

Effect of Tax Audit on Excise Duty Compliance among Non-Alcoholic Beverages Companies in Nairobi City County, Kenya

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Abstract

Despite these reforms, Excise Duty compliance has remained low, the overriding objective of excise taxes in Kenya is to raise tax revenues, but the performance has been weak. This study aimed to determine the effect of tax audits on excise duty compliance among non-alcoholic beverage manufacturing companies in Nairobi, Kenya. The study will benefit policymakers, KRA, and future researchers. The study was anchored on the Economic deterrence theory. Explanatory research design was employed and the target population was 272 non-alcoholic beverages manufacturing companies in Nairobi with a sample of 162 respondents in this study, 136 out of 162 distributed questionnaires were correctly completed and returned, yielding 84 % response rate. The study showed that tax audit was also found to positively influence excise duty compliance. ($\beta = 0.274$, $p = 0.002$). The government should enhance the frequency and depth of tax audits among non-alcoholic beverage companies. Given the positive impact on compliance, regulatory agencies should allocate more resources and develop specialized audit teams to ensure companies adhere to excise duty obligations. Further research may be conducted to determine the effect of technology and other factors on tax compliance.

Keywords: *Non-Alcoholic Beverages Manufacturing Companies, Tax Audit and Excise Duty Compliance*

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1. Introduction

Tax compliance level in Kenya has been a major government concern. The Government through the Kenya Revenue Authority has implemented a number of policy and administrative reforms. KRA has aimed at increasing efficiency and boosting tax revenue collections. Excise Duty reforms have been a key component of the overall reform package, for example, the implementation of excisable goods management system in 2018, widening of excise tax base to include other goods and services, and increasing of excise tax rates over the years (OECD, 2022).

Excise taxes can nevertheless serve the function of controlling externalities, the imposition of corrective excise taxes at rates equal to marginal external damages, noting that doing so restores economic efficiency (Sandmo, 2019). In practice, governments impose heavy excise taxes on

energy products, motor vehicles and other transportation, waste management, ozone-depleting substances, and other products and activities that arguably create externalities in degrading the environment (Hines, 2020). Excise taxes performance can also play a role in encouraging consumption of goods that may not have external effects but are nonetheless harmful to the individuals who consume them (Donoghue & Rabin, 2019).

Most of the excise taxes are levied on a specific rate base. These include, but are not limited to, spirits, other alcoholic beverages (beer and wine), tobacco, soft drinks (water, juices, and non-alcoholic beverages), motorcycles, fuel, oils, kerosene, and plastic bags. All excisable services, food supplements, cosmetics and beauty products, and motor vehicles are charged an ad valorem rate (Marete, 2017). Under the excise duty regime, only licensed operators can import or manufacture excisable goods, or supply excisable services. According to Obiero (2018), licenses are granted by the KRA Commissioner for a duration that depends on the activity and product category. As an enforcement tool, licensed operators are required to affix excise stamps on every package of an excisable good.

Tax audit is a norm practiced globally to improve tax compliance. It is normally conducted by revenue administrations all over the world for instance Inland Revenue Service introduced an audit tool to detect tax evaders and formally enforce the Federal Inland Revenue Service (FIRS) audit unit on any organization. To determine tax evaders or taxpayers who are not compliant, audit mechanisms such as this risk engine tool were put into operation (Lemuria, 2019).

Bottled water, juices, energy drinks, soda, and other non-alcoholic drinks must have an excise stamp to legally retail in the market. Manufacturers have warned that retailers could be forced to bear the costs. Manufacturers of bottled water, juices, and non-alcoholic beverages have decried high costs of the new Excise Goods Management System (EGMS) on these products, whose implementation has been rolled out. This comes as the Kenya Revenue Authority (KRA) continues to monitor compliance by manufacturers, importers, distributors and retailers, after rolling out the excise stamps for the products. The taxman had set February 29, 2020, as the deadline to sale old stocks without the new excise stamp, after which all players were to comply.

1.1 Problem Statement

Excise Duty compliance has remained low, contributing to only 40% of total revenue collected in Kenya. KRA expects to obtain a 65% Excise Duty compliance and to increase the Excise Duty to total revenue ratio to 55% by 2024 (KRA 7th Corporate Plan, 2018-2021). The collection of Excise Duty in the financial year 2021/2022 was Ksh.662,350,000 compared to a target of Ksh.705,150,000 falling short of the target by Ksh 42,800,000 million (KRA, 2022). This has raised a concern, especially on non-alcoholic beverage excise duty which has been declining over the years.

Taxpayers in this sector are yet to fully comply with the requirements of the respective tax laws. For instance, Bidin, Sinnasamy and Othman (2021) conducted research investigating determinants of importers' excise duty compliance in Malaysia. Chesire (2019), studied the relationship between excise tax regimes and the profitability of listed sin products (alcohol and cigarettes) manufacturers in Kenya. Therefore, it is against this background that this study filled the missing knowledge gap in literature by establishing the effect of tax audits on excise duty compliance among non-alcoholic beverages manufacturing companies in Nairobi, Kenya.

2. Literature Review

2.1 Theoretical Review

2.1.1 Economic deterrence theory

The contemporary revival of the economic analysis of crime began in 1968 with Becker's classic article on crime and punishment. While Becker mentioned tax evasion as an area of application for his general model, Allingham and Sandmo (1972), provided the analysis. Generally, this approach treats noncompliance as a rational individual decision based on probabilities of detection, conviction, and levels of punishment.

According to Allingham and Sandmo (1972), tax compliance is an expected utility (EU) maximizing decision where the taxpayer considers the tax rate, probability of audit, and the penalty in determining the declared income. The taxpayer's actual income is exogenously given and known by the taxpayer but not the Internal Revenue Service-IRS. A constant proportional tax is applied to reported income, the amount of which is chosen by the taxpayer. With some exogenous and constant probability, the taxpayer is audited, if he or she is discovered to be underreporting income, a penalty proportional to the amount of undeclared income, at a rate higher than the proportional tax rate, must be paid. The taxpayer chooses a level of reported income to maximize his or her expected utility of net wealth. Optimal tax evasion depends on the chance of getting caught and penalized, the size of the penalty for evasion, and the individual's degree of risk aversion.

Yitzhaki (1974) pointed out that if the penalty (and any related nonpecuniary costs) for discovered evasion is proportional to the tax understated rather than (Allingham and Sandmo assumed, the income understated), then the tax rate does not affect the terms of the tax evasion gamble. As the rate rises, the cost of a detected understatement of taxes rises in the exact proportion to the reward from a successful understatement of taxes, so the reward-to-risk ratio is unchanged. In this situation, a higher tax rate has only an income effect, and, for example, if a taxpayer's level of (absolute) risk aversion increases as after-tax income falls; a higher tax rate will decrease tax evasion.

Many years of subsequent analysis have extended this model in a number of dimensions, including allowing an endogenous probability of detection, analyzing evasion jointly with the labour supply decision (thus directly addressing the shadow economy), incorporating the sources of uncertainty other than the chance of an audit, and addressing general equilibrium considerations (Slemrod, 2007). This economics-of-crime approach gives the sensible result that compliance depends upon enforcement, as represented by the audit and penalty rates. Indeed, it is straightforward to show with comparative statics analysis that declared income increases with an increase either in the probability of detection or in the penalty rate (Alm, 2013).

This theory incorporates deterrence sanctions in determining compliance levels. The theory observes a taxpayer weighs the cost of being caught evading tax versus the benefit of going unnoticed. If the cost of being caught is high, then it will be beneficial for the taxpayer to just comply with the tax law and this will have a positive effect on tax revenue. The theory supported tax audit and deterrence sanctions variables.

2.2 Empirical Review

2.2.1 Tax Audit

Siregar et al. (2019) found a non-significant difference between tax audits and tax compliance amongst corporate taxpayers. Using a sample of 6,181 companies from Uruguay, the authors found a great misunderstanding and overestimation of probability of audits amongst the firms (Bérgolo et al., 2018). Another empirical finding has shown that tax audits have a wide disparity effect with respect to post-audit compliance. Thus, tax audits can bring about two outcomes: An ineffective tax audit decreases post-audit tax compliance; while an effective tax audit increases post-audit tax compliance (Kasper & Alm, 2022).

Olaoye et al. (2019) studied how tax audits affected Ekiti State's tax compliance and remittance of tax income. This study examined the impact of back duty audits, field audits, desk audits, and registration audits on tax revenue remittance and tax compliance in Ekiti State. A questionnaire with closed-ended questions was utilized to gather the required data, and multiple regression and a correlation matrix analysis were used to perform the research. It was determined that the registration audit, the back duty audit, the desk audit, and the field audit all had positive and significant effects on tax compliance and remittance in Ekiti State. Surprisingly, the field audit was the most significant predictor criterion out of all the predictor criteria. It was determined that the tax audit might result in tax payment and compliance in the state of Ekiti. These findings are supported by Rahmayanti et al. (2020), and Alm et al. (2013) who established that a tax audit mechanism would lead to higher tax compliance.

Adediran, Alade and Oshode (2021) examined the impact of tax audits and investigations on revenue generation among tobacco manufacturers in Nigeria and concluded that Tax audits and investigations can increase the revenue base of the government and can also stamp out the incidents of tax evasion in the country. He recommended that Tax audits and investigations should be carried out more often and as thorough as possible to accomplish its task of increasing the revenue base and stamping out tax evasion in the country.

2.2.2 Excise Duty Compliance

Excise duty is a form of tax imposed on the manufacture, sale, or consumption of specific goods within a country. The concept of excise duty compliance revolves around adhering to the regulations and requirements set forth by the government regarding the payment and reporting of this tax (James & Alley, 2021). Excise duty compliance is a critical aspect of operating within industries that produce or sell excisable goods. It requires a thorough understanding of the relevant laws and regulations, diligent record-keeping, timely reporting, and payment of duties. By adhering to these requirements, businesses can avoid penalties and legal issues, and contribute to the proper functioning of the tax system (OECD, 2022).

According to Nyaga and Omwenga (2016), capacity is required in areas such as automation, audit, risk profiling, and general skills development. The tax authority should pay more attention to taxpayers' education, compliance, and tax audits to give taxation process acceptable rationality. In the past, Excise Duty has been one of the tax heads that has proved a challenge and remained static in terms of growth and also was the most abused and subject to fraud. Very few taxpayers of excisable goods and services filed or declared the correct monthly tax returns hence the need to rethink outside the box. From 2011/2012 to 2015/2016 after the introduction of iTax and EGMS, there is significant growth of excise Duty (KRA, 2015).

2.3 Conceptual Framework

A conceptual framework is a structure that the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2001). This study was conceptualized by the dependent variable which was excise duty compliance and was measured by Tax declaration, Tax payments, and Returns filed. Independent variables where tax audit was measured by Excise stamps audit, Field audit, and Desk audit. As indicated in Figure 1.

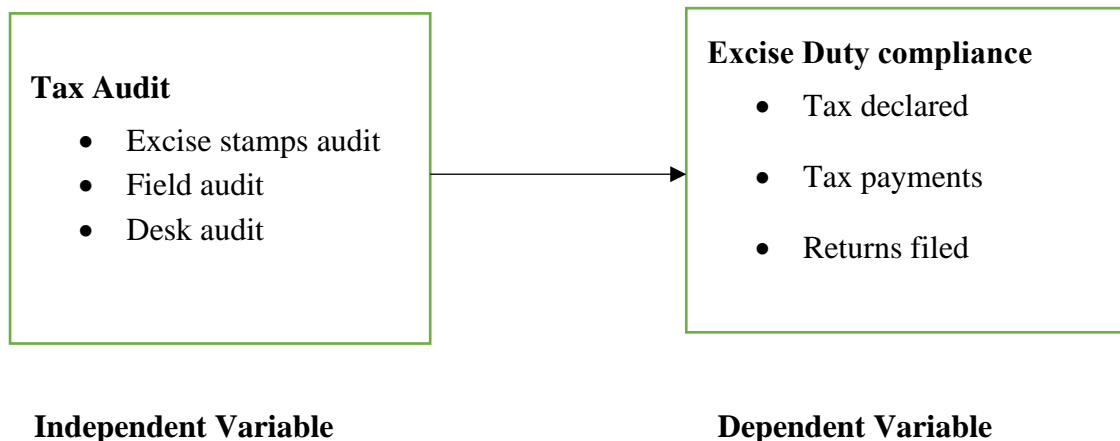


Figure 1: Conceptual Framework

3. Methodology

Bryman and Bell (2011) define research design as a plan to guide a researcher in organizing research activities and answering questions that are being studied. This study adopted the explanatory research design. Explanatory research can be explained as a “cause and effect” model, investigating patterns and trends in existing data that haven’t been previously investigated. Cooper and Schindler (2003) define a target population as the entire group of people, events, or objects that a study focuses on as the subject of analysis. The target population of the study was 272 non-alcoholic beverage companies in Nairobi County. Table 1 showed that 136 out of 162 distributed questionnaires were correctly completed and returned, yielding an 84 % response rate.

Table 1 showed that excise duty compliance had a Cronbach’s alpha of 0.923>0.7, and tax audit had a Cronbach’s alpha of 0.916>0.7. This implied that the instruments of measures for each construct of the questionnaire items was reliable.

Table 1: Test of Reliability of Questionnaire

Factor	Number of Items	Cronbach Alpha score	Conclusion
Excise Duty Compliance	5	0.923	Reliable
Tax Audit	5	0.916	Reliable

Data was cleaned and edited to ensure consistency of responses. According to Cooper and Schindler (2018), data analysis is the process of reviewing, cleaning, converting, and displaying data with the main purpose of reporting useful information and suggesting

conclusions and recommendations. The study findings were presented in tables and figures. Analysis of data was done using descriptive statistics, frequencies, and percentages. Further, correlations were computed to check the relationship between the independent variable and the dependent variable.

4. Results and Discussion

4.1 Descriptive statistics

Table 2 showed that "We have been audited on our claimed expenses for our business in the past" received a mean score of 3.82 (SD = 1.117). The item "I have been audited in the past by KRA" received a mean score of 4.07 (SD = 1.086). The item "KRA has audited our stamps usage and declaration in the past" received a mean score of 3.72 (SD = 1.146). The statement "KRA can pick up excise inconsistency by comparing filled data in our firm" received a mean score of 4.00 (SD = 1.155). The item "Our products have been questioned by KRA filed officers" had a mean score of 4.08 (SD = 1.004).

Table 2: Tax Audit

Statements	N	Mean	SD
We have been audited on our claimed expenses for our business in the past	136	3.82	1.117
I have been audited in the past by KRA.		4.07	1.086
KRA has audited our stamp usage and declaration in the past.		3.72	1.146
KRA can pick up excise inconsistency by comparing filled data in our firm		4.00	1.155
Our products have been questioned by KRA field officers.		4.08	1.004

Table 3: shows that the item "Our firm files tax returns on time" received a mean score of 3.92 (SD = 1.089). The statement "Our firm pays excise duty by or on the due date" received a mean score of 4.04 (SD = 1.032). The item "Our company declares and files accurate returns" obtained a mean score of 3.76 (SD = 1.117). The statement "I fully understand my tax obligation" achieved a mean score of 4.00 (SD = 1.068). For the statement "I always make excise duty payments on time," the mean score was 4.03 (SD = 1.011).

Table 3: Excise Duty Compliance

Statements	N	Mean	SD
Our firm files tax returns on time	136	3.92	1.089
Our firm pays excise duty by or on the due date		4.04	1.032
Our company declares and files accurate returns.		3.76	1.117
I fully understand my tax obligation.		4.00	1.068
I always make excise duty payments on time.		4.03	1.011

4.2 Correlation Analysis

Table 4 presents the correlation coefficients among several predictor variables and the outcome variable, Excise Duty Compliance, along with their respective significance levels. The results indicate that Tax Audit has a positive and significant correlation with Excise Duty Compliance, $r = 0.280$. This suggests that a higher level of tax auditing is associated with increased compliance with excise duty regulations.

Table 4: Correlations Statistics

	Excise Duty Compliance	Tax Audit
Excise Duty Compliance	1	0.280**
Tax Audit	0.280**	1

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

4.3 Regression Analysis

The regression analysis was used to determine the effects of the predictor variables of the study on the outcome variable. Table 5 showed that tax audit had a positive correlation with excise duty compliance up to 28% or ($R = 0.280$). The results reveal that tax audit caused a variation of 78% or ($R^2 = 0.78$ and adjusted $R^2 = 0.73$) on excise duty compliance.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.280 ^a	.078	.73	.37890

a. Predictors: (Constant), Tax Audit _mean

Table 6 showed that there was F statistic of 207.495 and a p-value of $0.000 < 0.05$, which indicates that the model was significant in explaining the variance caused by excise duty compliance.

Table 6: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	96.278	1	96.278	207.495	.000 ^b
	Residual	62.180	134	.464		
	Total	158.458	135			

a. Dependent Variable: Excise Duty Compliance

b. Predictors: (Constant), Tax Audit

Table 7 showed that unit change in tax audit caused a 0.274 increase in excise duty compliance. The study found that tax audit had a positive and significant effect on excise duty compliance $\beta = 0.274$ p-value $= 0.002 < 0.05$. The hypothesis was rejected.

Table 7: Regression Coefficient analysis

Variable	Standardized β	Std. Error	Unstandar dized β	t-statistic	Prob.
constant	0.857	0.372		2.304	0.023
Tax audit	0.274	0.071	312	3.859	0.002

4.4 Discussion

The study sought to determine the effect of tax audits on excise duty compliance non-alcoholic beverages manufacturing companies in Nairobi, Kenya. The correlation analysis found that Tax Audit had a positive and significant correlation with Excise Duty Compliance, $r = 0.280$. This suggests that a higher level of tax auditing is associated with increased compliance with excise duty regulations. The coefficient analysis showed that Tax audit was also found to positively influence excise duty compliance. ($\beta = 0.274$, $p = 0.002$). The findings concurred with Slemrod (2019) who found a significant impact of audits on reported tax liability, resulting in increased compliance due to the deterrent effect.

5. Conclusion

The study concludes that tax audit has a significant positive effect on excise duty compliance among non-alcoholic beverage companies in Nairobi City County, Kenya. The findings indicate that increased tax auditing correlates with improved compliance with excise duty regulations. Therefore, the study concludes that tax audits are an effective tool for enhancing excise duty compliance, emphasizing the importance of thorough and frequent audits to promote adherence among companies

6. Recommendations

Based on the findings, the government should enhance the frequency and depth of tax audits among non-alcoholic beverage companies. Given the positive impact on compliance,

regulatory agencies should allocate more resources and develop specialized audit teams to ensure companies adhere to excise duty obligations.

Further research may be conducted to determine the effect of technology and other factors on tax compliance.

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