

TAX BURDEN RATIO AS A KEY DRIVER OF BUSINESS PERFORMANCE OF LIQUOR MANUFACTURERS IN NAIROBI CITY COUNTY, KENYA

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Accepted: May 11, 2026

ABSTRACT

The business performance of liquor manufacturers faces a major challenge brought about by taxation policies that, due to higher excise taxes, higher tax duties on ethanol, and a complex business regulatory environment, have contributed to the proliferation of counterfeit and illicit alcoholic beverages, hence significantly affecting business performance. The study seeks to examine tax burden ratio as a key driver of business performance of liquor manufacturers in Nairobi City County, Kenya. The study was grounded on institutional theory. The study was underpinned by pragmatist philosophy and with an explanatory research design. The study gathered primary data quantitatively and qualitatively. Quantitative data were collected using a semi-structured questionnaire. Interviews with open questions captured qualitative data. Expert review checked validity; Cronbach's alpha tested reliability. A census guided respondent selection. Quantitative data came from 164 liquor-firm participants. Qualitative data were gathered from the chief executive officer or the topmost senior employee of 19 firms and 4 members of the secretariat of the Alcohol Beverages Association of Kenya. Data were analyzed with descriptive statistics, correlation, and regression. Results showed tax burden ratio had significant effects on business performance. Qualitative data were analyzed thematically through coding, theme development, and narration. Approval came from Kenyatta University and NACOSTI before data collection. The study followed ethics and safeguarded all respondents. The study therefore concluded that tax burden ratio was critical to the performance of liquor manufacturers; however, these are considered holistically to ensure that all effects are addressed effectively. The research recommended that policymakers should improve the predictability of taxation policies to lessen the tax burden thereby creating an enabling environment for effective business performance.

Key Words: Tax Burden Ratio, Business Performance and Liquor Manufacturers

CITATION: Lutomia, E., Njoroge, J., & Muna, W. (2026). Tax burden ratio as a key driver of business performance of liquor manufacturers in Nairobi City County, Kenya. *Reviewed International Journal of Social Science & Humanities*, 7 (1), 404 – 426.

INTRODUCTION

The effectiveness of alcohol taxation varies from one country to another, depending on the local taxation policies (Ezuem & Sagbara, 2024). Some nations have effectively used alcohol taxation to reduce consumption and harm, while others have not optimized taxes for health goals (Iris, 2023). Further, disparities in tax structures can lead to market distortions and illicit trade (Cullinan, 2023). Higher taxes in one country, especially bordering countries, may encourage cross-border smuggling from the country with lower taxes, undermining the public health objectives for which such taxes were levied and denying countries the needed revenue (Rehm *et al.*, 2021).

Taxation policies significantly influence the alcoholic beverage industry globally, hence affecting production, pricing, consumption, and public health (Guidon *et al.*, 2022). The government utilizes some of the tax policies, including excise taxes on alcohol, to generate revenue and contain excessive consumption (Chukwudi *et al.*, 2020). WHO reports that alcohol taxes generate about 0.3% of global GDP in revenue. Further, research evidence shows that increasing taxation on alcohol is associated with reduced consumption of alcohol and its related health harms (Alshamleh *et al.*, 2023; Iris, 2023).

In Sub-Saharan Africa, alcohol taxation is a crucial tool for revenue generation and public health management, yet the region faces numerous challenges of unrecorded alcohol production and consumption, further affecting the effectiveness of taxation policies (Jernigan & Ross, 2020). A study published in the Journal of Addiction showed that increases in alcohol taxation did not automatically lead to higher unrecorded alcohol consumption, meaning that properly administered tax policies can effectively reduce alcohol harm without driving consumers to illicit markets (Rehm *et al.*, 2021). Thus, part of the policy reforms recommended for countries in this region is to optimize taxation policies to leverage health benefits and economic gains (Cullinan, 2023; Iris, 2023).

The Kenya Tax Procedures Act No. 29 of 2015 is the foundation that anchors the implementation of taxation policies in Kenya (GoK, 2020). It consolidates and harmonizes tax administration procedures across various tax laws by providing a unified legal framework that governs key processes such as registration, filing, assessment, audits, enforcement, and dispute resolution for taxes administered by KRA (Oguso *et al.*, 2025). The Act enhances administrative efficiency, transparency, and taxpayer compliance by standardizing all the procedures required in tax administration. Further, it introduces safeguards such as the right to be heard, timelines for KRA actions, and the Alternative Dispute Resolution (ADR) mechanism, strengthening the need for fair and predictable tax administration (KIPPRA, 2020). Therefore, the TPA 2015 facilitates Kenya's tax policy objectives, specifically those of equity, efficiency, and accountability for effective fiscal prudence (PwC, 2024).

The Kenya Income Tax Act 2012 serves as the principal legislation governing the taxation of income in Kenya. The Act outlines the framework for assessing, charging, and collecting income tax from individuals, companies, partnerships, and trusts, covering various income sources such as employment, business profits, dividends, interests, and rental income (KRA, 2023). The Act establishes tax brackets, allowable deductions, and exemptions while integrating mechanisms for tax compliance, audits, and penalties (Oguso *et al.*, 2025). In the duty to administer income tax as per the Act, with broadened tax bases without transparency and accountability, individuals and firms sometimes fail to comply, which subsequently affects their businesses (PwC, 2024). For instance, the constant increment of excise duty for manufacturers over the last 20 years has led to a drop in GDP contribution from 11.08 to 7.8% by the liquor manufacturers, signifying a critical impact of taxation on business performance (KIPPRA, 2020; KAM, 2024).

Kenya's National Tax Policy emphasizes the importance of a predictable tax system as a cornerstone for creating investor confidence, economic growth, and efficient tax administration (KIPPRA, 2020). The policy promotes stable, clear, and consistent tax rules. It blocks sudden or retroactive changes and calls for

stakeholder input in shaping measures (GoK, 2024). The policy advocates for legal certainty and long-term fiscal planning; the policy aligns with best practices in tax governance, enabling businesses and individuals to make informed economic decisions (Wachuka, 2025). Predictability can contribute to voluntary compliance and reduce disputes, and in the opposite work, counterproductively for the government and business entities (PwC, 2024).

The Kenya Excise Duty Act 2015 was enacted to consolidate and modernize the laws concerning excise duty in the country, replacing provisions previously integrated in the Customs and Excise Act. It imposes excise duty on specified goods and services manufactured in or imported into Kenya (KRA, 2023). Goods such as alcohol, tobacco, petroleum products, motor vehicles, and mobile money transfers are subject to excise duty. It aims to generate government revenue while also influencing public behavior, especially concerning health and environmental concerns (PwC, 2022). The law empowers the Cabinet Secretary to adjust rates annually based on inflation and provides mechanisms for licensing, tax refunds, and exemptions of firms engaged in or directly impacted by excisable goods (Cheshire, 2018). However, such adjustments could be inclined to revenue collection rather than business promotion, which ultimately affects business performance (KAM, 2024).

In Kenya, businesses are mostly occupied by small and medium enterprises, with few falling under the large business category. MSMEs add about 40% to GDP (Oxfam, 2023). Kenya hosts 7.41 million, with 5.85 million informal and 1.56 million formal (KNBS, 2016). They form 98% of all firms and generate 30% of new jobs each year (MSEA, 2021). Based on Kenya's quarterly gross domestic product report, the expansion of the GDP by 4.6% in the second quarter of 2024 was contributed to by agriculture, forestry and fishing, real estate, financial services, insurance activities, wholesale and retail, and other sectors, including accommodation and food services, and information and communication services (KNBS, 2024).

The Kenya Association of Manufacturers' report, based on the Manufacturing Priority Agenda, manufacturing businesses face numerous challenges arising from regulatory burdens, specifically from the administrative burdens and compliance costs imposed by the government. These burdens include labor laws, tax regulations, and other legal obligations that make it very difficult for SMEs and large manufacturers to compete effectively (KAM, 2024). On average, it costs between KES 1.2 -2.2 million to obtain the requisite regulatory licenses for businesses in food and beverage manufacturing (KAM, 2024; Kenya Revenue Authority (KRA), 2023).

The other notable challenge faced by liquor manufacturers in Kenya is the instability and unpredictability of tax policies. KAM reports that fluid policies create business distortions that hurt business competitiveness and profitability. For instance, the introduction of 16% Value Added Tax (VAT) on plant and machinery shows a decline in imports in Kenya, with an increase in neighboring countries Uganda and Tanzania (KAM, 2024). Other challenges facing manufacturers include an influx of illicit and substandard liquor products. This leads to unfair competition, loss of business, and reduced ability to pay taxes to the government (Mwangi, 2021). It remains evident that business performance is severed in the presence of these challenges and hence it is critical to assess specifically the effect of tax compliance rate, tax burden ratio, predictable tax system, and tax dispute resolution effectiveness as one of the avenues to improve business environment for liquor manufacturers and increasing government revenue raising ability (Shah *et al.*, 2013; Smajli *et al.*, 2024).

Statement of the Problem

The business performance of liquor manufacturers faces burdensome taxation policies that due to high excise taxes, high ethanol excise duty and complex regulatory requirements have led to proliferation of counterfeit and illicit alcoholic products in the market, which consequently affect the manufacturers' profitability, reinvestment, innovation and expansion in Kenya (Watima, 2021; Mwaniki, 2022; Oguso *et al.*, 2025). These taxation policies and regulatory requirements, compared to those of the neighboring countries, are much higher; for instance, excise duty on beer per liter is KES 142, KES 83, and KES 59 in Kenya, Uganda, and

Tanzania, respectively, while spirits are charged KES 253, KES 48, and KES 219 in that order (Omondi, 2024).

Studies in this area include Musyoka et al. (2023) on stakeholder engagement and liquor underperformance, Kipchumba et al. (2022) on unrecorded alcohol in Kakamega and Uasin-Gishu, and Samuel & Murigi (2024) on leadership costs as a survival tool against competition and counterfeit products. While Muriuki and Felistus (2023) evaluated the innovation strategy on the product and operational performance of Kenya Breweries Limited. These studies on liquor manufacturers across Kenya did not consider that taxation policies have a cause-and-effect influence on the business performance of liquor manufacturers. Thus, this study filled these gaps by investigating the effect of taxation policies, including high excise duties, which escalate production costs, forcing manufacturers to raise prices, consequently, leaving consumers, especially those in low-income areas, to increasingly turn to easily accessible and affordable illicit and counterfeit alcohol alternatives, collectively affecting the business performance of liquor manufacturers.

LITERATURE REVIEW

Empirical Review

Business Performance of Liquor Manufacturers

Su (2020) analyzed China's liquor industry using financial reports and series methods. The research findings suggested that the industry was becoming more stable and standardized over the years. Operating cash flow to net profit reached about 1.04 points in the last 10 years of the analysis, with a compound annual growth rate of about 18.7% for the past 20 years. Even though the study posited growth in the liquor industry, the contextual scope was limited to China, which is a developed economy. Still, the study used time series analysis to present the findings. These gaps, therefore, provided an opportunity for this study to fill the contextual and methodological gaps identified.

Ameyibor, Anabila, and Saini (2021) examined brand positioning and performance of alcohol firms in Ghana, with brand equity as the mediator. The respondents were sampled from 196 staff of alcoholic beverage firms across the country using a judgmental sampling technique. Data was tested with structural equation modeling and partial least squares. Results showed brand positioning boosted performance, with brand equity mediating the link for Ghana's liquor firms. The study was limited by variables to effectively predict the performance of liquor manufacturers. This study filled this gap in measuring business performance, not only from a single construct but also from other critical factors that affect business performance, especially taxation policies.

Cele, Msosa, and Ntshangase (2023) studied CRM's effect on South Africa's beer trade. Using a quantitative cross-sectional design, they sampled 172 liquor outlets in Durban. Findings showed customer satisfaction with trading, ordering, delivery, and information flow, though the study lacked broad theorization. Some outliers and antecedents of performance, whose metrics are not necessarily monetary (sales), could have been omitted. This study widened the concept of performance beyond single metrics and investigated both monetary and non-monetary performance metrics.

Muriuki and Makhamara (2023) sought to understand the nexus between innovation strategy on product and the operational performance of KBL, in Nairobi City County, Kenya. Diffusion of innovation theory and Porter's generic competitive theory anchored the study. A total of 382 employees responded to the questionnaire, which was then descriptively and inferentially analyzed using linear regression through SPSS. The research findings suggested that product innovation was significantly and positively related to operational performance. The study was, however, limited to KBL only, and it also focused on operational performance only. It was important to narrow this weakness by investigating performance across various functions, including sales, operations, finance, and revenue. Inclusion of more firms broadened insights into the performance of liquor manufacturers in Kenya.

Tax Burden Ratio and Business Performance

Megarani *et al.* (2019) examined tax planning, firm value, and leverage in relation to income smoothing among Jakarta Islamic Index firms. The study used a cross-sectional survey of 12 listed companies from 2010–2017. Purposive sampling was also adopted, together with the Eckel Index, to classify two types of earnings as targets of income smoothing. Hypotheses were tested with logistic regression. Results showed firm value strongly shaped income smoothing. Tax planning, value, and leverage together influenced the practice. Industry differences in tax planning added insight when liquor firms were examined.

Feyisa (2019) reviewed Ethiopia's liquor industry through a case study of the national factory. Using descriptive methods, the study assessed productivity, profitability, capacity use, marketing, and socio-economic roles with data from 2011–2018 factory records. The research suggested that productivity has been declining over the years despite other efforts. The study focused on firm performance metrics only; however, the liquor manufacturers could be affected by several factors. Expanding the understanding of the role of taxation policies on the performance of privately owned liquor manufacturers was therefore necessary.

Nelson and Moran (2019) reviewed alcohol taxation and price pass-through. Findings showed over-shifting in imperfect markets: beer taxes pushed prices higher, while wine and spirits fully shifted. Full-shifting can occur across beverages. A deeper but specific insight can improve policy issues on taxation, including over-shifting and full-shifting consequences in society.

Theoretical Framework

The research was underpinned on the Institutional Theory, supported by Laffer Curve Theory, and RBV Theory. Institutional Theory assumes that business entities are institutions that are influenced by environmental players, the regulatory environment, which tend to borrow ideas and practices from each other, thereby learning to adopt and adapt to changes in the business environment as a result of taxation policies.

Institutional Theory

Institutional Theory originates from the contributions of sociologists like Max Weber (1904-1905), but it was fully articulated and disseminated by Philip Selznick throughout the 1940s and 1950s (Scalabrino *et al.*, 2019). The primary tenets of the theory assert that corporates and individuals are significantly shaped by the institutional environment, encompassing laws, regulations, conventions, and cultural ideas (Sahin & Mert, 2022). Ebrahim and Koh (2021) contend that adherence to institutional standards bolsters the organization's social and legal legitimacy. Organizations within the same sector often converge over time due to coercive, mimetic, and normative factors, such as unresolved taxation issues (Kauppi, 2022).

The theory explains how firms adapt to taxation shifts in business environments. New policies, regulations, health norms, and cultural behaviors can reshape operations and strategies, influencing performance (Baah, 2020; Oware & Mallikarjunappa, 2020; Ebrahimi & Koh, 2021). The adoption of health policies may be driven by institutional control of the production and consumption of alcohol, but counterproductively allows for an influx of illicit and counterfeit products (Yadegaridehkordi *et al.*, 2022; Wangare, 2024). Taxation policies, including compliance rate, burden ratio, and predictable systems, work in various institutional contexts (Sahin & Mert, 2022; Basri *et al.*, 2023). It explains why dynamic capabilities existing in institutions facilitate various levels of performance despite business environmental constraints, such as tax disputes, and how firms can use precedence to overcome any dispute stalemate (Kauppi, 2022).

Therefore, this theory explained how taxation policies shaped the environment in which liquor manufacturers operate by responding to compliance, allocating enough resources to shoulder the tax burden, responding to available dispute resolution mechanisms, and contributing towards policy direction in relation to predictable tax systems for tax planning.

METHODOLOGY

Research Philosophy

The research was underpinned by the pragmatist research philosophy. Pragmatism focuses on resolving practical concerns and is particularly relevant when research seeks to tackle real-world challenges (Yiaueki, 2023). Taxation policies and business success are tangible and may be studied more effectively through a pragmatic lens. Pragmatism underscores the relevance of research to practical policy matters, rendering the philosophy especially pertinent to this study, which sought to elucidate taxation policies and their effects on business performance, with potential applicability to other unexplored domains of knowledge (Katzav, 2023).

Research Design

This research utilized an explanatory research design aimed at explaining why phenomena occur and predicting future occurrences (Meyer & Meissel, 2023). The design allowed for data gathering at a single point in time. Explanatory design also explains the relationships between variables, intending to understand cause-and-effect dynamics.

Description of Variables

The study conceptualized four independent variables against one outcome variable. The independent variables included tax compliance rate, tax burden ratio, predictable tax systems, dispute resolution mechanisms, and one outcome variable, which was business performance.

Target Population

The research's target population was liquor manufacturers based in Nairobi City County, Kenya. The study targeted the entire 41 licensed manufacturers in Nairobi City County from 2020 to 2025. Four departments in each company, including the sales, marketing, operations, and financial departments.

Sampling Technique

The research utilized a census. The choice of population census was informed by the smaller number of liquor manufacturers. This was also meant to maximize the response for proper analysis of the relationships between the tested variables.

Research Instruments

Quantitative data were obtained utilizing a semi-structured feedback form. The choice of a questionnaire was based on its strength to accommodate standardized data collection, allow respondents to fill it out on their own, and allow respondents to be objective. Analyzing questionnaire data is straightforward due to numerous well-developed statistical methods (Cresswell & Poth, 2023).

Data Collection Procedure

Quantitative data were gathered utilizing a semi-structured survey which was not generated into a Google Form, and then the link was not shared with the respondents to enhance research objectivity and reach of the instrument, because the respondents were sensitive to unexplained data collection in the industry, and therefore were more confident with physical data collection. An introduction on the intent of the collection of data accompanied each questionnaire that introduced the respondents to the study.

Data Analysis and Presentation

Descriptive Statistics were analyzed using means and standard deviations to summarize demographic data and responses across all Likert-scale items (Taherdoost, 2022). Inferential statistics were analyzed using Hypothesis testing, Pearson Correlation, Multivariate Regression Model, ANOVA, Student t, and Fisher's tests to determine the model's significance while examining the connection between taxation policies and business performance at a 5% significance level. Data was displayed in frequency tables and figures, percentages, and the resultant model.

The study adopted a simple linear regression model to analyze the relationship between the study variables. The model was further represented as:

$$Y = \beta_0 + \beta_1 X_1 + \epsilon$$

Whereby;

Y=business performance (outcome variable)

β_0 =constant

β_1 =regression coefficient

X_1 - tax burden ratio (predictor construct)

ϵ – error term (error term; it considers all the possible factors that possibly affected the outcome variable, though not captured in the model)

Hypothesis was tested utilizing a simple linear regression analytical model and equations for hypothesis extracted as indicated in Table 1.

Table 1: Hypothesis Testing and Analytical Models

Null (H ₀)	Hypothesis	Statistical Test	Test Threshold
H ₀₁ : Tax burden ratio has insignificant effect on business performance.		Regression Equation $Y = \beta_0 + \beta_1 X_1 + \epsilon$ Y = Business performance (Dependent variable) X_1 = Tax burden ratio (Independent variable) β_0 = Constant β_2 = regression coefficient ϵ = error term	When the tested $p \leq p=0.05$, the research rejects the null hypothesis When the test $p \geq p=0.05$, the research fails to reject the null hypothesis

All hypotheses were tested at a 95% confidence level ($\alpha=0.05$). Statistical significance was determined by p-values, and the strength of connection was interpreted utilizing standardized β coefficients and R² values.

The qualitative data was analyzed thematically through coding and theme development with the aid of excel sheet. Coding used an open coding approach, followed by axial and selective coding for theme identification. Narration was thereafter used to report the qualitative findings. The qualitative analysis strengthens the quantitative findings through deeper insights into the contextual and experiential dimensions of tax policy impacts on the performance of businesses. Interpretation was done using plain text supported by empirical and other extant literature.

FINDINGS AND DISCUSSIONS

Response Rate

The respondents were liquor manufacturers' employees based in Nairobi City County, Kenya. The study administered the questionnaire to a total of 164 respondents, of whom 130 responded. 23 respondents were obtained for the interviews out of the target of 45 interviewees.

Descriptive Statistics

Descriptive statistics were conducted to generally identify the behavior of each variable on the outcome variables. Descriptive statistics in this study included mean, percentages, frequency, standard deviations, and skewness as per Taherdoost's (2022). This was presented in the form of frequency tables, percentages, means, and standard deviations for

Tax Burden Ratio and Business Performance

The research also intended to determine the relationship between tax burden ratio and business performance to identify the underlying effects that tax burden has on the liquor manufacturing firms. The test outcomes are tabulated in Table 2.

Table 2: Tax Burden Ratio and Business Performance

Statements	N	SD		D		N		A		SA		Mean	Std. Dev.
		F	%	F	%	F	%	F	%	F	%		
Our business operating costs are affected by the amount of excise tax paid.	130	7	5.4	18	13.8	10	7.7	75	57.7	20	15.4	3.6	1.1
Our excise tax obligations limit our ability to invest in business expansion.	130	8	6.2	5	3.8	0	0.0	102	78.5	15	11.5	4.0	0.6
Our products' pricing and competitiveness are affected by our corporate tax liabilities.	130	2	1.5	8	6.2	13	10.0	96	73.8	11	8.5	3.8	0.7
Our business profitability is reduced by the amount of corporate tax paid.	130	3	2.3	6	4.6	10	7.7	103	79.2	12	9.2	3.9	0.7
Our business has faced cash deficits due to other taxes that we have to pay.	130	15	11.5	10	7.7	42	32.3	62	47.7	1	.8	3.7	0.7
Our business innovativeness is limited due to the other taxes liabilities we have to pay.	130	15	11.5	10	7.7	42	32.3	62	47.7	13	10.0	3.2	1.0
Average	130											3.7	0.8

Field Data (2025)

From Table 2; On the statement of businesses operating costs being affected by the amount of excise tax paid, 75 (57.7%) agreed and 20 (15.4%) strongly agreed on impact of tax amount on the operations while 7 (5.4%) strongly disagreed and 18 (13.8%) disagreed that excise tax raises cost of operations and 10 (7.7%) were neutral about the statement. Business operating costs was affected by the amount of excise tax paid by 3.6 mean with a 1.1 standard deviation suggesting moderate agreement with some degree of variation in responses. This implies that excise taxes constitute a notable component of operating costs for liquor manufacturing firms, although the magnitude of the effect may vary across firms depending on production scale and tax management strategies. The statement on the excise tax obligations limit the business's ability to invest in business expansion was responded to by 102 (78.5%) who agreed and 15 (11.5%) were in strong agreement of this statement while 8 (6.2%) strongly disagreed and 5 (3.8%) disagreed and none were sure of the implication of the excise tax obligations. With a mean of 4.0 and a variation of 0.6, this indicated a strong concurrence and relatively low variability among responses thereby suggesting that excise tax obligations

significantly constrain the ability of liquor manufacturing firms to allocate financial resources toward expansion and growth initiatives.

The products' pricing and competitiveness are more affected by our corporate tax liabilities was responded to by 96 (73.8%) who agreed and 11 (8.5%) were in strong agreement while 2 (1.5%) strongly disagreed and 8 (6.2%) disagreed and 13 (10.0%) were neutral. A mean of 3.8 and a variation of 0.7 on this statement indicated that corporate tax liabilities are perceived to influence product pricing decisions and competitive positioning in the market thereby suggesting that firms may adjust prices to offset tax costs, which could affect their competitiveness relative to other manufacturers. The business profitability is reduced by the amount of corporate tax paid was responded to by 103 (79.2%) who agreed and 12 (9.2%) strongly agreed that the corporate tax reduces profitability. Some respondents, 3 (2.3%) strongly disagreed and 6 (4.6%) disagreed on tax reducing profitability while 10 (7.7%) remained neutral. This statement documented a mean of 3.9 mean and a variation of 0.7 inferring that most respondents believe corporate taxes significantly reduce business profitability. This finding suggests that taxation directly influences the financial outcomes of liquor manufacturing firms. Respondents reported that their business faced cash deficits due to other taxes that the business pays by 62 (47.7 %) who agreed and 1 (0.8%) strongly agreed. 15 (11.5%) strongly disagreed and 10 (7.7%) disagreed that there were cash deficit due to other taxes that the business pays, while 42 (32.3%) remained neutral. A mean of 3.7 and a 0.7 variation was noted indicating that suggesting moderate agreement with relatively consistent responses. This implies that while some firms experience liquidity constraints as a result of tax obligations, the severity of such effects may vary depending on firm size, financial management practices, and tax planning strategies. The business innovativeness is limited due to the other tax liabilities that they pay statement was responded to by 62 (47.7%) who agreed and 13 (10.0%) strongly agreed on the limitations while 15 (11.5%) strongly disagreed and 10 (7.7%) disagreed and 42 (32.3%) remained neutral. With a mean of 3.2 and variation of 1.0 indicated that indicated moderate agreement with greater variability in responses. This implies that although some firms perceive tax obligations as limiting their capacity to invest in innovation, others may have developed strategies to manage these financial pressures.

The descriptive findings indicate that the tax burden ratio exerts a considerable influence on liquor manufacturers, with an overall mean of 3.7 and variation of 0.8, suggesting general agreement that taxation affects operational and financial performance. The descriptive evidence supports the assertion that a higher tax burden ratio poses structural constraints on profitability, pricing flexibility, and expansion capacity, thereby potentially exerting a negative influence on business performance among liquor manufacturers.

From qualitative data, analysis revealed that the burden of excise tax has raised the production cost, and this has impacted the profit margins. The tax burden also limits the cash flow for any expansions into newer markets or technologies. The corporate income tax was particularly cited for affecting the company's profitability due to the need to increase product selling prices so as to absorb the tax burden. This consequently reduces demands for products, leading to subdued profits. The respondents also indicated that considerable amounts of money are spend on paying taxes, thereby leaving the company with little revenue to reinvest to expand their operations. Further, the respondents cited that the corporate income tax was particularly burdensome since it is meant to be paid at once thereby lacking flexibility through a payment plan.

The interview identified that tax increases cause major effects and adjustments on production volume and operational efficiency in ways that, every time there is a tax review and changes, the production volumes are a mechanism to adapt to the new tax obligations without hurting the firm's profits. The respondents mostly added that there is a need to improve the balance between revenue collection and business sustainability through tax payment arrangements that would include flexible payments of tax due, and reduced reviews to allow for inclusion of tax burden into the firm's business strategies. Further, the interviewees suggested that

where some tax penalty payments are unattainable or drag on for longer durations, authorities can consider waiving such taxes to allow for business continuity and payment of taxes in a healthy business environment.

Interview participants consistently described tax burden as an unavoidable cost that firms factor into pricing, budgeting, and cost structures. Respondent LIM13 opined that,

“Taxes are laws and as such our company cannot avoid them despite their burdensomeness on our business operations. Sometimes we find it very challenging to bear all our tax liabilities while at the same time trying to remain afloat, especially where sales drop unexpectedly”.

It was therefore, found that rather than reacting to tax burden sporadically, firms adapt structurally to tax costs so as to remain operational even though a challenging environment. These responses contribute to the effect of tax burden ratio on business success. That is, firms internalize tax burden, reducing its direct observable impact on performance when assessed in isolation.

The interview conducted sought to establish the burdensomeness of excise tax on the firm's business cost structure and pricing strategy. A recurring theme was that the perceived fairness and consistency of tax burden mattered more than absolute tax rate. Respondents emphasized that uneven enforcement and sudden increases were more disruptive than high but predictable tax levels. Respondent LIM11 said that,

“Our business mostly feels the burdensomeness of taxes we are supposed to pay when audit queries emerge unexpectedly and require instantaneous action. Even if taxes could be high in our industry, payment is not a serious matter compared to haphazard enforcement, and sudden tax increases without prior planning”.

Respondents noted that a high tax burden is particularly detrimental when combined with unpredictable policy changes or complex compliance requirements. On the flip side, predictable systems mitigate the negative effects of tax burden. This response, therefore, reinforces the conclusion that tax burden operates synergistically with other taxation policy dimensions, including tax compliance rate, predictable tax systems, and tax dispute resolution mechanisms. This was further emphasized by a direct response from respondent LIM2, who said,

“Taxes are mostly burdensome when fragmented, and there are various levels of compliance requirements, disregarding the holistic nature of the taxation environment. As such, we are constantly worried about taxation implications on our business since we do not know when the next tax issue is going to arise”.

The above findings are in agreement with Feyisa (2019), who investigated the economic success of the Ethiopian alcohol and liquor industry with a case study of the national alcohol and liquor factory. The research findings suggested that productivity has been declining over the years despite other efforts to stabilize the situation. The study focused on firm performance metrics only; however, the liquor manufacturers could be affected by several factors. Hence, it was concluded that external environmental factors are a concern for businesses strategies and planning, taxation being one of the major considerations that implicate liquor manufacturers.

Also, Nelson and Moran (2019), who systematically reviewed the effect of alcohol taxation on prices through a systematic review and meta-analysis of pass-through rates is supported. The findings showed a substantial over-shifting of prices, predicting imperfectly competitive markets for alcohol. Beer taxes are over-shifted, but wine and spirits are fully shifted. Full-shifting can affect any beverage.

Business Performance of Liquor Manufacturers

The research sought to understand business performance as measured by factors such as sales, rate of growth, production capacity, and market expansion. The findings of the analysis are presented in Table 3.

Table 3: Business Performance of Liquor Manufacturers

Statements	N	SD		D		N		A		SA		Mean	Std. Dev.
		F	%	F	%	F	%	F	%	F	%		
Our business has experienced growth in sales over the past three years.	130	0	0.0	5	3.8	28	21.5	56	43.1	30	23.1	3.8	0.9
Our sales growth rate meets or exceeds our annual targets.	130	10	7.7	7	5.4	8	4.2	38	29.2	30	23.1	2.9	1.1
We make optimal use of our production or operational capacity.	130	11	8.5	11	8.5	29	22.3	52	40.0	34	26.2	3.3	1.2
Our business has minimal idle capacity during regular operations.	130	1	0.8	23	17.7	23	17.7	40	30.8	32	24.6	3.8	0.9
Our business offers a variety of products that meet diverse customer needs.	130	0	0.0	5	3.8	26	20.0	48	36.9	34	26.2	3.8	1.0
We frequently introduce new innovative products to expand our offerings.	130	4	3.1	1	0.8	27	20.8	62	47.7	37	28.5	3.3	1.2
Our business has increased its market share in the past three years.	130	0	0.0	0	0.0	11	8.5	90	73.1	29	26.9	3.1	1.1
We are competitive in our industry compared to other businesses of a similar size.	130	0	0.0	0	0.0	8	6.2	70	53.8	52	40.0	3.9	1.0
Average	130											3.5	1.1

Field Data (2025)

The managers responded that their business has experienced growth in sales over the past three years by 56 (43.1%) who agreed and 30 (23.1%) who strongly agreed while 5 (3.8 %) disagreed. 28 (21.5%) chose to be neutral. With a mean of 3.8 and 0.9 variation, it suggested relatively strong agreement with moderate dispersion. These findings indicate that many liquor manufacturers have experienced positive sales performance, potentially reflecting sustained demand for alcoholic beverages and market resilience. The sales growth rate on meeting or exceeding annual targets, 38 (29.2%) agreed and 30 (32.1 %) strongly agreed while 10 (7.7%) strongly disagreed and 7 (5.4%) disagreed and 8 (4.2%) remained neutral. From this statement, a mean of 2.9 and a variation of 1.1 was recorded suggesting relatively weaker agreement compared to other performance indicators. This indicates that although firms may experience sales growth, the growth does not always align with strategic sales targets, which could reflect operational constraints, regulatory pressures, or competitive dynamics within the liquor manufacturing sector. On organizations making optimal use of

production or operational capacity, 52 (40%) agreed and 34 (26.2%) strongly agreed. 11 (8.5%) disagreed while 29 (22.3%) remained neutral. The statement recorded a mean of 3.3 and a variation of 1.2 inferring moderate concurrence but with relatively higher variation among responses. This finding suggests that while many firms operate near optimal capacity, some may face production inefficiencies or operational constraints that limit full utilization. The business has minimal idle capacity during regular operations and responded to by 40 (30.8%) who agreed, 32 (24.6%) strongly disagreed while 1 (0.8%) and 23 (17.7%) strongly disagreed and disagreed respectively. 23 (17.7%) were neutral. From the statement, a mean of 3.8 and 0.9 variation inferring relatively strong agreement. These findings suggest that most firms maintain relatively consistent operational activity, although a notable minority still experiences periods of underutilization. On business offering a variety of products that meet diverse customer needs 48 (36.9%) agreed and 34 (26.2%) strongly agreed while 5(3.8%) were of contrary opinion. 34 (26.2%) chose to be neutral. A mean of 3.8 and a 1.0 variation shows that liquor manufacturers pursue product diversification strategies to capture broader market segments and respond to consumer preferences. On introduction of new innovative products to expand offerings, 62 (47.7%) agreed and 37 (28.5%) strongly agreed. 4 (3.1%) strongly disagreed and 1 (0.8%) disagreed while 27 (20.8%) were neutral. From the statement, a mean of 3.3 and 1.2 variation was noted. The study also assessed whether firms have increased their market share over the past three years. The findings reveal that 90 respondents (73.1%) agreed and 29 respondents (26.9%) strongly agreed, indicating that 125 respondents (96.2%) perceived market share expansion. None of the respondents strongly disagreed or disagreed, while 11 respondents (8.5%) were neutral. The statement recorded a mean of 3.1 and a variation of 1.1. This infers that many liquor manufacturers perceive their firms as gaining a stronger position within the market, possibly due to product differentiation, brand positioning, or increased demand. Finally, respondents were asked whether their firms are competitive compared to other businesses of similar size. The findings show that 70 respondents (53.8%) agreed and 52 respondents (40.0%) strongly agreed, meaning 122 respondents (93.8%) believed their firms are competitive. Only 8 respondents (6.2%) remained neutral, and none expressed disagreement. The statement recorded the highest mean of 3.9 with a variation of 1.0. This strong agreement suggests that liquor manufacturing firms in the study area perceive themselves as well positioned within the competitive landscape.

The respondents pointed out that taxes had a big impact on the business, especially the excise taxes that have increased the product's prices, hence slowing sales growth. The companies have had to absorb such costs just to stay competitive, and thus has led to squeezed margins. Taxation policies make or break businesses as they directly impact the pricing and production costs. The most challenging aspect of taxation is its unpredictability due to tax policy changes. The businesses are not able to predict, hence cannot plan, and sometimes the changes are so sudden and thus altering the business operations. The taxation levels end up limiting the capacity utilization and production scale. High production costs due to taxes result in increased product prices, which are imposed on the end user, hence low demands on such products. The products have therefore become less competitive, and this has led to a reduction in the market share compared to other players.

Besides high taxes, the interview findings pointed to consistency in sales growth in the period of four years from 2021 to 2024, which varied in various organizations and were between 200 million and about 240 million. Some organizations highlighted taxes paid in the same period were averagely in the 60 million. It was also noted that the taxation policies at least change once or twice in a year within the studied period, and this sometimes leads to the tax disputes resolution period lasting for about six months.

These findings agree with the positions of Handoyo *et al.* (2023), who asserted that business performance is influenced by financial, operational, and strategic factors. These factors can be operational and strategic factors that inform business performance (Rudiawarni *et al.*, 2022; Handoyo *et al.*, 2023). However, in the process of seeking to achieve higher business performance, firms are faced with externalities, including taxation and policy changes that affect their performance (Davidsson *et al.*, 2002; Ngo & Nguyen, 2022).

Firms that are poised for growth must leverage their resources to counter the negative impact of these externalities and still meet the obligations of the shareholders (Omisakin & Adegoke, 2022).

Model Summary

The model summary was presented to show the magnitude of changes that were caused by the independent variables on the dependent variable. Specifically, simple regression analyzed how tax burden is a driver of business performance of liquor manufacturers in Nairobi, Kenya. The findings are displayed in Table 3.

Table 3: Overall Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.669 ^a	.447	.443	.36896

a. Predictors: (Constant), TAXBURDENRATIO

Field Data (2025)

From Table 3 above, the model summary results indicate a strong relationship between tax burden ratio and business performance among liquor manufacturing firms in Nairobi City County. The correlation coefficient ($R = 0.669$) demonstrates a strong favourable connection between the predictor variables and business performance. The coefficient of determination implies that 66.9% of the variation in business performance is explicated by tax burden ratio. The remaining 33.1% is influenced by other variables not tested in this model. The relatively low standard error of the estimate (0.36896) further suggests that the model provides reliable predictions of business performance. Hence, the model was fit for further inferential statistics.

ANOVA

The study analysed the variances to determine the overall statistical significance of the regression model. It examined the effect of tax burden ratio on business performance and the outcomes are exhibited in Table 4. The study tested that the null hypothesis that the tax burden ratio does not have any statistically significant effect on the success of the business for the liquor manufacturing firms.

Table 4: Analysis of Variance

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.083	1	14.083	103.448	.000 ^b
	Residual	17.425	128	.136		
	Total	31.508	129			

a. Dependent Variable: BUSINESSPERFORMANCE

b. Predictors: (Constant), TAXBURDENRATIO

Field Data (2025)

The ANOVA results showed that the regression model was statistically fit with an F-value of 103.448. The p-value of 0.000 was less than the level of significance (0.05), an indicator tax burden ratio affected the success of the liquor manufacturing firms in Nairobi City County. With these results, the null hypothesis that the tax burden significantly affected the business performance is therefore rejected at 5% level of significance.

Regression Coefficients

Regression coefficients were tested to identify both the level and how significant each of the measured predictor variables was to the outcome variable. The relationship between tax burden ratio was analyzed, as well as how it drives business performance of liquor manufacturers in Nairobi, Kenya, as displayed in Table 5.

Table 5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	Coefficients ^a	
(Constant)	2.679		.128		20.922	.000		
TAXBURDENRATIO	.364		.036	.669	10.171	.000	1.000	1.000

a. Dependent Variable: BUSINESSPERFORMANCE

Field Data (2025)

From the regression model output, the study establishes the regression model to be as thus:

$$\text{Business Performance} = 2.679 + 0.364 (\text{tax burden ratio}) + 0.36$$

The constant term ($\beta = 0.364$, $p < 0.000$) represents the predicted level of business performance when tax burden ratio, predictable tax systems, and tax dispute resolution mechanisms) are held at zero.

Tax burden ratio has a favourable and statistically significant effect and exerts the strongest influence on business performance ($\beta=0.364$, $t=10.171$, $p= 0.000$). This implies that variations in perceived or experienced tax burden significantly affect firm performance in that a unit increase in tax burden ratio increases performance by 0.364. The positive direction suggests that improvements in the structure or manageability of the tax burden are associated with enhanced business outcomes. Given its magnitude and significance, tax burden ratio emerges to be a critical tax administration dimension influencing business performance in this study.

On tax burden ratio, Tan *et al.* (2023) found that a higher tax burden ratio indicates that a business may be paying a larger portion of its earnings in taxes, with subsequent constraints on its financial flexibility. A lower tax burden ratio, on the contrary, may suggest that the business retains a greater portion of its earnings for reinvestment, innovation, and expansion (Lu et al., 2023).

Hypothesis Testing

The study tested the hypotheses utilizing simple regression to confirm the relationships between the study variables.

H₀₁: There is no significant effect of tax burden ratio on business performance of liquor manufacturers in Nairobi City County, Kenya.

The study tested the connection between tax burden ratio and business performance. From Table 4.15, the results showed $p=0.000$ which was less than significance level of $p = 0.05$. Hence, the null hypothesis was rejected. Therefore, this means that tax burden ratio affects the business performance of liquor manufacturers in Nairobi City County, Kenya.

The results are in tandem with the findings of Nelson and Moran (2019), who systematically reviewed the effect of alcohol taxation on prices through a systematic review and meta-analysis of pass-through rates. The findings showed a substantial over shifting of prices, predicting imperfectly competitive markets for alcohol.

The results also agree with those of Feyisa (2019), who established that the productivity has been declining over the years despite other efforts. To enhance the economic performance of the Ethiopian alcohol and liquor industry, Feyisa (2019) argued that the firms that face higher tax burden ratios face inability to diversify and innovate their products because excise duties on some products, such as spirits, beers, and wines, create financial disincentives for product diversification. Jernigan and Ross (2020) opined that the fear of the firms to engage in new product lines because they would be bogged down with several tax requirements, further

stifling its profits, and therefore, choose to remain in the status quo. Therefore, failure to innovate due to heavy tax burden further leads to poor performance, because brands in the market are common, almost fully imitated, and therefore, cannot effectively compete to create more revenue (Conlon & Rao, 2020). Thus, strategic policy reforms are critical to reducing the tax burden ratio for liquor manufacturers to support their sustainable growth, innovation, and competitiveness in the local and global markets (Lenz, 2018). Alternatively, existing tax regimes can be efficiently managed to further ease doing business while achieving both social and economic gains from the industry (Morojele *et al.*, 2021).

CONCLUSION AND RECOMMENDATIONS

The study investigated the effect of tax burden ratio on business success. The results reveal that tax burden ratio has the strongest influence among all the predictors included in the model. The magnitude of the beta coefficient indicates that tax burden ratio contributes more to explaining variations in business performance than tax compliance rate, predictable tax systems, or dispute resolution mechanisms. The high t-statistic further confirms the robustness of this relationship. This finding implies that the proportion of tax obligations relative to firm income significantly shapes performance outcomes. When the tax burden is structured in a way that firms can manage without undermining liquidity and reinvestment capacity, performance improves. Conversely, excessive or poorly structured tax burdens may constrain working capital, limit expansion, and weaken profitability. The statistical strength of this variable suggests that the financial implications of taxation remain central to business sustainability within the liquor manufacturing sector.

On the effect of tax burden ratio on business performance of liquor manufacturers, the study concludes that the tax burden ratio exerts the strongest influence on business performance among all the taxation dimensions examined. With a standardized coefficient of 0.424 and an extremely substantial statistical test, tax burden ratio emerged as the most powerful predictor in the model. This finding emphasizes the centrality of the financial weight of taxation in shaping firm outcomes. The conclusion is that the structure and proportional impact of taxes on firm income significantly determine the ability of liquor manufacturers to sustain profitability, reinvest earnings, and expand operations. Therefore, the economic implications of taxation levels are critical in influencing sectoral performance.

Regarding tax burden ratio, which emerged as the strongest predictor of business performance, policymakers need to carefully evaluate the structure and cumulative impact of excise duties, corporate taxes, and other levies imposed on liquor manufacturers. Parliament and the National Treasury ought to undertake periodic tax incidence assessments to ensure that tax levels do not unintentionally suppress sectoral growth, reduce competitiveness, or encourage informal market activities. A balanced approach that safeguards revenue generation while preserving business sustainability is essential. The Kenya Revenue Authority need to enhance transparency in how tax obligations are computed to enable firms to anticipate financial commitments accurately. Business owners, on their part, should engage in strategic financial planning and scenario analysis to manage tax exposure effectively. Future research should explore optimal tax thresholds that maximize revenue without undermining firm performance, particularly in highly regulated sectors such as alcohol manufacturing.

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