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# Effect Of Excise Duty Tax On The Financial Performance Of Telecommunication Firms In Kenya

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## ABSTRACT

The telecommunications industries have gain a huge interest of the scholars in the recent past partly to the high growth rate in the industry as well as the contribution of the industry to the development of economies of various countries because of the huge turnover characterized by the industry. In Kenya, the telecommunication market is continuously and rapidly undergoing considerable changes in the advent of increasing competition, fast developments in the mobile market as well as improved international connectivity. With the favourable revenue margins characterized by telecommunication companies, the telecommunication firms are viewed as lucrative tax space in Kenya. The telecommunication industry like other industries is subject to the fiscal policies of the country and hence are subjected to general tax payments including income taxes whereas the ICT services that the consumers purchase are subjected to VAT. The tax is paid by the consumer in the form of excise taxes, sales taxes, VAT taxes, income taxes or tariffs. The coming into effect of the Finance act 2021 further increased internet and telephone service excise taxes to 20% from 15% implying that in addition to paying the 16% VAT, the consumers are subjected to the 20% excise tax. This means that, for every amount the consumers spent on airtime, 36% is tax that goes to the government. The proposed study seeks to determine the effect of consumption tax on the performance financially of Kenyan telecommunication entities. The specific objectives were to find out the effect of excise duty, import duty and VAT on the performance financially of telecommunication companies in Kenya. The study further sought to determine if the firm size moderates the relationships between sin tax and the performance financially of Kenyan telecommunication entities. The study was guided by the benefits theory and the ability to pay theory. The study adopted a causal research design in answering its research questions. The population of the study entails 26 telecommunication entities whose data is collected between the periods January 2017 to December 2022 making 156 observations. When data collection is complete, the data was cleaned and organized in an excel sheet to simplify the process of data arrangement and analysis. The data was set to panel data and analyzed using STATA version 13. The analysis of the data entailed the inferential as well descriptive statistics. The descriptive statistics

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involved the mean, maximum, the minimum values as well as the standard deviation. Inferential statistics involved the multivariate panel regression model. The study concluded that excise duty and import duty have a positive and significant effects on the performance financially. VAT had a positive and significant effect on the performance financially. Firm size had a moderating effect on the relationship between consumption tax and on the performance financially. The study recommended that KRA ought to regulate the taxes imposed on the telecommunication entities in Kenya.

**Key words:** *Consumption Tax, Excise Duty, Financial Performance, Firm Size*

## I. INTRODUCTION

Telecommunication companies in Kenya are experiencing stiff competition in the provision of both data and voice services. Some of the telecommunication firms have been recording increasing profits while others are recording declining profits (Businesswire report, 2022). In Kenya, the telecommunication industry is faced with a number of challenges that includes low subscription among customers, low quality infrastructure, poor connectivity in some parts of the country among others. This may be attributed to poor strategic plans of the companies, which in other cases has led to staff layoffs (Rahab et al., 2022). The performance of telecommunication entities like other companies in other sectors is paramount to its sustainability (Ngugi & Murugi, 2022). Though the telecommunication industry in Kenya has shown upward growth trend, the sector faces still competition and constraint by regulatory policies that include taxation policies skewed towards them.

Different parameters can be used in measuring organizational Performance, which include internal business, financial, customer, innovation and learning in order to give a true picture (Wandabwa & Kilika, 2020). Firm performance according to Mudogo (2019) focuses on three specific aspects including the market competitiveness of the firm, the profit and loss aspects of the firm and finally the shareholder returns. Good performance or bad performance of a firm is measured within the industry using specific standards set by the industry players with the assumption of fairness.

Digitization is considered as a major factor that contributes to productivity and firm performance. The main driver of digitization is the telecommunication industry, which is viewed as an important component that enhances the performance of a firm. Telecommunication industry provides both voice and data services, which are employed by the firms in the process of production. The telecommunication industry like other industries is subject to the fiscal policies of the country and hence are also subjected to general tax payments including income taxes whereas the ICT services that the consumers purchase are subjected to Value Added Tax (VAT) (Katz & Jung, 2023). Most of the telecommunication services are provided by multinational companies. As a result, taxing the profits of these companies becomes a challenge especially in those countries characterized by low capacity.

A consumption tax is levied on the services and goods purchased. The tax is paid by the consumer in the form of excise taxes, sales taxes, value added taxes, income taxes or tariffs. Consumption tax form a significant source of revenues for various governments globally. In OECD countries, consumption tax contributed to about 32.3 percent of tax revenues in 2019 (Tax Foundation, 2021). Taxes on consumption are charged by the authorities for different reasons including generation of revenue for the government, discouragement of consumption of certain services and goods, stimulate growth and development of the country, control inflation rates, redistribution of income in the society among others (Omodero, 2020).

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The tax application in the telecommunications industry is heterogeneous globally. Various governments have different objectives of taxation of the telecommunication industry, which may be conflicting. The reason to this is that the telecommunications industry plays huge contribution in the economic development of the various countries. Thus, due to the huge turnover that is associated with the telecommunication firms, the various governments are banking on these firms for revenue generation. The taxes that are subjected to the telecommunication firms are subject to the firms and the consumers. The governments apply two evident fiscal models in the taxation of the telecommunication firms. There are countries that have made the decision to reduce the taxes on the firms as a way of stimulating investments and adoption of the telecommunication firms while others have increased the taxation of the telecommunication industry to maximize revenue collection that would aid in the provision of the various government services (Katz & Jung, 2023).

A section of the governments wants the telecommunication firms to increase their coverage as cheaply and widely as possible to spur growth and increase the revenue generation to the government. As a way of encouraging more investments in the technological industry, other governments go an extra mile to provide tax incentives. The governments perceive the increased coverage as being beneficial as technology is instrumental in the provision of the general services in the sectors such as health, banking and education among others (Matheson & Petit, 2017).

In the developing countries especially with the huge revenue turnover associated with the telecommunication industry, the developing countries bank on the telecommunications industry for revenue generation. However, the overreliance on the industry for revenue generation by the developing countries has led to overtaxation which afffected negatively the growth of the industry by extension. A report by Deloitte (2015) indicates increasing average ration of the total indirect and direct taxes to the overall cost of ownership of the mobile phones to 21.1% from 17.4% in 2015 and 2007 respectively (Rota-Graziosi & Sawadogo, 2022).

The telecommunications industries have gain a huge interest of the scholars in the recent past partly to the high growth rate in the industry as well as the contribution of the industry to the development of the economies of various countries as a result of the huge turnover characterized by the industry. Globally, China is among the leading countries with the largest telecommunication market where the studies have indicated that an average of 1.25 million weekly cellular subscribers (Pyramid, 2018). On the other hand, India has been seen to have the fasted and competitive telecommunications market with a growth rate of 26% (PTI, 2019).

Globally, the tax application on the telecommunication entities are heterogeneous across the countries. The Chinese government has a set standard enterprise income tax (EIT) rate of 25%. The Chinese government has also considered the small-scale businesses with special tax rates of between 2.5% to 20% if the businesses meet certain requirements. In addition, the enterprises who have invested to perform qualifying outsourcing services as well as those enterprises with new and high technology status enjoy a tax rate of 15%. Those entities that have operations in some parts of China who operate in activities that are within the Chinese laws (15%) (Deloitte, 2023).

The tax policy of a country has affects the performance of companies since it affects the organizational structure as well as liquidity of a firm. Latin America is experiencing constant modifications and updates in the fiscal regulations. The tax regulations have an impact on the firm performance financially. However, the same regulations provide tax incentives and benefits where the entities can take advantage. The burden on tax has an impact on the behaviour of different entities in the different productive sectors. The tax incentives are

purposely meant to promote certain behaviours among the actors in the economy (Córdova-León et al., 2022).

Chile's main source of revenue are the consumption taxes with 53.1 percent of its revenue in total collected from consumption taxes. The United States government however raises 17.6 percent of the total tax revenue from consumption taxes. This is an indication that the consumption tax rates in Chile are higher as compare to the consumption tax rates in US. A comparison of consumption tax rates as a measure of GDP indicates that Hungary is leading with consumption taxes amounting to 16.2 percent of the GDP among the OECD countries. On the other hand, United States recorded the lowest tax rate percentage of GDP at 4.3 percent again an indication that US has the lowest consumption rates (Tax Foundation, 2021).

In terms of the sales revenues, US is leading both in the revenues as a percentage of GDP at 2 percent and has the highest total revenue share at 8.2 percent. The OECD countries that generate revenues out of sales taxes are only 10. Spain collects less than 0.1 percent as a share a percentage of GDP or as a share of total revenue in sales taxes. Turkey raises the most from excise taxes at 14.8 percent as a share of revenue whereas New Zealand occupies the lowest category in terms of revenue generation at 2.5 percent with Estonia taking the highest generation as a share of the gross domestic product at 4 percent. The united states generation of tax revenue as a share of GDP is the lowest ate 0.8 percent.

Alsarmi and Ahemed (2022) studying on VAT effects on the performance financially, found that, VAT would influence significantly of the companies operating in Kuwait and other GCC countries performance financially in the beginning of year 2018. Profitability was adopted in the study as one of the measures of performance financially of entities. Companies were also found to pass the effect of taxation to the final consumer.

The telecommunication entities in the developing countries are considered as the major avenues of generating revenues for the countries because of the turnover associated with entities as well as their formal sector status. According to Matheson and Petit (2021) the telecommunication entities face several sector specific taxes in the developing countries because the entities are characterized by huge turnovers and thus the developing country governments consider these entities as major sources of revenue (Rota-Graziosi & Sawadogo, 2022). The telecommunication industry is heavily taxed in countries such as Zambia, Chad, Congo and Guinea at 35 percent, 37 percent, 61 percent and 33 percent respectively (Statista, 2022). The total revenues generated from the telecommunication in Malawi, a country with relatively heavy telecom-specific taxes averaged 1.8 percent of GDP, in 2013-2015.

The telecommunication companies in Senegal made a contribution between 2005 and 2009 of about 20 to 30 percent of corporate income tax. More than a quarter of the sales taxes in Haiti came from the telecommunications sector in 2014. The overall taxation of the telecommunication industry has been on the rise especially in the developing countries who are seeking more revenues for service delivery. The average ratio of the indirect and direct taxes to the total cost of the mobile telecommunications rose to 20.1% from 17.4% in 2015 and 2007 respectively. The rising burden on the taxes imposed on the telecommunication industry has affected their incomes and by extension their operations and has raised concerns among policy experts regarding negative growth effects (Matheson & Petit, 2021).

In the sub-Saharan Africa, the taxes subjected on the transactions especially mobile-based that includes airtime has been increasing. An approximation of 26% of the fees and taxes paid by the telecommunication industry in 2015 in the 12 sub-Saharan countries that include South Africa, DRC, Chad, Madagascar, Guinea, Tanzania, Ghana, Rwanda, Niger, Senegal,

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Cameroon and Sierra Leone were classified as sector specific taxation and did not apply to all sector of the economy. In Uganda, the excise duty for the telecommunication firms is 15 percent, 12 percent in Kenya and 10 percent in Tanzania (International Centre for Tax and Development, 2022).

The sub-Saharan countries in Africa have been increasing the rates of taxation on the telecommunications industry with a view of increasing tax revenue generation form the formal, informal enterprises as well as the households that would aid them in the provision of services to the citizens (Matheson & Petit, 2017). However, the increasing burden of taxation in the industry has raised concerns as it has a potential negative effects on the growth of the industry and threatens the gains so far made by the entities in terms of inclusion financially especially in the countries still developing. Tax contribution of the telecommunication sector in DRC was $352 million much higher than $277 million which was the contribution from the general economy (Ndung'u, 2019). Furthermore, in 2015, the total contribution of the telecommunication industry in terms of sales revenue as a percentage of GDP was 3% in DRC. The contribution of mobile tax payments was at least 17% of the total government tax revenues (ogers & Pedros, 2017).

The mobile telephony and its associated financial transactions in Kenya now faces increasing taxation from tax exemption initially. The government of Kenya initially exempted the mobile devices from the VAT as a move in increase accessibility of the mobile telephony services by the citizens in 2009 (Ndung'u, 2019). This move led to an increased affordability of the mobile devices and many of the citizens acquired the handsets. During the same period, the purchases of the mobile devices increased by 200% and the penetration rates increased to 70% up from 50%. The increasing purchases and penetration rates of the mobile telephony devices accelerated other services including mobile money services. The total mobile subscribers of Kenya nearly doubled by March 2013 from 17.4 million to 29.8 million in June 2009 (Sapovadia, 2018).

The Kenyan telecommunication industry is subject to special telecom tax (International Centre for Tax and Development, 2022). When VAT act of 2013 came into effect, some of the goods that were earlier exempted by the government of Kenya including computer hardware, mobile phones and software were now subjected to taxes. The mobile phones were subjected to 16% VAT. Furthermore, airtime was also subjected to tax at the rate of 10%. An excise tax of 10% was introduced by the government of Kenya for all retail financial transactions. When the Finance act 2018 came into effect, the excise tax relating to bank transfers of money was increased to 20% from 10%, the excise tax increased to 15 % up from 10% on airtime and 15% excise tax introduced on fixed line services and internet services. As a result, these taxes have led to the rise in consumption tax (Ndung'u, 2019). The excise duty was raised by the government of Kenya to 20% from 15% in 2021 in a view of increasing revenue generation (Lane, 2022).

The telecommunication market in Kenya has been growing recently and based on the forecasts, stronger growth of the industry is expected by the year 2025. This increasing growth in the industry can be attributed to increasing adoption of the smartphones as well as the increasing population and know how. The growth can also be attributed to the robust regulatory frameworks that exist in the country. The main parts of the growth in the industry are the content services as well as the premium connectivity. Therefore, because of the increasing connectivity and adoption of the services by the firms, the firms have been realizing increasing revenue generation over time (Global monitor, 2022).

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The telecommunication entities in Kenya have been flagged by the Kenya Revenue Authority (KRA) because of possible under declaration of internet, airtime and other sales relating to mobile money transactions. The telecommunication firms are expected to remit 10% duty on money transfer services, 20% excise duty on sale of data bundles and airtime.

The telecommunication industry in Kenya comprises three tier one registered telecommunication firms, which include Telkom Kenya Limited, Airtel Kenya Limited and Safaricom, PLC. These are the firms that own a network, provide voice and data services as well as host their numbers (M'Kuma et al., 2020). However, there are other telecommunications entities in Kenya classified as tier two, three and four who may not have their own network by operate their own numbering system and mostly supported by the higher tier network services in serving their customers. Tier zero operators occupy the lowest tier classification and rely on tier four and tier one networks in the provision of their services. Their main characteristic is that they have their systems that they use in managing the users and embrace innovation in technology in a move aimed at avoiding reliance on purchase of network access from the other providers to support them (Wandabwa & Kilika, 2020). The telecommunication market in Kenya is continuously and rapidly undergoing considerable changes in the advent of increasing competition, fast developments in the mobile market as well as improved international connectivity (Mohammed & Shahin, 2020).

The mobile (SIM) penetration dropped by 2.5 percent from 65.1 million subscribers as at December 2022 to 64.9 million subscribers in 2022 and stood. Part of the reason for the decline may have been the SIM registration that is ongoing where some cards were deactivated. On the other hand, the subscriptions for mobile money however increased to 36.4 million subscriptions by March ending 2022 up from 35.2 million subscribers as at end of December 2021 thus translating to a rate of penetration of 73.8%. During the first quarter of 2022, the domestic mobile voice traffic dropped to 1.4% from 7.7% due to the conclusion of various promotions that were running during the previous quarter (Competition Authority, 2022).

## II. PROBLEM STATEMENT

The Kenyan telecommunication entities are experiencing stiff competition in the provision of both data and voice services. Some of the telecommunication firms have been recording increasing profits while others are recording declining profits. The telecommunication industry like other industries is subject to the fiscal policies of the country and hence are also subjected to general tax payments including income taxes whereas consumers are subjected to VAT on the ICT services that they purchase (Katz & Jung, 2023). The telecommunication firms are viewed as lucrative tax space. The coming into effect of the Finance act 2021 further increased internet and telephone service excise taxes to 20% from 15% implying that in addition to paying the 16% VAT, the consumers are also subjected to the 20% excise tax. This means that, for every amount the consumers spent on airtime, 36% is tax that goes to the government.

Consumption tax form a significant source of revenues for various governments globally. Various governments have different objectives of taxation of the telecommunication industry, which may be conflicting. The telecommunication firms especially those in the developing country governments are persieved to have a high turnover and hence these governments bank on the firms for revenue generation. The burden of taxation of these firms in the developing countries has been increasing over time. In Kenya, the taxation on the telecommunication industry has changed from tax exemption in 2009 to increaseing taxation on the firms every time a new finance act comes into effect, the latest being the finance act 2021 that increased the excise duty from 15% to 20% (Ndung'u, 2019).

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Though consumption tax remains a critical aspect of taxation affecting performance of companies, a number of studies have been conducted on the effect of consumption tax on performance of telecommunication firms. A study by Matheson and Petit (2021) indicated that taxes on the telecoms sector have placed the operations of the telecoms firms in uncertainty, high and regulatory and compliance costs. The study however, did not indicate the impact of these taxation levies on performance financially of these telecom firms indicating methodological gap. Furthermore, the study focused at all the developing countries contrasting the current study that narrows to the context of consumption tax in Kenya. Taxation policies vary from country to country and from territory to territory hence contextual gap. A study by Katz and Jung (2023) on the impact of subjecting the telecommunications industry to taxation found strong evidence that taxation affects the telecommunications investment negatively in terms of high regulatory fees, custom duties, excise taxes and profit taxes. However, the study did not indicate how custom duties, excise taxes impact the profitability of the telecom firms. The proposed study seeks to narrow to the effect import duty, excise duty and VAT on telecom firms' performance' financially in Kenya. Local studies in Kenya conducted on taxation focused at the performance of SMEs tax effects (Kamar, 2015; Ngali, 2020) or listed firms (Tirimba, et al 2016). However, no study if they exist have focused at the effect of consumption tax on the Kenyan telecommunication firms' performance financially an indication of contextual gap. Therefore, the proposed study seeks to determine the impact of consumption tax on the telecommunication entities' performance financially in Kenya. This study has been necessitated by the persistent increase in the consumption costs of the telecommunication firms as a result of the changing fiscal policies in the country.

## III. OBJECTIVES

To determine the effect of excise duty on the financial performance of Kenyan telecommunication companies.

## IV. EMPIRICAL LITERATURE REVIEW

A number of researches have been done on how taxation affects firms' performance financially. A study was conducted by Katz and Jung (2023) on how taxation affects the telecommunications industry. The study took note of the fact that the application of taxes on telecommunication firms globally is not homogeneous. Various governments have conflicting objects with regards to the tax treatment of the telecommunication firms. This is mainly because the government perceives the telecommunication firms as one of its major sources of revenue due to its turnover and at the same time appreciating their role in the economic development. Thus, according to the study, the telecommunication firms are subjected to numerous taxes, which have had an impact on their service prices. The current study however deals in the excise duty effects on the telecommunication firms' performance in terms of finance in Kenya.

In a research on how excise duty affects the manufacturing entities' performance financially in Kenya, focusing on manufacturing entities in kiambu county, Mwangi (2019) pointed out that excise duty has been in use in Kenya by the government to raise revenue for its service delivery to its citizens. The study concluded that the regulation on excise tax, rates of excise tax as well the performance of the manufacturing entities financially is affected by the models of pricing of the excisable goods. The study further indicated that the transfer of excise tax to consumers reduces the profitability of the manufacturing firms. Thus, the favorable excise regulation improves on firm profitability. The study was focused on excise duty effects on the

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manufacturing entities' performance financially whereas the current study focuses on effect of excise duty on the performance financially of Kenyan telecommunication firms.

Ombati (2021) further conducted a research on the multiple taxation effects on manufacturing entities' performance financially of the entities listed at NSE. Results of the research underscored the effect of taxation policies on the investments within a country. The increment in taxes has an effect of the product prices of the manufacturing firms and ultimately on their performance financially. Thus, prudent fiscal policies by the government are necessary in ensuring that the government raises the much-needed revenue as well as allowing the flourishing of the manufacturing firms, which would in turn create opportunities and contribute in economic development. The focus of the investigation was on the multiple taxation effects on the manufacturing firms' performance financially whereas the current study focuses on effect of excise duty on the performance financially of telecommunication entities in Kenya.

A research was conducted by Dong et al. (2022) on the rate of bearing of tax that is actual actual impacts on the enterprises performance financially. Owing to the impact of the Covid 19 pandemic, most enterprises were affected and hence in an attempt to help these enterprises pick, the government embarked on reducing various taxes. Therefore, it was the conclusion of the study that the reductions in taxes affected positively on the enterprises' performance financially in the short term. This study was focused on how the enterprises' performance financially was affected by the actual tax-bearing rate whereas the current study focuses on effect of excise duty on the telecommunication entities performance financially in Kenya.

## V. THEORITCAL REVEIW

### Benefit Theory

Benefits theory is a theory of taxation that was espoused by Knut Wicksell (1896) and Erik Lindahl (1919). The benefit theory is a principle of taxation, which postulates that the government should impose levies on individuals in accordance with the benefits accrued from such payments. One of the sources of revenue for the government is through the taxes imposed on its citizens. Thus, the more benefits the individuals derive, the more they should pay to the state. Taxes, according to this principle help determine the type of services the individuals would receive from the government (Lin et al., 2020).

Ideally, taxes on individuals reduces the income of the individuals. However, the taxes, which make up the income of the government, are returned by the government back to the community in the form of service delivery (Taghizadeh-Hesary & Yoshino, 2020). This may take the form of routine development within the community, which benefited the entire community in the end. The main justification for the principle is that taxation serves the purpose aiding in the provision of government services. Thus, citizens pay taxes in return to the services that the governments provide to them (Saez & Zucman, 2020).

The theory is of relevance because even though the consumption tax may reduce the income taxes of the telecommunication firms, the firms may benefit from these taxes through the various services provided by the government. Thus, the theory clearly presents an explanation of the role of consumption taxes that the telecommunication firms are subject to. The theory has however been criticized in that one cannot point to a direct benefit the gain from the government from the taxes they pay. In addition, applying the principle means that the less endowed would have to contribute more because they are the greatest beneficiaries from the government services.

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### Ability to Pay Theory

The theory was espoused by Adam Smith (1776) and postulates for a progressive income taxation in that people with the ability to pay more should pay a higher percentage of the income tax. Tax payment is a legal obligation for the citizens to contribute in enhancing service delivery by the government of the day. The principle of ability to pay gives the provision for fair taxation if it comes to tax norms with fiscal substance. The rationale behind this principle is that those with higher incomes are more capable of paying more taxes (Koritnik & Podlipnik, 2017).

The government sources its main revenue from taxes on individuals and businesses. The government uses the revenue generated from taxation to fund its provision of services across the country. In order to generate substantial amount of revenue, the principle advocates for a progressive tax system when the well-endowed pay more compared to the less endowed (Clemens & Veuger, 2020). The ability-to-pay theory promotes the concept of income distribution within the society as it advocates for more revenue to be collected from those with high incomes in the society which is the spent or redistributed in the provision of services where less endowed are the most beneficiaries (Coote et al., 2019).

The ability to pay theory is of significance in the current study because it outlines a progressive method in which a government can use while implementing its taxation policies on individuals and businesses. Thus, the principle advocates that the government should adopt a system whereby individuals and businesses should pay taxes depending on their levels of income. Those on the higher income bracket are required to pay more compared to those on the lower income bracket. However, the theory has been equally criticized and the critics assert that the principle is not fair as it punishes hard work and reduces the incentive to earn more.

## VI. CONCEPTUAL FRAMEWORK

It presents a diagrammatic presentation of the expected relationship between the dependent and the independent variables of the study. The independent variable comprises of the study are import duty, added tax and excise duty value whereas the dependent factors is the performance financially of Telecommunication entities in Kenya.

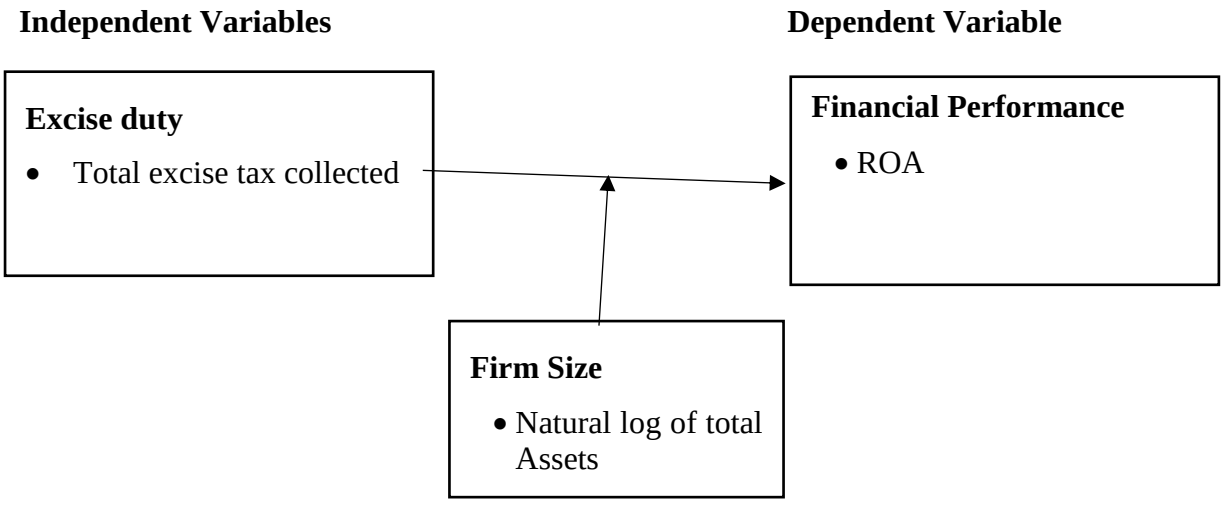


**Figure 1: Conceptual Framework**

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## VII. RESEARCH METHODOLOGY

The study adopted a causal research design in answering its research questions. The design can be used to give answers to the questions such as where, what, when and how (Erickson, 2017).

The population of the study involved the 26 telecommunication companies operating in Kenya as of December 2022. The data was collected from this population for the Periods January 2017 to December 2022 on excise duty paid by the identified telecommunication firms during the period under review. Furthermore, data was collected on the total assets of the firms across the study period.

The size of a sample is used to refer to the population portion of the study where the researcher deduces inferences of the research. The population of the study entails 26 telecommunication firms whose data is collected between the periods January 2017 to December 2022 making a total of 156 observations. This data size is manageable and hence the study adopted a census method.

The accuracy and reliability of the results of a study are squarely dependent on the accuracy of the data collected. The study adopted secondary data in its analysis. The data was sourced from the financial statements of the telecommunication firms identified in the study for the period from January 2017 to December 2022. Thus, the data to be collected was specifically cover the excise duty paid by the companies and finally the return on assets. The data covered the identified telecommunication entities specifically in Kenya.

When data collection is complete, the data was cleaned and organized in an excel sheet to simplify the process of data arrangement and analysis. The data was set to panel data and analyzed using STATA version 13. The analysis of the data entailed the inferential as well descriptive as the statistics. The descriptive statistics of the study involved the mean, maximum, the minimum values as well as the standard deviation. On the other hand, the inferential statistics involved the panel regression model that was estimated to determine the relationship between the dependent and the independent variables of the study.

The study adopted a multivariate model in estimating the relationship between the independent variables (excise duty, import duty and value added tax) and the dependent variable of the study (Performance financially). However, this model was estimated after running the diagnostic tests that was key in determining the suitability of the data for regression analysis. With the dynamic panel data, the population in the study is studied across the specified time period (Hsiao, 2007). The study estimated the following panel model as outlined below.

$$Y_{it} = \beta_0 + \beta_{1i}X_{1it\,t} + \varepsilon_{it}$$

Where

$\beta_0$ the model's constant term

$\beta$ are the beta Coefficient of variables

Y stands for performance financially of telecommunication entities in Kenya

t is time variance 2017 to 2022

i observations, telecommunication entities.

$\varepsilon$ is the error term

In testing the moderating effect of entity size on the relation between consumption tax and of the telecommunication entities performance financially, the following models were used.

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$Y_{it} = \beta_0 + \beta_{1i}X_{1it} + \varepsilon_{it}$ .....(i)

$Y_{it} = \beta_0 + \beta_{1i}X_{1it} + \beta_{2i}X_{2it} + \varepsilon_{it}$ .....(ii)

Whereby

$\beta_0$ represents constant term

$\beta_{1-4}$ are the beta Coefficient of variables

Y stands for performance financially of telecommunication entities in Kenya

$X_1$ is excise duty

$X_4$ is firm size

t represents time variance 2017 to 2022

i stands for the number of observation, telecommunication entities.

ε refers to the error term

For the results to be reliable, the level of significance of the estimated results should be <0.05. The conclusions to be made in the study depended on the level of significance of the results. The results with the estimated P value greater than 0.05 showed that they are insignificant whereas the results with estimated P values < 0.05 implied that they are significant and can be used to make reliable inferences.

The tests are conducted to determine the suitability of the data collected to perform a regression analysis. The tests include tests for multicollinearity, autocorrelation, normality, heteroscedasticity, unit root tests and hausman specification tests. Gall et al. (2006) indicated that the basic assumptions of a regression model should be met failure to which, the results of the estimated model would give unreliable estimates and this means that the results were not used to draw reliable inferences.

## VIII. RESEARCH FINDINGS AND DISCUSSION

### Descriptive Statistics

This entails the means of the respective variable, their SDs as well as the minimum and the maximum values. Descriptive outcomes of the study are outlined in the subsequent sections.

**Table 1: Descriptive Results**

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| Excise Duty in billion KES | 156 | 1.76215 | 0.48831 | 0.95424 | 2.94596 |
| ROA | 156 | 0.09966 | 0.07503 | 0.00025 | 0.34742 |

From the results, it can be noted that the size of the entity had a mean of 6.72756 as well as a standard deviation of 12.2336, a minimum value of 0.2 and s corresponding maximum value of 74. Excise duty on the other hand had a max value of 2.94596 and a min value of 0.95424. Its mean was 1.76215 and its corresponding standard deviation was 0.48831. The mean and standard deviation values for import duty were 1.55039 and 6.61409 respectively. Its corresponding max and min values were 42.29 and 0.131 in that order.

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### Correlation Analysis

This was conducted to find out the relationship, direction and magnitude of the between the independent variables that is excise duty and entity size on performance financially.

**Table 2: Correlation Results**

| | ROA | Excise Duty | Import Duty | Value Added Tax | Firm Size |
|---|---|---|---|---|---|
| ROA | 1.000 | | | | |
| Excise Duty | -0.2869 | 1.000 | | | |

The correlation outcomes outlined indicated that excise duty had a moderately strong, negative and a correlation that was significant statistically (r=-0.2869, p=0.000<0.05). In addition, the import duty strongly and negatively correlated with performance financially. Thus, the size of a firm can be used to ascertain the performance of a telecommunication entity financially.

### Testing Moderating effect of Firm Size

In order to test the moderating effect of entity size on the relationship between consumption tax and performance financially, the following models were used.

$Y = 0.065 - 0.065X_1 + 0.0076X_2$

| Return on Assets | Coef. | Std. Err. | t | P>t | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| Excise Duty | -0.0558 | 0.02554 | -2.19 | 0.031 | -0.1064 | -0.0053 |
| Firm Size | 0.00897 | 0.00128 | 6.98 | 0.000 | 0.00643 | 0.01151 |
| _cons | 0.14795 | 0.04695 | 3.15 | 0.002 | 0.05503 | 0.24086 |
| R-sq: | 0.4026 | | | | | |
| Prob > F | 0.000 | | | | | |
| $F(_{4, 126})$ | 14.12 | | | | | |

$Y = 0.148 - 0.056X_1 + 0.009X_2$

Where;

Y stands for performance financially of telecommunication entities in Kenya

$X_1$ is excise duty

$X_2$ is firm size

A clear look at the results indicate that entity size reduces the effects of excise duty on performance financially from 0.065 to 0.056. Thus, the study concludes that entity size moderates on the association between consumption tax and performance financially.

### Discussion of the Findings

Here, the outcomes of the investigation are discussed. Thus, key outcomes of other scholars relevant to this investigation are compare with the outcomes of the study at hand. The outcomes can either concur or contrast with the past results.

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### Excise Duty

From the analysis of the results, excise duty had a max value of 2.94596 and a min value of 0.95424. Its mean was 1.76215 and its corresponding SD was 0.48831. The correlation results outlined indicated that excise duty had a moderately negatively strong correlation and (0.2869). The correlation was significant statistically (0.000<0.05). The outcomes of regression indicated that excise duty significantly and negatively influences the performance financially of Kenyan telecommunication entities (β=-0.065, p= 0.000<0.05). This indicates that excise duty negatively and significantly affects the financial wellbeing The results confirm the findings of Katz and Jung (2023) who indicated that telecommunication firms are subjected to numerous taxes, which have had an impact on their service prices. Furthermore, Mwangi (2019) argued that the transfer of excise tax to consumers reduces the profitability of the manufacturing firms. Thus, the favorable excise regulation improves on firm profitability. In addition, Ombati (2021) the increment in taxes has an effect of the product prices of the manufacturing firms and ultimately on their performance financially. Thus, prudent fiscal policies by the government are necessary in ensuring that the government raises the much-needed revenue as well as allowing the flourishing of the manufacturing firms, which would in turn create opportunities and contribute in economic development. Dong et al. (2022) further indicated that the reductions in taxes affected positively on the enterprises' performance financially in the short term.

### Moderating Effects of Firm Size

Entity size reduces the effects of excise duty on performance financially from 0.065 to 0.056. In addition, entity size reduces the effects of import duty on performance financially from 0.037 to 0.014. Furthermore, entity size enhances the effects of VAT on performance financially from 0.0076 to 0.053. Thus, the study concludes that entity size moderates on the association between consumption tax and performance financially. The outcomes confirm the findings of Pila et al. (2022) who argued that the size of a firm has been found to be a significant determinant of profitability because of the economies of scale. The separation of ownership from control of firms negatively impacts its performance financially because of fraud, inefficiencies, leakages, losses and high operations costs. It is more difficult to control large firms compared to small firms thus leading to decreased management efficiency in the large firms. Thus, the study concluded that entity size moderates on indicators of uncertainty financially and of manufacturing entities' financial wellbeing in Kenya. Ishmail et al. (2023) further argued that the size of a firm significantly moderates on the nexus existing between credit risk and performance financially. Thus, large firms are better placed at managing credits compared to small firms. Muriithi (2020) indicated that firms should take advantage of the internal mechanisms to control the adverse effects of the capital structure and when the interest rates are determined by the market. Thus, the firm assets should be utilized by firms that can protect them from the adverse effects brought about by capital mix.

## VIII. SUMMARY, CONCLUSION AND RECOMMENDATIONS

From the analysis of the results, excise duty had a maximum value of 2.94596 and a minim value of 0.95424. Its mean was 1.76215 and its corresponding SD was 0.48831. The outcomes of correlation outlined indicated that excise duty had a strong, moderate negative correlation. The correlation was significant statistically (r=-0.2869, p=0.000<0.05). The outcomes of regression intimated that excise duty negatively and significantly influences the performance financially of Kenyan telecommunication entities (β= -0.065, p= 0.000<0.05). This indicates that excise duty negatively and significantly affects the financial wellbeing of the telecommunication entities in Kenya. The results of the study are consistent with the findings

of Katz and Jung (2023) who indicated that telecommunication firms are subjected to numerous taxes, which have had an impact on their service prices.

The study further pointed out that entity size reduces the effects of excise duty on performance financially from 0.065 to 0.056. Thus, the study concluded that entity size moderates on indicators of financial uncertainty and of Kenyan manufacturing companies' performance financially.

## Conclusion

Excise duty negatively and significantly influences on the performance of telecommunication organizations financially. This indicates that excise duty negatively and significantly affects the financial wellbeing of Kenyan entities dealing with telecommunication in Kenya. Thus, increasing excise duty levied on the telecommunication organizations in Kenya negatively effect on the performance of the Kenyan telecommunication companies financially. Excise duties entail taxes on the use or sale of some specific items. They are indirect taxes.

The study makes the conclusion that the size of the entity moderates on the relation between consumption tax and performance financially of the Kenyan telecommunication entities. It is more difficult to control large entities compared to small entities thus leading to decreased management efficiency in the large firms.

## Recommendation

KRA ought to control the imposition of excise duty on the telecommunication entities in Kenya. This is because, from the conclusion, increasing the excise duty on the telecommunication firms negatively affects their productivity and by extension negatively affects the performance of KRA measured by the amount of taxes collected.

Past studies including this study argues that taxes largely have deterrent negative impact on performance. For instance, in this study, excise had negative impact on performance of telecommunication firm measured using return on assets. However, this may not the true reflection. There is also perception that tax compliance (payment) should have positive impact on performance because taxation compliance by paying taxes means abiding by legal obligation of operations. As such, well thought and collaborative taxes should exhibit positive impact on firm performance but only when there is good institutional quality existing in government. Thus, further research should focus on the effect of consumption taxes on performance of telecommunication firms under mediating effect of institutional quality.

## Limitation of the study

The study was confronted with one major significant methodological limitation particularly data access and availability. Some of the telecommunication companies did not post financial data and tax data on their website and for some data were missing for some years.

## REFERENCES

Ali, A. (2021). Value Added Tax on Cross-Border Digital Supplies: The Kenyan Approach under the Finance Act 2019. *Journal of Intellectual Property and Information Technology Law (JIPIT), 1*(1), 37-62.

Alsarmi, Y. N. A., & Ahemed, E. R. (2022). Determinants of efficiency of tax's collection in Oman. *JABE (Journal of Accounting and Business Education), 7*(1), 59-71.

Born, B., & Breitung, J. (2016). Testing for serial correlation in fixed-effects panel data models. *Econometric Reviews*, *35*(7), 1290-1316.

Businesswire report (2022). Telecommunications Industry in Kenya 2022: Focus on Bridging the Digital Gap between Urban and Rural Areas - ResearchAndMarkets.com. Available at https://www.businesswire.com/news/home/20220412005609/en/Telecommunications-Industry-in-Kenya-2022-Focus-on-Bridging-the-Digital-Gap-between-Urban-and-Rural-Areas---ResearchAndMarkets.com. Accessed on 2nd June 2023.

Clemens, J., & Veuger, S. (2020). Implications of the COVID-19 pandemic for state government tax revenues. *National Tax Journal*, *73*(3), 619-644.

Competition Authority. (2016). *Telecomunication Landscape*.

Competition Authority. (2022). Telecomunication overveiw.

Coote, A., Kasliwal, P., & Percy, A. (2019). Universal basic services: Theory and practice-a literature review.

Córdova-León, F., Duque-Espinoza, G., Aguirre-Quezada, J. C., & Sigüencia-Muñoz, A. (2022). Tax incentives and financial performance: empirical evidence of Ecuadorian companies. *Cuadernos de Administration (Universidad del Valle)*, *38*(73).

Crawford, I., Keen, M., & Smith, S. (2010). Value added tax and excises. *Dimensions of tax design: the Mirrlees review*, *1*, 275-362.

Dang, C., Li, Z. F., & Yang, C. (2018). Measuring firm size in empirical corporate finance. *Journal of banking & finance*, *86*, 159-176.

Deloitte (2023). International Tax China Highlights 2023. https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-chinahighlights-2023.

Deloitte. (2007). "Global Mobile Tax Review, 2006-2007" .

Deloitte. (2015). "Digital Inclusion and Mobile Sector Taxation.".

Dezhina, I., Nafikova, T., Gareev, T., & Ponomarev, A. (2020). Tax incentives for supporting competitiveness of telecommunication manufacturers. *Форсайт*, *14*(2), 51-62.

Dong, Y., Liang, C., & Wanyin, Z. (2022). Research on the Impact of Actual Tax Bearing Rate on the Financial Performance of Enterprises. *Frontiers in Public Health, 10(1) 78-86*.

Dougherty, S., Harding, M., & Reschovsky, A. (2019). Twenty years of tax autonomy across levels of government: measurement and applications.

Eva, B., & Stern, R. (2019). Causal explanatory power. *The British Journal for the Philosophy of Science*.

Fatihudin, D. (2018). How measuring financial performance. *International Journal of Civil Engineering and Technology (IJCIET)*, *9*(6), 553-557.

Frost, J. (2020). Multicollinearity in Regression Analysis: Problems, Detection, and Solutions.

Gartner. (2022). Telecommunication services.

Global monitor. (2023). Kenya telecomunication market report .

Habibniya, H., Dsouza, S., Rabbani, M. R., Nawaz, N., & Demiraj, R. (2022). Impact of capital structure on profitability: panel data evidence of the telecom industry in the United States. *Risks*, *10*(8), 157.

Hintsa, J., Mohanty, S., Tsikolenko, V., Ivens, B., Leischnig, A., Kähäri, P., ... & Cadot, O. (2014). The import VAT and duty de-minimis in the European Union–Where should they be and what will be the impact?. *Final Report, Crossborder Research Association, Lausanne*.

International Centre for Tax and Development (2022). Mobile-money taxation in East Africa: Harmonisation or laissez-faire? Available at https://www.ictd.ac/blog/mobile-money-taxation-east-africa-harmonisation/. Accessed on 2nd June 2023.

Ishmail, D. M., Memba, F., & Muriithi, J. (2023). Moderating effect of firm size on the relationship between credit risk and financial performance of microfinance banks in Kenya.

Jauzaa, A., & Hirawati, H. (2021). Financial performance of telecommunication sector companies before and during the COVID-19 pandemic. *Airlangga Journal of Innovation Management*, *2*(2), 131.

Kamar, I. K. (2015). Effects of government taxation policy on sales revenue of SME in Uasin Gishu County, Kenya. *International Journal of Business and Management Invention*, *4*(2), 29-40.

Kamau, D. (2018). *Effect of Tax Incentives on Financial Performance of Quoted Agricultural Firms in Kenya for the Period 2011-2015* (Unpublished doctoral dissertation, United States International University-Africa).

Kanellos, N., Katsianis, D., & Varoutas, D. (2022). Forecasting a telecommunications provider's market share, 31st European Conference of the International Telecommunications Society (ITS): "Reining in Digital Platforms? Challenging monopolies, promoting competition and developing regulatory regimes", Gothenburg, Sweden, 20th - 21st June 2022, International Telecommunications Society (ITS), Calgary.

Karama B., F. & Linge K. (2019). Strategic Factors Influencing Market Share of Telecommunications in Kenya. *Journal of Marketing and Communication, Vol 2(1) pp.* 80-91.

Katz, R., & Jung, J. (2023). The impact of taxation in the telecommunications industry. *Information Economics and Policy*, 101016.

Koritnik, B., & Podlipnik, J. (2017). The Ability-to-Pay Principle as a Primarily Constitutional Basis for Tax Norms of a Financial Nature. *Izzivi ustavnega prava*, *21*.

Kubjatkova, A., Krizanova, A., & Jurickova, V. (2021). Value Added Tax and Its Influence on Pricing and Price Decision Making of Companies–A Case Study. In *SHS Web of Conferences* (Vol. 91, p. 01009). EDP Sciences.

Kuria, J. (2017). Effects of corporate income and value added tax incentives on the performance of export processing zone (EPZ) firms in Kenya.

Lane, A. (2022). The Effects of Taxing Mobile Phone Airtime & Data Bundles in Kenya in 2021. Available at https://blog.huawei.com/2022/05/27/effects-taxing-mobile-airtime-data-bundles-kenya-2021/. Accessed on 2nd June 2023.

Lin, K. Y., Wang, Y. T., & Huang, T. K. (2020). Exploring the antecedents of mobile payment service usage: Perspectives based on cost–benefit theory, perceived value, and social influences. *Online Information Review*, *44*(1), 299-318.

Matheson, T., & Petit, P. (2017). Taxing Telecommunications in Developing Countries . *IMF Working Paper*.

Matheson, T., & Petit, P. (2021). Taxing telecommunications in developing countries. *International Tax and Public Finance*, *28*(1), 248-280.

M'Kuma, E., Kinyua, J., & Kariuki, S. (2020). Organizational Assets and Strategic Positioning in Telecommunication Industry in Kenya.

Mohammed, S. S., & Shahin, O. (2020). Service quality perspectives in telecommunication sector: Trust and loyalty investigation. *Amazonia Investiga*, *9*(28), 394-403.

Mudogo, E. K. (2019). *Technological innovation and performance of telecommunication companies in Kenya* (Doctoral dissertation, University of Nairobi).

Muriithi, L. N. (2020). *Effects of firm size on the relationship between interest rates and capital structure of listed manufacturing and construction firms in Kenya* (Doctoral dissertation, Strathmore University).

Mwangi, V. W. (2019). *Effects of Excise Duty on Financial Performance of Manufacturing Firms in Kenya: A Case of Manufacturing Firms in Kiambu County* (Doctoral dissertation, United States International University-Africa).

Ndung'u, N. S. (2019). Taxing mobile phone transactions in Africa: Lessons from Kenya.

Ngali, J. I. (2020). Effect of Taxation on the Performance of Small and Medium Enterprises in Voi Town, Kenya. (Masters Dissertation, Kenyatta University, Nairobi Kenya).

Ngugi, D. W., & Murugi, E. (2022). Competitive strategies and performance of telecommunication firms in Kenya. *International Academic Journal of Human Resource and Business Administration*, *4*(1), 226-251.

OECD. (2023). Tax revenue (indicator).

Omar, M. A. (2020). Effect of Value Added Tax on Financial Performance of Small and Medium Enterprises in Mombasa County.

Ombati, K. (2021). *Effect of Multiple Taxation on Financial Performance of Manufacturing Firms Listed at the Nairobi Securities Exchange* (Doctoral dissertation).

Omodero, C. O. (2020). The consequences of indirect taxation on consumption in Nigeria. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(4), 105.

Pila, J., Muturi, W., & Olweny, T. (2022). Moderating Effect of Firm Size on Financial Uncertainty Indicators and Financial Performance of Manufacturing Firms in Kenya. *Journal of Accounting and Finance in Emerging Economies*, *8*(4), 489-500.

PTI. (2019). Indian Telecom market to be at Rs 344,921 crore by 2012. *The Economic*.

Pyramid,. (`2018). Telecommunications Markets in China. *Pyramid publications* .

Rahab, N., Ann, M., & Samuel, M. (2022). Niche Market Penetration Strategy and Performance of Selected Telecommunication Application Service Firms. *International Journal of Managerial Studies and Research*, *10*(2), 8-17.

Rogers, M., & Pedros, X. (2017). Taxing mobile connectivity in Sub-Saharan Africa: a review of mobile sector taxation and its impact on digital inclusion. *GSMA. London. Available online: https://www. gsmaintelligence. com/research*.

Rota-Graziosi, G., & Sawadogo, F. (2022). The tax burden on mobile network operators in Africa. *Telecommunications Policy*, *46*(5), 102293.

Rota-Graziosi, G., & Sawadogo, F. (2022). The tax burden on mobile network operators in Africa. *Telecommunications Policy*, *46*(5), 102293.

Saez, E., & Zucman, G. (2020). The rise of income and wealth inequality in America: Evidence from distributional macroeconomic accounts. *Journal of Economic Perspectives*, *34*(4), 3-26.

Sah, R. K. (1991). Social osmosis and patterns of crime. *Journal of Political Economy*.

Sapovadia, V. (2018). Financial inclusion, digital currency, and mobile technology. In *Handbook of Blockchain, Digital Finance, and Inclusion, 2(1)* 361-385.

Singh, A., Hosanagar, K., & Gandhi, A. (2020, July). Machine learning instrument variables for causal inference. In *Proceedings of the 21st ACM Conference on Economics and Computation* (pp. 835-836).

Statista (2022). Average taxation as a proportion of market revenue in the mobile sector in selected African countries as of 2017. Available at https://www.statista.com/statistics/1202804/taxation-as-proportion-of-market-revenue-in-the-mobile-sector-in-africa-by-country/. Accessed on 2nd June 2023.

Taghizadeh-Hesary, F., & Yoshino, N. (2020). Sustainable solutions for green financing and investment in renewable energy projects. *Energies*, *13*(4), 788.

Tax Foundation (2021). Consumption Tax Policies in OECD Countries. https://taxfoundation.org/consumption-tax-policies/

Taxfoundation. (2023). Tax defination. *Tax basics*.

Tipton, E., & Pustejovsky, J. E. (2015). Small-sample adjustments for tests of moderators and model fit using robust variance estimation in meta-regression. *Journal of Educational and Behavioral Statistics*, *40*(6), 604-634.

Tirimba, O. I., Muturi, W., & Sifunjo, K. E. (2016). Effects of tax incentives on performance of listed firms in Kenya. *International Journal of Scientific and Research Publications*, *6*(7), 678-690.

Wandabwa, M., & Kilika, J. (2020). Strategic Information Technology and Performance of Telecommunication Firms in Kenya. *International Journal of Scientific and Research Publications*, *10*, 12.

World bank. (2021). Legal Framework for Telecommunications in Kenya.

Worldbank. (2022). *https://www.worldbank.org/en/topic/taxes-and-government-revenue*.