customs import procedure variables tests whether the un-standardized (or standardized) coefficients are equal to 0 (zero) in the population (i.e. for each of the coefficients. The B coefficient of the independent variable is the slope. It represents the amount of change in the dependent variable for a one-unit change in the independent variable. Looking at the B coefficient in the table, it is positive for all independent variable indicating that as customs import procedure (customs automation system, customs risk management system, customs coordination with other stakeholders and customs tariff classification) increases trade facilitation also increases. From the multiple regression coefficients tables 4.18 the independent variables (customs automation, risk management systems, customs coordination with other agencies and customs valuation) were significantly affect and predicted for Trade Facilitation, since their p-value is less than the level of significance 0.05. However independent variables (import customs procedure and tariff classification) were not much significantly affect for dependent variable (Trade facilitation) in this study at Moyale customs branch office because of their p-value was greater than the level of significance 0.05. As of the table 4.18 indicated that the t-value and corresponding p-value are in the "t" and "Sig." columns respectively showed that customs automation system $p(.000) < 0.05$, customs risk management system $p(.009) < 0.05$, customs coordination with other stakeholders $p(.041) < 0.05$ and customs tariff classification $p(.025) < 0.05$ were significant. In other

words customs automation system, customs risk management system, customs coordination with other stakeholders and customs tariff classification adds a substantial contribution to explaining trade facilitation.

4. Conclusion

A total of 156 employees of Moyale customs office, customs clearing agents and importers with different sex, experience, job position and from different department were surveyed. In this study four variables (customs automation system, customs risk management system, customs coordination with other stakeholders and customs tariff classification) that affect customs import procedure were used and their effect on trade facilitation analyzed. To analyze the data by descriptive statistics like frequencies, percentages, tables and inferential analysis correlation and regression analysis were used. Overall in this study, customs import procedure of Moyale Customs One Stop Border Post Office in terms of customs automation system, customs risk management system, customs coordination with other stakeholders and customs tariff classification are high and most of the respondents agreed that there is good customs import procedure on average.

Recommendations

In the absence of adequate automation system in customs transit procedure, customs clearance

procedure and in customs warehousing procedures unable to deliver expected service. To overcome the problems of ineffective use of customs automation system Customs Commission should be able effectively use the system by improving its capacity to process without frequent interruption with collaborating other related agencies like Ethio Telecom and to significantly implement automation system that supports the three customs procedure. To overcome the problems of improper implementation of risk management techniques, Customs should design a modern technology to ensure effective information flow for risk profiling and often updated the risk profile database. Should explore the technology field of Artificial Intelligence. Then the system would be provide a better service which facilitate trade facilitation and risk assessment would be also fairly implement without involvement of officers personal judgment.

References

- 1) Alam, P. (2018). The challenges of import clearance procedure on trade facilitation: the case of jigjiga branch customs office. *International journal of trade and global business perspectives*, 7(04), 4065-4074.
- 2) Ayuma, (2018). Customs mandate are revenue collection, border protection, collection of international trade statistics and trade facilitation (Ayuma, 2018). Revenue collection has been used as the apex yardstick for measuring the performance of Kenya's customs and border control department. In the year 2016/2017 and 2017/2018, K.
- 3) Alsharari, N. M. (2022). Risk management practices and trade facilitation as influenced by public sector reforms: institutional isomorphism. *Journal of Accounting & Organizational Change*, 18(2), 192-216.
- 4) Bank, W. (2020). *Economy profile Ethiopia, Doing business 2020*, Washington, DC. The World Bank, pp. 45-46.
- 5) Bekele Shiberu (PhD) and Biruk Tamene (MBA). (2021). Effects of import customs procedure on trade facilitation.
- 6) Clark, R. J., & Bernard, D. (2022). Customs in a World of Enhanced Trade Facilitation. *Customs Matters: Strengthening Customs Administration in a Changing World*, 1, 95.
- 7) Chinnapareddy. (2019). Assessment of the challenges of customs import clearance procedures at Addis Ababa Air Port Customs branch office.
- 8) Cooper, D., & Schindler, P. (2014). *Business research methods*, New York, NY: McGraw-Hill Education.
- 9) Creswell, W. (2017). *Research Design: qualitative, quantitative, and mixed methods approaches*, 3rd ed., Thousand Oaks, Calif.: Sage Publication.
- 10) Desta, L. (2016), challenges of customs procedure in relation to trade facilitation in ERCA (unpublished).
- 11) ECA (2013). *Building Trade Capacities for Africa's Transformation: A critical review of Aid for Trade*. UNECA; Addis Ababa. capacities-africas transformation.
- 12) Erca Manual, (2017) revised customs guide manual. March, 2017.
- 13) Federal Democratic Republic Ethiopian: Customs Proclamation; 1160/2011: Addis Ababa: 26 November 2023.
- 14) Gnanngnon, S. K. (2017). Impact of trade facilitation reforms on tax revenue. *Journal of Economic Studies*, 44(5), 765-780.
- 15) Girma, E. (2019) the effects of customs clearing process on the performance of customs clearing agent in Addis Ababa (unpublished).
- 16) Grainger, A. (2014). The WTO trade facilitation agreement: Consulting the private sector. *Journal of World Trade*, 48(6).
- 17) Grainger, A. (2021). *Cross-Border Logistics Operations: Effective Trade Facilitation and Border Management*. Kogan Page Publishers.
- 18) Hannington, M. A. (2022). Effects of Automation of Customs Systems on Revenue Performance in Kenya (Doctoral dissertation, KESRA/JKUAT-Unpublished research project).
- 19) Jeker, R. (2008) *Trade Facilitation and Public - private Partnership in Africa*. Africa Emerging Markets Forum 2008.
- 20) Kasila, C. N, & Mumia Benn, M. I. N. C. U. (2019). Effect of Customs procedures on trade facilitation at the port of Mombasa in Kenya.
- 21) Karingi, S., et. (2016). "Streamlining Trade through One Stop Border Post: A case study of Moyale"
- 22) Kenya, „Investment Programmed for the Economic Recovery Strategy for Wealth and Employment Creation 2003-2007“ (Poverty Reduction Papers IMF Country Report No. 05/11, 2005)

- 23) Kubie, K. (2010) Efficiency of Electronic Service Delivery ASYCUDA++ (unpublished)
- 24) Legesse, G. (2011). Assessment on Customs Risk Management of ERCA (unpublished). Muluadam, A. (2015). Introduction to SPSS for windows, Version 20. Training Manual (PPT). Public Policy & Management FBE, AAU, Ethiopia.
- 25) Milner, C. (2013). The trade and welfare effects of a Regional Economic Partnership and Agreement.
- 26) Negus, E., & Teklu, T. (2011). The Impact of Border Clearance Procedures on the Cost of Doing Business in Ethiopia. Chamber of Commerce and Sectoral Association.
- 27) Omosa, A. M. (2022). Effect of systems automation on customs revenue performance in Kenya. *African Tax and Customs Review*, 5(1), p38-p60. Procedures Kenya Revenue Authority. (2017). Customs and border control department. 04, department%20brochure%20v3.pdf
- 28) Peterson, J. (2017). An overview of customs reforms to facilitate trade. *Journal of International Commerce and Economics*, 1-30.
- 29) Sakyi, D., Villaverde, J., Maza, A., Bonuedi, I., 2017. The effects of trade and trade facilitation on economic growth in Africa. *Afr. Dev. Rev.* 29 (2), 350–361. <https://doi.org/10.1111/1467-8268.12261>
- 30) Sakyi, Daniel, and Sylvanus Kwaku Afesorgbor. 2019. "The Effects of Trade Facilitation on Trade Performance in Africa." *Journal of African Trade* 1–15.
- 31) Shiberu, B., & Tamene, B. (2021). Effect of Import Customs Procedure on Trade Facilitation the Case of Adama City. *Information Technology in Industry*, 9(3), 01-16.
- 32) Sudi, J., & MINCU, M. B. (2018). Effects of One Stop Border Post on trade facilitation at the LungaLunga Border Post.
- 33) Tavengerwei, R. (2018). Using trade facilitation to assist MSMEs in E-commerce in developing countries. *Journal of International Economic Law*, 21(2), 349-378.
- 34) Uzzaman, M.A., & Yosuf, M.A. (2015). The Role of Customs and Other Agencies in Trade Facilitation in Bangladesh: Hinderances and ways forward. *World Customs Journal*, 5(1), 29–42.
- 35) WorldBank. (2016). Trading: across Borders. Retrieved January 27, 2017 from: <http://www.doingbusiness.org/data/explore-topics/trading-across-borders>.
- 36) WCO, (2005). Framework of Standards to Secure and Facilitate Global Trade. Retrieved from: omd.org/ie/en/Press/.pdf.
- 37) WCO, (2012). WCO Information Sheets on Key Trade Facilitation Measures. Available at: omd.org/pfwcoinfosheets.htm/ [Accessed 16 October 2023]
- 38) WCO, (1999). International Convention on the Harmonization and Simplification Customs Procedures Revised Kyoto Convention, WCO, and Brussels. Available at: <http://www.wcoomd.org/i.e./En/TopicsNews/sues/FacilitationCustomsProcedures/KyotoNwecon tent.html>
- 39) Weldegebriel, T. (2011) Challenges of Customs on Trade Facilitation in Ethiopia: The case of Customs clearance in ERCA, (Unpublished).
- 40) Wondwossen, D. (2013). Assessment of the challenges of Customs Import Clearance Procedure on Trade Facilitation: the Case of Addis Ababa Airport Custom Branch Office
- 41) Wunwimon, P. (2010). Trade Facilitation and Customs Regulatory Control: A Study of Express Consignment Operation in Thailand.: [http://www.camberr.edu.au/research repository/file/](http://www.camberr.edu.au/research/repository/file/) (Accessed 16 October 2023).