EdinBurg Peer Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 4||Issue 6||pp 53-64||October||2024
Email: info@edinburgjournals.org||ISSN: 2789-0201

Effect of Integrated Customs Management Systems (ICMS) on Customs Duty Performance in Nairobi County, Kenya

Francis Apelli Mwosero[1], Prof Ronald Bonuke[2] & Dr. Bruce Ogaga PhD [3]
[1,3]Tax Administration, Kenya School of Revenue Administration
[2] School of Business and Economics, Moi University
Corresponding email: francis.mwosero@gmail.com

How to Cite: Mwosero, F. A., Bonuke, R., & Ogaga, B. (2024). Effect of Integrated Customs Management Systems (ICMS) on Customs Duty Performance in Nairobi County, Kenya**.** *Journal of Finance and Accounting, 4*(6), 53-64.

Abstract

Purpose: Tax is an important stream of revenue for government's development projects and therefore all efforts must be made by governments to ensure that it is accurately and efficiently collected to facilitate the government's operations. This study sought to determine the of integrated customs management system on factors affecting customs duty performance Nairobi County, Kenya. The theories supporting the study is comparative theory of international trade.

Methodology: The study employed explanatory research design. The target population of this study was 438 respondents comprising customs heads of departments, customs officers and customs agents at Embakasi Inland Depot, Nairobi**.** with a sample size of 209, out of which 173 respondents correctly filled the questionnaires and submitted them accordingly. The data collected was analyzed through descriptive and inferential statistics. A linear regression model was used.

Results: The coefficient study showed that a unit change in ICMS increases customs duty performance significantly $\beta = 0.205$ p-value $= 0.000 < 0.05$.

Conclusion: The study recommends that the KRA and the government of Kenya prioritize the continuous improvement of the Integrated Customs Management System (ICMS). Customs management should ensure full utilization of the ICMS by training customs officials and stakeholders, given its positive impact on duty performance. Future research may be carried out on the effects of tax incentives on Customs duty performance

Keywords*: Integrated Customs Management Systems, Customs Duty Performance*

Received: 17th September 2024	*Revised: 8th October 2024*	*Published: 25th October 2024*

1.0 Introduction

Available data according to OECD (2020) shows that taxation patterns around the world today exhibit large cross-country differences, especially between developed and developing countries. Developed countries collect a larger proportion of their national output in taxes than compared to developing nations, and they tend to rely more on income taxation. On the other hand, developing countries tend to rely more heavily on trade taxes as well as on consumption taxes such as value-added tax (VAT) and excise duty.

The operating environment for customs in the 21st Century has evolved and this has necessitated the adaptation of modern operations and mindset. This is to serve the expectations

of the international trading community working environment that envisages the most affordable, less complex, time-saving and most efficient way of doing trade in business. Traders are looking for time saving, simplicity, and speed (World Trade Organization, 2015). The performance of customs patrol has an integral role of managing the trade activities along the border points. Customs patrol is one of the large departments in terms of manpower and mandated to revenue collection and facilitation of trade and commerce (KRA, 2017).

Customs Performance and World Economic Forum report (2016) indicated those developing countries, by contrast, have pursued broad-based customs reform efforts that, in some cases, include both infrastructure and institutional (soft infrastructure) reform. In South Sahara Africa (SSA), for example, customs reform is often associated with so-called "hard infrastructure reform," including the building or improvement of roads, railways, airports, and seaports, Information and Communications Technology (ICT) systems, and reliable sources of power. "Soft infrastructure reform" encompasses the streamlining and harmonization of customs and border procedures, the incorporation of ICT-enabled processes, and the elimination of corruption at border checkpoints.

Customs performance in Kenya has been under review form the past decade. Tariff code rationalization, reduction of the average tariffs and reduction of the number of tariff bands have formed customs duty reforms in the past. Since the 1990s, reforms have been driven partly by conditions for development aid, preferential trade arrangements and efforts to comply with the World Trade Organization (WTO) regulations. Thereafter, there has been a gradual reduction in both the tariff rates; especially on imported intermediate inputs; and tariff bands. Customs reforms were implemented alongside trade liberalization whose main objective was to enhance trade openness by moving away from the restrictive import substitution strategy towards export-oriented industrialization (Kamau, 2014).

Integrated Customs Management System (ICMS) is a comprehensive digital platform designed to streamline and automate the various processes involved in customs administration. It integrates multiple functions of customs operations, such as the collection of customs duties, processing of imports and exports, enforcement of trade regulations, and facilitating legitimate trade, into a single unified system, KRA, (2022).

1.1 Problem Statement

Customs mandates are revenue collection, border protection, collection of international trade statistics, and trade facilitation (Ayuma, 2018). Collection of revenues has been used as the apex yardstick for measuring the performance of Kenya's customs and border control department (Morini, De'Sa Porto, & Inaciao, 2017). Customs and Border Control Department in Kenya has not been performing to the expectations of the treasury. The issue is that the customs department has on several occasions missed its collection targets.

For instance, in the year 2016/2017, the department collected 443.5 billion out of the targeted 462 billion. The following financial year 2017/2018, the department missed the target collecting 469.97 billion out of the targeted 484.97 billion (KRA, 2019). Kenya's share in merchandise trade remains very low at 2.7% in 2021, Kenya's share in world exports declined from 3.5% in 2018 to 2.5% in 2022, the lowest regional share. In 2022, 79% of people who imported goods experienced delays in facilitation. Between October 2019 and August 2021, the number of containers that had overstayed at Inland Container Depot Nairobi was 4923 (KPA, 2022).

From the existing empirical studies by previous researchers such as Duval, Utoktham, and Kravchenko (2018) who conducted a study on the effect of implementation of digital trade

facilitation on trade costs in Asia. Hence conceptual gap and contextual gap Sameti and Rafie (2020) analyzed the effects of customs duty tax and economic growth in South Africa. They used panel data regression thus conceptual and methodological gaps. Gacanja (2021) explored the relationship between tax awareness and economic growth in Kenya for the period 2015-2020, hence conceptual gap. This study therefore sought to fill in the gaps by focusing on effect of an integrated customs management system on factors affecting customs duty performance in Nairobi County, Kenya.

2.0 Literature Review

2.1 Theoretical Review

The theory also known as the Ricardian theory rides on autarky of prices. Countries have different relative labor productivities (Ruffin, 2002). When countries do not trade at all with one another in what they refer to as autarky, the relative price of one good expressed in terms of the other good differs between the countries. Hypothetically, this difference in relative prices opens up opportunities for welfare-enhancing international trade at a world price lying between the two autarky prices. Autarky prices are determined by countries' consumption preferences and their relative sizes (Markusen, 1995). A country will prefer to specialize completely in the production of goods in which it has a comparative advantage as explained by Heckscher-Ohlin (Keuschnigg, 1999). Inefficient trade procedures result in high customs costs which create a wedge between the relative prices faced by the two countries (Samuelson, 1954). Hence the imbalance of product prices in developed and developing countries.

Furthermore, this wedge in the relative prices faced by the two countries also means a divergence in factor prices. There develops a trickledown effect on the final consumer who pays a higher than would have been expected price for the final product as explained by the "Iceberg partial equilibrium" theory (Irarrazaba, Moxnesz, & Opromolla, 2010). Hence trade facilitation will improve terms of trade for both the importing country and the exporting country. The comparative theory applies by simultaneously reducing the price paid by domestic consumers for imports and increasing the price received by foreign importers. If trade costs become high enough, the international price faced by one country can become less favorable than its autarky price and trade ceases altogether, returning both countries to their autarky equilibria.

For both the importing and exporting countries, the comparative theory applies by simultaneously reducing the price paid by domestic consumers for imports and increasing the price received by foreign importers. Therefore, this theory provided a guide into investigating the effect of transaction costs on performance of customs and border control departments with emphasis on revenue collection and trade facilitation. The study of transaction costs were guided by the comparative theory.

2.2 Empirical Review

2.2.1 Customs Duty Performance

Customs Duty Performance is the effectiveness and efficiency of a country's customs authority in collecting duties and taxes on goods imported and exported across its borders. It is a measure of how well customs agencies perform their duties in terms of revenue collection, enforcement of trade regulations, and facilitation of legitimate trade. The Kenya custom Wanyama, 2017, points out that the lack of smooth flow of documentation process and operational inefficiencies were also found to be contributing factors to the delay in the clearance of goods with corruption as a major course (Wanyama, 2017). The number of officers deployed at the verification section

would not match the demand of the work as the volume of goods had increased and therefore, the laid down number of containers that every officer is supposed to verify, cannot reduce congestion at the port. The bureaucratic system existing in long rooms means the documents have to pass through many stages that are not value-adding in any way. For goods to be released, they have to be verified by other government bodies such as public health, Kenya bureau of standards, Kenya police and other interested government organs. These processes prolong the procedures at the expense of the importers.

2.2.2 Integrated customs management system

Ward and Dietmar (2020) automation bring about benefits such as faster release of cargo passing through customs clearance; simpler procedures and documents, based on international standards; reduced physical examination of goods; separation of payment of duties and taxes from physical clearance of goods and faster electronic lodgement of customs declarations, using Direct Trader Input or other on-line connections. Holniker (2005) highlighted other advantages as reduced customs auditing of documents.

Swindley (2007) adds payment and accounting, to register and account for payments by importers and exporters; and risk management, to select those consignments bearing higher risks, concealing duty and tax noncompliance, illegal importation of drugs or materials aimed 34 for terrorist activities; statistics and reporting, to extract data for dissemination of foreign trade statistics and to generate management reports for customs for efficient communication between customs, traders, and other government agencies. The overarching benefit is the direct and indirect reduction in administration cost and increased effectiveness in collection of customs revenue, since customs administration leads to increased collection of duties and taxes due to the uniform application of laws and regulations through the automated calculation of tax due; and built-in security.

Mwonge, (2011) conducted a study that sought to find out the influence of electronic tax filing on customs tax collection in Uganda. The study found out that with the commencement of an e-filing system (e-Tax) in June 2009, at least UShs 7 trillion worth of revenue resulting from 1.4 million payments has been receipted through electronic tax payments. This revenue is a result of over 360,000 tax returns that have been received online. The study made the recommendations that the tax authority should upgrade the e-tax servers, incorporate user friendly features to improve tax payer's interest in the use of the system and embark on a country wide sensitization programe to enhance the adoption of the system.

2.3 Conceptual Framework

A conceptual framework is an interconnected set of ideas or theories about how a particular phenomenon functions or is related to its parts (Svinicki, 2010). The study focused on dependent variable customs duty performance which was measured by Revenue collected and Trade Facilitation. Independent variable ICMS which was measured by Declaration of Goods Verification. Figure 1 describes the relationship between the variables of study accordingly.

EdinBurg Peer Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 4||Issue 6||pp 53-64||October||2024
Email: info@edinburgjournals.org||ISSN: 2789-0201

Figure 1: Conceptual Framework

3.0 Methodology

This study adopted explanatory research design, which was used to establish the cause and effect in the relationship between the variables. Explanatory research aims to explain why things happen and anticipate what will happen in the future. Hypotheses that determine the type and direction of the link between or among the variables evaluated characterize explanatory investigations. The target population for this study was 438 respondents composed of customs heads of departments, customs officers and clearance agents in Nairobi, County.

The reliability results indicates that for the various items Cronbach's alpha values are 0.991, for respondents to integrated Customs Management System. For customs duty performance the alpha value is 0.983, the results indicate Nunnally (1978) argued that a Cronbach's alpha value of 0.7 and above proves that the research instrument used is reliable. The responses from the survey had alpha values >0.7 reliability.

Table 1: Test of Reliability of Questionnaire

Factor	Number of Items	Cronbach Alpha score	Conclusion
Integrated customs management systems	5	0.991	Acceptable
Customs duty performance	5	0.983	Acceptable

4.0 Results and Discussion

4.1 Descriptive Statistics

4.1.1 Integrated Customs Management System Descriptive

Table 2 illustrates that the transmission of declarations electronically to customs services is fast with a mean score of 3.94, SD 1.024. Electronic lodging of entries against the manifest registered electronically had a mean score of 4.19, SD 0.942. ICMS is critical in streamlining customs procedures had a mean score of 3.98 SD 1.037. ICMS Training is available to all stakeholders had a mean score of 4.18, SD 0.849. Lastly, Using ICMS decentralizes customs operations affecting time costs had a mean score of 4.16 SD 0.969.

EdinBurg Peer Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 4||Issue 6||pp 53-64||October||2024
Email: info@edinburgjournals.org||ISSN: 2789-0201

Table 2: ICMS Descriptive Summary

Items	N	Mean,	Std. Deviation	Skewness	Kurtosis
The transmission of declarations electronically to customs services is fast	173	3.94	1.024	-.595	-.790
The electronic lodging of entries against the manifest registered electronically is efficient.		4.19	.942	-1.024	.128
ICMS is critical in streamlining customs procedures.		3.98	1.037	-.661	-.762
ICMS Training is available to all stakeholders.		4.18	.849	-.998	.571
Using ICMS decentralizes customs operations affecting time costs.		4.16	.969	-.990	-.022
Aggregate Mean		4.09			

4.1.2 Customs Duty Performance Descriptive

Table 3 illustrates that I always make correct customs duty declarations and had a mean score of 3.95, SD 1.056. I always file return on time and as required by law had a mean score of 4.01, SD 1.113. I file customs duty returns voluntarily because it's an obligation with a mean score of 3.98, SD 1.078. I pay the tax liability that arises from my customs duty obligation without failure had a mean score of 4.06 SD 1.038. Lastly, I pay tax by the due date had a mean score of 4.04 SD 1.069.

Table 3: Customs Duty Performance Descriptive Summary

Items	N	Mean	Std. Deviation	Skewness	Kurtosis
I always make correct customs duty declaration	173	3.95	1.056	-.657	-.447
I always file returns on time and as required by law.		4.01	1.113	-.754	-.646
I file customs duty returns voluntarily because it's an obligation.		3.98	1.078	-.742	-.411
I pay the tax liability that arises from my customs duty obligation without failure.		4.06	1.038	-.873	-.045
I pay tax by the due date.		4.04	1.069	-.918	.030
Aggregate Mean		4.01			

EdinBurg Peer Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 4||Issue 6||pp 53-64||October||2024
Email: info@edinburgjournals.org||ISSN: 2789-0201

4.2 Correlation Analysis

A correlation coefficient enables the researcher to quantify the strength of the linear relationship between two ranked or numerical variables. Pearson correlation analysis was done to determine the relationship between study variables. There is a strong positive correlation between the Integrated Customs Management System and Custom Duty Performance, at 64.1% This correlation is statistically significant at the 0.05 level.

Table 4: Correlations Statistics of Independent and Dependent Variable

	Custom Duty Performance	Integrated Customs Management System
Custom Duty Performance	1	0.641**
Integrated Customs Management System	0.641**	1

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

4.3 Regression Analysis

The results in Table 5 shows that there is a positive and significant correlation between Integrated Customs Management System and customs duty performance at 64.1%. The Coefficient of determination shows that an Integrated Customs Management System causes a 41% variation in customs duty performance. 59% of the remaining variation is caused by factors not captured in the model.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.641.	0.410	0.403	0.57264

a. Predictors: (Constant), Integrated Customs Management Systems

The ANOVA was used to analyze the significance of the variation caused by integrated customs management system on customs duty performance. Table 6 indicates that there is an F statistic of 127.946 and a P-value of 0.000<0.05 indicating that there is a significant variation caused by integrated customs management system on customs duty performance. The implication is that independent variable (integrated customs management system) contributes significantly to changes in the dependent variable (customs duty performance). This shows that the model works and thus accounts for significantly more variance in the dependent variable than would be expected by chance.

EdinBurg Peer Reviewed Journals and Books Publishers
Journal of Finance and Accounting
Vol. 4||Issue 6||pp 53-64||October||2024
Email: info@edinburgjournals.org||ISSN: 2789-0201

Table 6: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	85.980	1	85.980	127.946	.000[b]
	Residual	115.021	171	0.672		
	Total	201.001	172			

a. Dependent Variable: Customs duty performance

b. Predictors: (Constant), Integrated customs management system

H_{01} stated that Integrated customs management system has no significant effect on customs duty performance in Nairobi County, Kenya. Integrated customs management system has a positive relationship effect on the customs duty performance in Nairobi County, Kenya. The results in Table 8 revealed that p value was less than 0.05, ρ=0.000 which implies that relationship was statistically significant, and therefore hypothesis was rejected.

Table 7: Regression Coefficients

Model		Standardized Coefficients		Unstandardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.417	0.226		15.119	.000
	Integrated customs management system	.205	.052	.216	3.942	.000

a. Dependent Variable: Customs duty performance

4.4 Discussion of the Findings

The study was to establish the effect of Integrated Customs Management System (ICMS) on customs duty performance in Nairobi County, Kenya. The study found a positive and significant correlation between the Integrated Customs Management System (ICMS) and customs duty performance in Nairobi County, Kenya. Improvements in ICMS significantly enhance customs duty performance, indicating that advancements in ICMS can lead to better outcomes in customs duty administration.

5.0 Conclusion

The study established that the Integrated Customs Management System (ICMS) plays a crucial role in enhancing customs duty performance in Nairobi County, Kenya. The significant positive correlation indicates that improvements in ICMS directly contribute to better customs duty outcomes. This relationship underscores the importance of continuous advancements in technology and system integration to streamline customs processes, reduce manual errors, and enhance the efficiency and accuracy of customs operations. The findings suggest that policymakers and customs authorities should prioritize investments in ICMS to foster a more efficient and effective customs environment, ultimately benefiting the broader economic framework.

6.0 Recommendations

Based on the findings the study recommends that the KRA and the government of Kenya prioritize the continuous improvement of the Integrated Customs Management System (ICMS). Customs management should ensure full utilization of the ICMS by training customs officials and stakeholders, given its positive impact on duty performance. Future research may be carried out on the effects of tax incentives on Customs duty performance.

References

Adams, C. (2001) For Good and Evil the Impact of Taxes on the Course of Civilization. Hacienda Publishing, Madison

Anderson, J. (1979). A Theoretical Foundation for the Gravity Equation. *America Economic Review*, 106-116.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.

Bittker, O. and Rahdert, K. (2011). The effectiveness of Internal Control System in achieving value for money in School facilities grant; a case of Kamuli District Local Government. MakerereUniversity

Brink, HIL. 1996. Fundamentals of research methodology for health care professionals. Kenwyn: Juta.

Burns, N. and Grove, S. (2001). *The practice of nursing research: conduct, critique, and utilization* (4th edition). W.B. Saunders: Philadelphia, Pennsylvania, USA.

Chang, M. K. (1998). Predicting unethical behavior: A comparison of the theory of reasoned action and the theory of planned behavior. *Journal of Business Ethics*, 17(16), 1825-1834.

Chau, K. K. G., & Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1(2), 034-040

Chipeta. C. (1998). Tax Reform and Tax yield in Malawi, AERC Research Paper No. 81. Nairobi.

Chow, C. Y. (2004). Gearing up for the self-assessment tax regime for individuals. *Tax Nasional*, 2(1), 20-23.

Cooper D. R & Schindler P. S. (2011) *Business research methods*, 11th ed.NY: McGraw-Hill.

Cooper, D. R., & Schindler, P. S. (2006). *Business Research Methods.* Irwin/McGraw-Hill.

Cooper, L. and Schindler, J. (1998). Taxpayer attitudes study: Final report. *Public opinion survey prepared for the Internal Revenue Service.* Washington, DC: Internal Revenue Service, U.S. Department of the Treasury.

Creswell, J. W. (2013). *Research Design_ Qualitative, Quantitative, and Mixed Methods Approaches.* Califonia: SAGE Publications, Inc.

Creswell, J. W. (2013). *Research Design_ Qualitative, Quantitative, and Mixed Methods Approaches.* Califonia: SAGE Publications, Inc.

Cyan, M.R., Koumpias, A.M. & Martinez-Vazquez, J. (2017). The effects of mass media campaigns towards tax compliance; quasi-experimental evidence from survey data in Pakistan. *Journal of Behavioral and Experimental Economics*, 70,10-22.

Cytonn Investments (2019). *Current real estate trends in Kenya & how they affect investors*. Cytonn Investments.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.

DeLone, WH & McLean, ER (1992), 'Information systems success: the quest for the dependent variable', Information Systems Research, vol. 3, no. 1, pp. 60-90.

Eriksen, K., & Fallan, L. (1996). Tax knowledge and attitudes towards taxation: A report on a quasi-experiment. *Journal of Economic Psychology*, 17,387-402.

Feld, P. and Frey, H. (2012). Determinants of income tax evasion: Role of tax rates, shape of tax schedules and other factors. *In:* Gandhi, V. P. (ed.). International Monetary Fund.

Fjeldstad, O. H., & Semboja, J. (2001). Why people pay taxes: The case of the development levy in Tanzania. *World Development*, 29(12), 2059-2074.

Fjeldstad, O. (2012). Fighting Fiscal Corruption: Lessons from Tanzania Revenue Authority", Public Administrative and Development, Volume 23, 165-175.

Fu, J.R., Cheng. K.F. and Wen, P.C. 2006. Acceptance of electronic tax filing: A study of taxpayer intentions. *Information & Management*, 43, 109-126

Gitau, M.(2012). *Internal Control: The Case of Nyayo Bus Corporation.* Unpublished MBA Project Report, School of Business, University of Nairobi.

K.RA Website (2011). Home Page, www.revenue.go.ke.

Karingi, S. N. & Wanjala, B. (2005). The tax reform experience of Kenya (No. 2005/67). WIDER Research Paper

Kenya Revenue Authority (2010). Revenue administrative in Kenya: experience and lessons.KRA Nairobi.

Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, 29(2), 210-225.

Kombo, D. K., & Tromp, D. L. (2006). *Proposal and Thesis Writing.* Nairobi: Paulines Publications Africa.

Kothari, C. R. (2004). *Research Methodology; Methods and Techniques.* New Delhi: New Age International Publishers.

KRA (2012) *Taxation of Rental Income in Kenya.* Retrieval from www.kra.go.ke website.

KRA. (2018). *Kenya Revenue Authority Seventh Corporate Plan.* Nairobi: KRA.

Krichler E. (2007). *The economy psychology of tax behavior*, Cambridge.

Lekasi. G.T. (2010). Strategic management processes at Kenya Revenue Authority(K.RA). Unpublished MBA Project. University of Nairobi.

Lewis, A. (2002). *The Psychology of Taxation. Oxford*: Martin Robertson.

Moyi and Ronge. (2006), Taxation and Tax Modernization in Kenya: A Diagnosis of Performance and Options for Further Reform.

Mugenda A. & Mugenda, O. (2003). *Research methods; quantitative and qualitative approaches*. Nairobi; African centre for technology studies.

Mugenda A. & Mugenda, O. (2003). *Research methods; quantitative and qualitative approaches*. Nairobi; African centre for technology studies.

Mukabi, D. N. (2014). Factors influencing turnover tax compliance in the Kenya Revenue Authority domestic taxes department in Nairobi County. *Unpublished MA Project*. University of Nairobi, Kenya

Muriithi, M.and Moyi D (2003).Tax Reforms and Revenue Mobilization in Kenya Research Paper No 131, African Economic Research Consortium (AERC), Nairobi,Kenya.

Mwangi, P. N. (2014). Factors influencing tax compliance among small and medium enterprises in Nairobi's Industrial Area, Kenya. *Unpublished MA Project*. University of Nairobi, Kenya

Ngechu M (2004): Understanding the Research Process and Methods: An Introductionto Research Methods Nairobi, Acts Press.

Ogbonna, K and Ebimobowei, T. (2012) " Taxes on general consumption as a percentage of total taxation," in *Consumption Tax Trends: VAT/GST and Excise Rates, Trends and AdministrativeIssues, 2006 Edition.* Paris, France: OECD Publishing. 55

Onyiego, A.(2016) A Thesis on Factors influencing Tax Compliance cost on value added tax compliance among the construction firms in Kisumu County, Kenya.

Osborne, J. W., Christensen, W. R., & Gunter, J. (2001). Educational psychology from a statistician's perspective: A review of the power and goodness of educational psychology research. Paper presented at The National Meeting of the American Education Research Association (AERA), Seattle: WA.

Osoro, N.E, (1993), Revenue Productivity: Implications of Tax Reforms in Tanzania, Research paper number No. 20, Africa Economic Research Consortium (AERC). Nairobi, Kenya.Philadelphia: JB Lippincott.

Owino.(2014) A Thesis on "Tax knowledge and tax compliance determinants in a self-assessment system in Malaysia". Oxford University.

Polit, DF & Hungler, BP 1999: Nursing research: Principles and methods; 6th edition.

Razali, N.M. & Wah, Y.B. (2011). Power comparisons of Shapiro-wilk, Kolmogorov-Smirnov, Lillierfors, and Anderson-darling tests. *Journal of Statistical Modeling and Analytics*, *2*(1), 21-33.

Sekaran, U. (2012). Research Methods for Business. New York: J. Wiley & Sons, Inc.

Smith, B. (2018). "Customs Tax Compliance and Administrative Reforms: A Case Study of Busia Border Control." International Journal of Trade and Finance, 15(2), 87-105. value for money in School facilities grant; a case of Kamuli District Local

Thananga, A. G., Wanyoike, D. M., & Wagoki, A. J. (2013). Factors affecting compliance on rental income tax policy by landlords in Nakuru Municipality. *Journal of Agriculture and Environmental Sciences*, 2(1), 26-38.

Walsh, K. (2012). Understanding taxpayer behaviour–new opportunities for tax administration. *The Economic and Social Review*, 43(3), 451–475.

Waris A, M Kohenen, J Ranguma & Mosioma A (2009): Taxation & state building in Kenya; enhancing revenue capacity

Wasao, D. (2014). The effect of online tax system on tax compliance among small taxpayers in east of Nairobi Tax District. *Unpublished Masters of Science project*, University of Nairobi, Kenya.

Wawire. N.H.W. (2011). Determinants of value added tax revenue in Kenya. The CSAE Conference Paper. March, St Catherine's College.

Webley, P. (2004). Tax compliance by businesses. *New Perspectives on Economic Crime*, 95-126.

Yamane, T. (1973). *Statistics: An introductory analysis*. New York: Harper and Row.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business research methods, 8th Edition.* South-Western, Cengage Learning