

Effect of Excisable Goods Verification on Excise Duty Compliance Among Water Firms in Nairobi, Kenya

Dennis Ogada^{1*}, Dr. Robert Odunga², Dr. Sheila Arusei³

¹Tax Administration, Kenya School of Revenue Administration (KESRA)

^{2,3}School of Business and Economics, Moi University

Corresponding Author Email: dennis.ogada@yahoo.com

Accepted: 16 July 2025 || Published: 26 August 2025

Abstract

Despite the integral role that excise duty plays in the government's fiscal space, excise duty compliance has remained relatively low. This is in spite of several excise duty administration reforms implemented over time. The key aim of the study was to investigate the effect of excisable goods verification on excise duty compliance among water firms in Nairobi, Kenya. The study was guided by the following theories: Ability to pay theory and Unified Theory of Acceptance and Use of Technology (UTAUT). The study adopted an explanatory research design. The target population was 187 water firms in Nairobi, Kenya. There was an 87.2% response rate with 163 out of 187 invited respondents correctly filling the questionnaires and submitted. A non-response rate of 12.8% (24 individuals) was observed. The study used primary data, collected through questionnaires administered through a drop and pick later method. The data collected was analyzed using both descriptive and inferential statistics. The study analysis found that excisable goods verification had a positive and significant effect on excise duty compliance. $\beta = 0.242$, $p = 0.000$. The findings of this study provide policy recommendations for the government to enhance excise duty compliance. The government should prioritize the implementation of robust excisable goods verification systems. Further research could explore the effects of tax morale on excise duty compliance.

Keywords: *Water Firms, Excisable Goods Verification, Excise Duty Compliance*

How to Cite: Ogada, D., Odunga, R., & Arusei, S. (2025). Effect of Excisable Goods Verification on Excise Duty Compliance Among Water Firms in Nairobi, Kenya. *Journal of Finance and Accounting*, 5(4), 43-54.

1. Introduction

Taxation is the major source of government revenue in developed and developing economies. It also gives a significant avenue for the monetary objective of nations from peripheral assistance (OECD, 2009). According to Pope and Abdul-Jabbar (2008), states that are unable to develop the encouraging factors for their taxpayers to completely comply with the tax desires and ensure they pay their taxes excellently. If this dilemma could be fixed, then many states that are struggling financially would gain their financial independence. This will ultimately lead to an efficient way of raising the country's revenue point, which in turn raises the financial aptitude of the country in financing the countrywide development.

Excise taxes are a type of indirect taxation that is used in most countries with the aim of influencing a certain industry towards a desired strategic trajectory. According to Vito and Howell (2017), the most notable shortcoming of the excise systems found in many developing

countries is their inappropriately broad coverage of products, often for revenue reasons but sometimes for reasons difficult to discern, as the magical revenue raised from some excised goods (which shouldn't be excisable) could well be significant. All the same, a good tax system is invariably characterized by its ability to generate revenue (as a by-product) from a narrow base and with relatively low administrative costs.

In Kenya, Excise duty is a complex tax to administer, with changes in excisable goods and services occurring annually in the Finance Act (Kimani et al., 2020). Although excise tax collections in Kenya have improved each year, they have not met the expected levels, and the Kenya Revenue Authority (KRA) has not achieved its excise duty collection targets since 2016 (Owino et al., 2021). Excise taxes as a percentage of GDP in Kenya have fluctuated over the years, with an average of 3.1 percent but demonstrated wide variations. Between 2000 and 2010, the average percentage of GDP contributed by excise taxes rose from 1.8 percent to 4 percent before leveling to 3.3 percent between 2011 and 2018. Kenya's excise tax revenue has been falling for a few years due to several aspects, including falling sales of excisable products like kerosene and diesel and pricing wars among mobile telecom operators (Kimani et al., 2020).

In Kenya, water firms gained popularity in the late 1990s (Members Directory, 2008). These companies were established to meet evolving customer demands for service delivery, distribution, and globalization (Kilasi, 2020). Their functions include mixing drinking ingredients and filling cans and bottles with water (Juma and Mathooko, 2022). The types of water firms available in Kenya include carbonated, flavored, functional, and still bottled water. Bottled water has become the third most popular commercial beverage in Kenya, following alcoholic and soft drinks.

1.1 Problem Statement

Excise duty compliance continues to be low in numerous economies worldwide, with revenue authorities often missing their annual targets (Finlay, 2022). Therefore, educating taxpayers about their excise duty responsibilities is crucial for a well-functioning tax system (Fauvelle-Aymar, 2020). Globally, countries are encountering a shared challenge from increasingly complex and innovative financial crimes and tax evasion (OECD 2022). This results in fewer resources for infrastructure and services such as education and health, ultimately lowering living standards in both developed and developing nations.

Despite the integral role that excise duty plays in the government's fiscal space, excise duty compliance has remained relatively low. This is in spite of several excise duty administration reforms implemented over time. Tax compliance in Kenya is estimated at 65% being the weighted average of registration, 60% of the citizens filing, 55.5% of the taxpayers registered, and payment rates at 79.9% of the taxpayers who are filing returns, respectively (KRA, 2023). The overriding objective of excise duty in Kenya is to raise tax revenues, but the performance has been weak.

For instance, in the year ended June 2023, the Kenya Revenue Authority (KRA) collected KES 264.5 billion on account of excise duty against a target of KES 294 billion, representing a revenue gap (KRA, 2023). This study will seek to investigate the effect of excisable goods verification on excise duty among water firms in Nairobi, Kenya.

2. Literature Review

2.1 Theoretical Review

2.1.1 Ability to pay theory

Adam Smith in *The Wealth of Nations* (1776) stated that such things as defending the country and maintaining the institutions of good government are of general benefit to the public. Thus, it is reasonable that the population as a whole should contribute to the tax costs. It is also reasonable to demand certain other things of a tax system, for instance, that the amounts of tax individuals pay should bear some relationship to their abilities to pay.

The ability to pay theory indicates that every person should pay taxes to the government depending on his or her ability to pay Zolt & Bird, 2003; Rai, 2004; Chodorow, 2008; Batt, 2012). The insinuation in this theory is that the wealthy class people should pay higher taxes to the government, because without the protection of the government authorities, they could not have enjoyed the income that they earn. Adam Smith argued that taxes should be proportional to income Zolt & Bird, 2003; Rai, 2004; Chodorow, 2008; Batt, 2012). It can therefore be argued that this is one of the critical principles of tax because it advocates for tax to provide equity in its application, wherein those who have the financial resources should make the payment.

This theory propagates that people should be asked to pay taxes according to their ability to pay, and assessment of their taxable capacity should be made based on the basis of income and property. The most popular and accepted principle of equity or justice in taxation is that citizens of a country should pay taxes to the government in accordance with their ability to pay (Limerick, 2013). It can therefore be argued and appears reasonable and just that taxes should be taxed based on the taxable capacity of a person and in using this principle it can be stated that if the taxable capacity of one individual is greater than that of the other person, that a person who earns more should be asked and expected to pay more taxes in comparison with the one who earn less.

2.1.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT theory was developed through the seminal work of Venkatesh et al. (2003). It is a unified model developed from eight acceptance technology models. The rapid development of technology led to the development of the new model (Venkatesh & Davies, 2000). The UTAUT model sought to showcase technological acceptance and utilization as observed in some contexts, like in consumer technologies. Later, UTAUT 2 was developed as an improvement of UTAUT. UTAUT 2 has seven factors that influence behavior, use, and intention, including performance expectancy, facilitating condition, habit, price value, hedonic motivation, social influence, and effort expectancy (Liebenberg, Benadé & Ellis, 2018). The UTAUT 2 was used in this study because it is the most recent and it has been developed out of the improvement of UTAUT.

Behavioral intention is a person's intention to act in a certain way, which can be used to predict other behaviors, especially when the person's actions are voluntary. Additionally, behavioral intention is the probability of performing an act and also the cause of a given usage behavior (Reis, Coutinho & Lencastre, 2017). It is therefore true to say intentions are the motivational influencers of behavior, and they also show the effort individuals are willing to put in to act in a given behavior. Further behavioral intention was found to be the key factor that affected the

use of mobile services by the individual. Usage intentions were found to be the best indicators of future usage of the services (Venkatesh, Thong & Xu, 2012).

UTAUT theory was used in this study to explain the effect of excise stamp features, stamps' application procedure, system installation requirements, and verification of stamps on excise duty performance. In regard to Performance Expectancy, technology improves efficiency in compliance with taxation. Regarding effort expectancy, excisable goods production companies manufacturing beer, bottling water, tobacco, and spirits have to install systems compatible with EGMS. This is despite the technological capability in an institution. In relation to Social Influence, every other excisable goods production company has adopted information technology as required by the law.

2.2 Empirical Review

2.2.1 Excisable Goods Verification and Excise Duty Compliance

Consumers can verify, and the authorities may be able to identify authentic products in the supply chain, with the use of stamps integrated with electronic communication capabilities. On the other hand, the business believes that tax stamps are simple to forge. Furthermore, the industry agrees with claims from journalists indicating that real stamps can be obtained on the black market by smugglers and counterfeiters, and that genuine original bottles with genuine stamps have been discovered to have been refilled. Therefore, even if customers can visit a website to verify the integrity of stamps, this does not ensure that a product is legitimate (Godden & Allen, 2019).

Ogundajo and Onakoya (2021) established the effect of excisable goods verification on the tax compliance of manufacturing firms quoted on the Nigerian Stock Exchange using annual reports and accounts of 10 selected firms out of 28 firms listed under the consumer goods sector. They established that aggressive excisable goods verification, such as thin capitalization and tax law incentives, have not been fully utilized by the Nigerian firms. They further recommended that manufacturing firms in Nigeria should make excisable goods verification as part of the firm's strategic planning and to effectively utilize all-inclusive tax planning strategies available in order to further influence tax compliance positively.

The effectiveness of product marking on excisable goods will depend on both the wider anti-illicit strategy and the scheme detail. Product marking on excisable goods can only be effective as a means of curbing illicit consumption and protecting tax revenues if effective monitoring, control, and enforcement measures are also put in place, and if tax rates and business costs are not so high as to incentivize illicit consumption at the expense of the legitimate industry. It is possible for product marking on excisable goods to help contain illicit trade in alcohol and associated tax losses. This is far from guaranteed without considering a multitude of other factors, including careful design, implementation, and consideration of the specifics of a market and its influences (Euromonitor International, 2021).

2.2.2 Excise duty compliance

Excise duty is a type of tax imposed by a government on the manufacture, sale, or consumption of specific goods within a country. Unlike customs duties, which are levied on goods imported into a country, excise duties are applied to goods produced domestically. The primary objectives of excise duties are to generate revenue for the government and to regulate the

production and consumption of certain goods, often for public health or environmental reasons (Kleven et al., 2019).

Excise taxation constitutes an important part of fiscal policy, which can be engaged effectively by different countries' government and developing economies. According to Mashiri and Sebele-Mpofu (2019) most of the developing countries rely on excise taxes for their economic growth and generating wealth. In Kenya excise taxes have continued to play an important role in raising additional government revenue. Excise taxes have always been useful whenever the government wants to raise additional revenue to contain the level of its budget deficit. Furthermore, most of the recent upward adjustments to tax rates outside the usual annual government budget have been on excisable products.

Muriithi and Moyi (2022) indicate that excise taxes in Kenya are imposed under the Customs and Excise Act (Chapter 472). The administration of excise taxes, therefore, is the responsibility of the Customs and Excise Department of the Kenya Revenue Authority. Kenya's main excisable commodities include soft drinks, alcoholic beverages, tobacco, fuel, and motor vehicles. Other excisable commodities are plastic bags and the importation of second-hand computers. Excisable services mainly include mobile telephone services and gambling. Other than on motor vehicles, excise taxes on beer, cigarettes, and petroleum are currently charged on a specific basis, per volume or quantity. Characteristic of these commodities is that they have a low own-price elasticity of demand, implying that their responsiveness to price change is low and hence minimum shifting of consumer purchases. It is these characteristics that make high excise tax rates applicable.

2.3 Conceptual Framework

Miles and Huberman (1994) defined a conceptual framework as a visual or written product, one that explains either graphically or in a narrative form the main aspects to be studied, the key factors, concepts, or variables, and the presumed relationship among them. The conceptual framework is created to demonstrate relationships between independent variables, excisable goods verification, and dependent variable excise duty compliance. As shown in Figure 1.

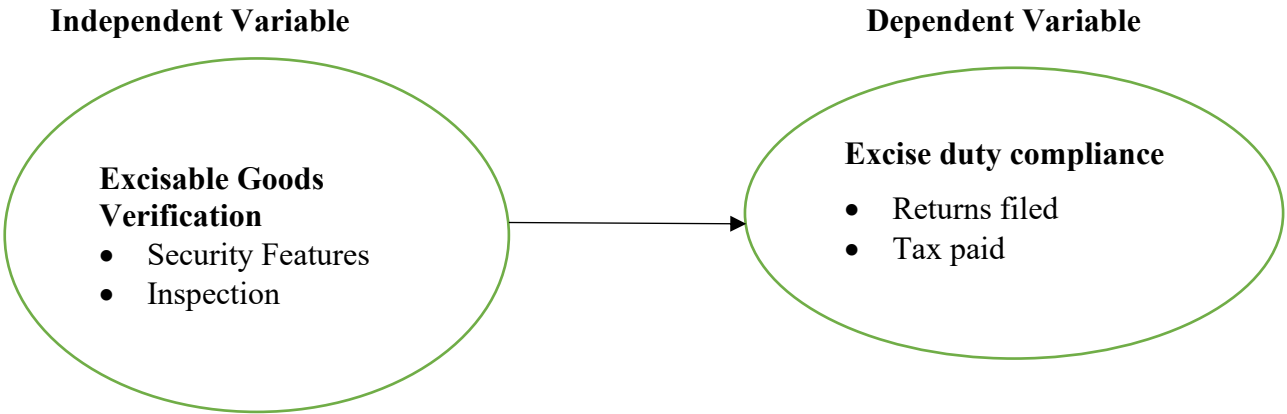


Figure 1: Conceptual Framework

3. Methodology

Research design can be defined as the outline, scheme, or plan to answer the research questions or the arrangements of conditions for research data collection and analysis of collected data to

achieve the study objective (Kothari, 2014). This study employed an explanatory research design. Explanatory research is a methodological approach aimed at exploring research questions that have not been thoroughly examined before. The target population is a set of items, elements, people, services, groups of things, events, or households that are being investigated. This definition ensures that the population of interest is homogeneous (Mugenda & Mugenda, 2013). The target population was respondents from all 187 water firms in Nairobi, Kenya, KRA (2024). The study used a census survey, therefore there was no need for sampling. The response rate for the survey, as shown in Table 1, was 87.2%, with 163 out of 187 invited responded correctly filling the questionnaires and submitted. A non-response rate of 12.8% (24 individuals) was observed.

Table 1: Response Rate

		(%)
Response	163	87.2%
Non-Response	24	12.8%
Total	187	

Reliability Analysis

Sekaran (2003) stated that the reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the “goodness” of a measure. The reliability analysis was done using Cronbach’s Alpha, which is usually interpreted as the mean of all possible split-half coefficients. The Cronbach’s alpha coefficient of 0.7 was used as the threshold for this study. Cronbach's alpha (α) values were used to determine the internal consistency of each construct. Table 2 showed that in assessing the reliability of the questionnaire items for measuring latent constructs, for excise duty compliance, the Cronbach’s alpha was 0.899, indicating excellent reliability. This high value suggested that the four statements associated with this construct were highly consistent in measuring excise duty compliance. The construct excisable goods verification yielded an alpha of 0.875 across five items, placing it in the "good" range and indicating that the items reliably measured the concept of excisable goods verification.

Table 2: Test of Reliability of Questionnaire

Factor	Number of Items	Cronbach Alpha score	Conclusion
Excise duty compliance	4	0.899	Reliable
Excisable goods verification	5	0.875	Reliable

4. Results and Discussion

4.1 Descriptive statistics

4.1.1 Descriptive statistics: Excisable goods verification

The descriptive summary for excisable goods verification was summarized in Table 3. For the statement, technology enforces rigorous verification; the risk of smuggling excisable commodities has decreased. The mean response was 4.07, with a standard deviation of 1.114. The statement, the excisable goods verification procedure at KRA has been optimized using technology, received a mean response of 4.00, and the standard deviation of 1.054. For the item, the organization's execution time for the validation and verification of excisable items has improved, thanks to technology; the mean score was 3.93. Respondents' agreement on the statement, Information can be stored and retained by the system for use in the verification and validation of excisable products at a later time, is reflected in the mean response of 4.01, with a standard deviation of 1.094. Lastly, for the data that was entered into the system for verification is trustworthy and pertinent to the process of making decisions, the mean response of 4.02 shows agreement among respondents, and a standard deviation of 1.045.

Table 3: Excisable Goods Verification

	Mean	Standard Deviation
Technology enforces rigorous verification; the risk of smuggling excisable commodities has decreased.	4.07	1.114
The excisable goods verification procedure at KRA has been optimized using technology.	4.00	1.054
The organization's execution time for the validation and verification of excisable items has improved thanks to technology.	3.93	1.177
Information can be stored and retained by the system for use in the verification and validation of excisable products at a later time.	4.01	1.094
The data that was entered into the system for verification is trustworthy and pertinent to the process of making decisions.	4.02	1.045
Mean	4.01	
N=163		

4.1.2 Descriptive statistics for Excise Duty Compliance

The descriptive summary for excise duty compliance was summarized on Table 4. The item the business is registered for excise duty had a mean response of 4.00 (SD = 1.139). For the statement, the payment and filing process is easy and simple to make, the mean was 4.02 (SD

= 1.060). The statement that the business files its excise duty returns on time received a mean score of 3.98 (SD = 1.132). For the statement, the business makes the correct amount of excise payment on time, the mean response was 4.06 (SD = 1.071).

Table 4: Excise Duty Compliance

	Mean	Standard Deviation
The business is registered for excise duty.	4.00	1.139
The payment and filing process is easy and simple to make.	4.02	1.060
The business files its excise duty returns on time.	3.98	1.132
The business makes the correct amount of excise payment on time.	4.06	1.071
Mean	4.02	
N=163		

4.2 Correlation Analysis

Table 5 presents the correlation analysis between excise duty compliance and each predictor variable. The analysis revealed a positive and significant correlation between excise duty compliance and excisable goods verifications at 55.8%. This suggested that higher levels of excisable goods verification were associated with increased compliance with excise duty obligations.

Table 5: Correlation Statistics

	Excise duty compliance	Excisable goods verifications
Excise duty compliance	1	0.558**
Excisable goods verifications	0.558**	1

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

4.3 Regression Analysis

R-squared Table 6 showed that excisable goods verification was responsible for 31.1% variance in excise duty compliance. The remaining 68.9% variation was caused by factors not included in the model.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558 ^a	.0311	.306	.39013

a. Predictors: (Constant), Excisable goods verification _mean

The ANOVA results presented in Table 7 indicate that the F statistic of 254 and the p-value of $0.000 < 0.05$, which indicates that the model was significant in explaining the variance caused by Excise duty compliance.

Table 7: ANOVA

Model		Sum Squares	of df	Mean Square	F	Sig.
	Regression	25.211	1	25.211	254.656	0.000
1	Residual	16.089	161	0.099		
	Total	41.3	162			

a. Dependent Variable: Excise duty compliance

b. Predictors: (Constant) Excisable goods verification

Table 8 Standardized coefficients showed that excisable goods verification has a significant positive effect on excise duty compliance, with a standardized beta coefficient of ($\beta = 0.242$, $p = 0.000$). This indicates excisable goods verification caused a 0.242 increase in excise duty compliance. The study found that excisable goods verification had a positive and significant effect on excise duty compliance, $\beta = 0.242$, $p\text{-value} = 0.000 < 0.05$. Consequently, the null hypothesis was rejected.

Table 8: Regression Coefficient analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	0.345	0.135		2.556	0.014
1	Excisable goods verification	0.242	0.063	0.246	3.905	0.000

a. Dependent Variable: Excise duty compliance

4.4 Discussion of the Findings

The study was to establish the effect of excisable goods verification on excise duty compliance among water firms in Nairobi, Kenya. The correlation matrix revealed a positive and significant correlation between excise duty compliance and excisable goods verifications at 55.8%. The regression analysis showed that excisable goods verification had a positive and significant effect on excise duty compliance. $\beta = 0.242$, $p = 0.000$. This finding implied that more thorough verification of goods enhanced excise duty compliance. Godden & Allen (2019) and Ogundajo and Onakoya (2021) supported the role of excisable goods verification in enhancing compliance. Godden & Allen (2019) argued that tax stamps could help consumers verify product authenticity, despite industry concerns over counterfeiting risks.

5. Conclusion

The study first sought to determine the effect of excisable goods verification on excise duty compliance among water firms in Nairobi, Kenya. Based on the findings, the study concluded that excisable goods verification had a significant positive effect on excise duty compliance in these firms. Enhanced verification practices were found to increase excise duty compliance levels, indicating that thorough monitoring of excisable goods supports adherence to tax regulations. This finding suggested that verification processes strengthen regulatory oversight and help mitigate risks of tax evasion in the water sector, reinforcing the importance of implementing rigorous verification measures

6. Recommendations

The findings of this study provide policy recommendations for the government to enhance excise duty compliance. The government should prioritize the implementation of robust excisable goods verification systems. Further research could explore the effects of tax morale on excise duty compliance.

References

- Adam Smith. (1776). *An inquiry into the nature and causes of the wealth of nations*. W. Strahan and T. Cadell.
- Batt, R. (2012). The globalization of service work: Comparative institutional perspectives on call centers. *International Journal of Comparative Sociology*, 53(3), 1–23.
- Chodorow, N. (2008). *The reproduction of mothering: Psychoanalysis and the sociology of gender* (2nd ed.). University of California Press.
- Euromonitor International. (2021). Soft drinks in Kenya. <https://www.euromonitor.com/>
- Fauvelle-Aymar, C. (2020). Taxation and democracy in Africa. *Revue d'économie du développement*, 28(4), 99–130. <https://doi.org/10.3917/edd.344.0099>
- Finlay, L. (2022). *Reflecting on reflective practice*. Routledge.
- Godden, W., & Allen, J. (2019). *Quantitative and qualitative research methods*. Open University Press.
- Juma, D., & Mathooko, P. M. (2022). Strategic responses to competitive environment by public universities in Kenya. *International Journal of Strategic Management*, 7(1), 45–59.

- Kenya Revenue Authority (KRA). (2023). 7th Corporate Plan 2021/22–2023/24. <https://www.kra.go.ke/>
- Kilasi, P. (2020). Effects of tax reforms on revenue collection in Tanzania. Unpublished master's thesis, University of Dar es Salaam.
- Kimani, M., Kipsat, M., & Rutto, N. (2020). Influence of tax compliance costs on tax compliance among small taxpayers in Kenya. *International Journal of Economics, Commerce and Management*, 8(3), 75–88.
- Kleven, H. J., Knudsen, M. B., Kreiner, C. T., Pedersen, S., & Saez, E. (2019). Unwilling or unable to cheat? Evidence from a tax audit experiment in Denmark. *Econometrica*, 79(3), 651–692.
- Kothari, C. R. (2014). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
- Liebenberg, A. P., Benadé, E. S., & Ellis, S. M. (2018). Factors influencing tax compliance among small business owners. *Journal of Economic and Financial Sciences*, 11(1), 1–10.
- Limerick, M. (2013). *Managing the new organisation: Collaboration and sustainability in the post-corporate world*. Allen & Unwin.
- Mashiri, M., & Sebele-Mpofu, F. Y. (2019). Exploring tax compliance motives in SMEs in Zimbabwe. *Journal of Accounting and Taxation*, 11(4), 59–70.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Sage Publications.
- Mugenda, O. M., & Mugenda, A. G. (2013). *Research methods: Quantitative and qualitative approaches*. Acts Press.
- Muriithi, M. K., & Moyi, E. D. (2022). Tax compliance behavior among SMEs in Kenya: A case of Nairobi County. *African Journal of Business Management*, 16(5), 101–111.
- Ogundajo, G. O., & Onakoya, A. B. (2021). Taxation and inclusive growth in sub-Saharan Africa. *Journal of Economic Studies*, 48(3), 441–456.
- Organisation for Economic Co-operation and Development (OECD). (2009). *Tax administration in OECD and selected non-OECD countries: Comparative information series*. OECD Publishing.
- Organisation for Economic Co-operation and Development (OECD). (2022). *Revenue statistics in Africa 2022*. <https://www.oecd.org/>
- Owino, J., Gachanja, P., & Bwisa, H. (2021). Taxation knowledge and tax compliance among micro and small enterprises in Kenya. *International Journal of Business and Social Science*, 12(2), 15–27.
- Pope, J., & Abdul-Jabbar, H. (2008). Small and medium-sized enterprises and tax compliance burden in Malaysia. *Journal of Australian Taxation*, 10(2), 356–387.
- Rai, A. K. (2004). Tax compliance: A review of literature. *Indian Journal of Public Administration*, 50(4), 686–700.

- Reis, A. L., Coutinho, C. P., & Lencastre, J. A. (2017). Using grounded theory in educational research: Possibilities and limitations. *European Journal of Education Studies*, 3(10), 113–128.
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). John Wiley & Sons.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178.
- Vito, R., & Howell, C. (2017). The impact of audit regimes on compliance: Evidence from the field. *Public Finance Review*, 45(2), 222–244.
- Zolt, E. M., & Bird, R. M. (2003). Redistribution via taxation: The limited role of the personal income tax in developing countries. *UCLA Law Review*, 52(6), 1627–1695.