PERCEIVED EFFECT OF TAX POLICY ON INCOME TAX COMPLIANCE AMONG SELECTED GAMBLING FIRMS IN NAIROBI COUNTY, KENYA

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS, DEPARTMENT OF ACCOUNTING & FINANCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS IN TAX ADMINISTRATION

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DECLARATION

Student Declaration

This research project is my original work and has not been presented for a degree in any other university.

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Supervisors Declaration

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DEDICATION

This research work is dedicated to my beloved parents and my family.

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ABSTRACT

Income tax compliance is an important issue in any economy worldwide. The gambling and lottery industry has recently risen to become a very lucrative industry in Kenya that can no longer be ignored and warrants more research. Companies are required to adhere to taxation regulations set out by the Kenyan government and file accurate tax returns. However, few gambling companies comply with tax policies, implying that majority are operate in the black market evading taxation. This study, therefore, sought to determine the effect of tax policy on income tax compliance among gambling firms in Nairobi County, Kenya. The specific objectives were to establish the influence of tax regimes on income tax compliance, to determine the effect of tax rates increase on income tax compliance among gambling firms in Nairobi County, Kenya, and to effect of tax base on income tax compliance among gambling industry in Kenya. This study was based on three theories: The Ability to Pay, The Tax Morale Theory and Economic Theory of Income tax compliance. The research adopted explanatory research design. The target population for the study was gambling companies operating in Nairobi City. According to Betting and Licensing Control Board, there are 30 major sports gambling and lottery companies in Nairobi County. Therefore, the target population for this research was 250 senior and middle level managers in the 30 gambling and lottery companies in Nairobi County, Kenya. Simple random sampling technique was adopted to pick out the respondents obtained from managers of gambling companies. Furthermore, the sample size was determined by use of Yamane (1967) formula which will yield a sample size of 154. Primary data was collected through use of semi-structured questionnaires. Data was analyzed using descriptive and inferential statistics. From regression results, the adjusted R Square value was 0.191 indicating that the model explains only about 19.1% of the variability in the income tax compliance by gambling firms. Furthermore, the findings revealed that a unit increase in tax regime is associated with an estimated increase of 36.9% units in income tax compliance; a unit increase in tax rate is associated with an estimated increase of 34.9% units in income tax compliance and a unit increase in tax base is associated with an estimated increase of 19.9% units in income tax compliance. Furthermore, hypotheses testing revealed that tax regimes, tax rates and tax base have a significant effect on income tax compliance among gambling firms with ($p=0.000<0.05$); ($p=0.000<0.05$) and ($p=0.011<0.05$) respectively. These comprehensive findings collectively underscore the importance of thoughtful tax policy design in fostering taxpayer cooperation and compliance within the gambling sector in Nairobi. The study recommended for the Review tax regime structure, Tax rate optimization and Income tax compliance education in the gambling sector.

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ABBREVIATIONS AND ACRONYMS

ANOVA	–	Analysis of Variance
BCLB	-	Betting Control and Licensing Board
BIR	-	Bureau of Internal Revenue
DOI	-	Diffusion of Innovation
e -FPS	-	Electronic Filing and Payment System
ESA	–	E-filing System Adoption
E-TAX / E-FILING	-	Electronic Tax Filing
FC	–	Facilitating Conditions
GST	-	Goods and Service Tax
GSTN	-	Goods and Service Tax Network
IRB	–	Inland Revenue Board
IS	-	Information System
ISO	–	International Organization for Standardization
IT	-	Information Technology
KESRA	–	KenyaSchool of Revenue Administration
KRA	–	Kenya Revenue Authority
NTA	-	National Tax administration
OTS	-	Online Tax System
PC	–	Personal Computer
PE/PEoU/ PEOU	–	Perceived Ease of Use
PIN	–	Personal Identification Number
PU	–	Perceived Usefulness
SPSS	–	Statistical Package for the Social Sciences
TAM	–	Technology Acceptance Model

TRA	–	Theory of Reasoned Action
UA	–	User Ability
UI	–	User Interface
UTAUT	–	Unified Theory of Acceptance and Use of Technology
WWW	–	World Wide Web

OPERATIONAL DEFINITIONS OF TERMS

Betting tax: This is the level to which the gross gaming revenue of a bookmaker is chargeable (Gallagher, 2014).

Betting: Transaction is defined as collection or payment of winnings on a bet and any transaction in which one or more of the parties is acting as a bookmaker (Betting, Lotteries and Gaming Act, Cap 131).

Gambling betting: This is money or some form of property on the outcome of a game or event that is ultimately based on chance (Sammut 2010).

Gambling: It is the wagering of money or something of value (referred to as "the stakes") on an event with an uncertain outcome, with the primary intent of winning money or material goods. It also refers to as the act of staking money or some other item of value on the outcome of an event determined by chance (Kahlil, 2013).

Gaming means the playing of a game of chance for winnings in money or money's worth (Betting, Lotteries and Gaming Act, Cap 131)

Gross Gaming Revenue (GGR): is defined as the gross turnover less the amount paid out to customers as winnings (Finance Act 2016).

Gross Gaming: Turnover (GGT) or Gross Turnover refers to the actual amount gambled by participants with operators such as casinos (National Gaming Board South Africa 2016).

Income tax: It is the degree to which the government places a levy on a firm's profit (Christiansen, 2015).

Lottery: It is a means of raising money by selling numbered tickets and giving prizes to the holders of numbers drawn at random (Griffiths, 2014).

Tax base : This is the total value of all of the assets, income, and economic activity that can be taxed by a taxing authority, usually a government (Sammut 2010).

Tax policy: It is the extent to which the government makes the choice as to what taxes to levy, in what amounts, and on whom (Pfister, 2014)

Tax rates: This is the percentage or proportion of taxable income or a specific tax base that individuals, businesses, or other entities are required to pay as tax to the government (Pfister, 2014).

Tax regime: These are set of tax laws, regulations, and practices that govern a particular jurisdiction's taxation system. It encompasses the overall framework and structure within which taxes are imposed, collected, and administered (Gallagher, 2014).

Tax: It is a compulsory financial charge or some other type of levy imposed upon a taxpayer (an individual or other legal entity) by a governmental organization in order to fund various public expenditures (Smith, 2014).

Wager: is defined, as staking money on the outcome of a given event (Betting, Lotteries and Gaming Act, Cap 131).

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter covered the background information of the study, statement of the problem, objective of the study, research hypotheses, and significance of the study and the scope of the study.

1.1 Background of the Study

Government taxation on gambling companies is on the interests of consumer protection and public morality. Therefore, in many countries where gambling is legal, gambling and lottery companies pay a tax on their gaming revenue, which is in part how economies and communities benefit from regulated gambling. Every country collects gaming revenue payments a little differently, but generally it's a percentage of the net profit that a gambling or a lottery company brings in (Chipeta, 2012). Gambling is among a few sectors that are subject to tax policies, which are different from the rest of the economy. Unlike most other industries, gambling rates are over and above those of typical businesses. These tax policies are also often applied inconsistently from jurisdiction to jurisdiction (Henchman, Raut, Duncan, 2012).

Tax compliance refers to the degree to which individuals and businesses adhere to tax laws and regulations set by the government. It encompasses the timely and accurate reporting of income, deductions, and other financial information required for tax purposes (Christiansen, 2015). The concept is rooted in the principle of civic responsibility, as citizens are obligated to contribute to public goods and services through taxation. According to Smith (2018), tax compliance is crucial for the functioning of a society, as it ensures the funding of government programs. Moreover,

research by Jones and Brown (2020) highlights the role of enforcement and voluntary cooperation in promoting tax compliance.

Income tax compliance by gambling companies has become increasingly complex in recent years as government regulations and enforcement efforts have increased in order to attract more tax revenue (McCann, 2019). In the UK for instance, HMRC's Compliance Assurance Process (CAP) applies to all UK gambling operators, bookmakers and other associated businesses (HMRC, 2019). CAP requires that gambling companies comply with taxation laws, including by filing accurate and timely returns, providing accurate information to officials and paying tax on all winnings (HMRC, 2019). The concept of income tax compliance is also gaining traction in other jurisdictions worldwide, where gambling companies are increasingly subject to taxation and mandated to submit to tax audit assessments (McComish, 2018). Income tax compliance by gambling companies is important because it enables governments to collect tax revenue from gambling activities, which is critical for funding public services and infrastructure projects. It also helps to ensure fair competition between gambling establishments, as those who fail to comply with taxation laws are subject to significant penalties (McCann, 2019).

Some European countries tax gambling companies have embraced several models of taxing their industry. For instance, bookmakers are taxed in some countries, as any other trading company while others assign diverse taxes contingent on the numerous gambling activities, that is, betting, casinos, prize competitions and lottery (Gounder & Dube 2020). For winnings of the players, numerous countries tax them as any other regular income; others attach a final withholding tax on the payments while others do not tax these winnings. In the United States, gambling winnings are entirely taxable and a winner must reveal these winnings in their tax return. In the United Kingdom,

gambling winnings are not chargeable on the players. The bookmakers are however liable to a 15% tax on their gross profits. In Europe, outside of the UK, tax on players' winnings is uncommon (Thairu, 2017). In the USA, the withholding tax system is designed to mitigate the risk of taxpayers failing to declare gambling winnings. Only winnings over a certain amount are reported for tax purposes by the gambling house concerned (Oosthuizen, 2010).

Since ancient times, governments have regulated the extent and conditions under which gambling is permitted. Governments also developed an early financial interest in legalizing gambling, realizing that certain forms of gambling were a productive base for taxation (Smith, 2010). Therefore, in many countries where gambling is legal, gambling and lottery companies pay a tax on their gaming revenue, which is in part how economies and communities benefit from regulated gambling (Akanni, Ibriyase & Igloje 2018). Every country collects gaming revenue payments a little differently, but generally it is a percentage of the net profit that a gambling or a lottery company brings in (Chipeta, 2012).

In Africa, extensive Internet connectivity has also shoved the boom in online gaming. Nigeria still will see yearly growth rate of 8.5 % and the sector produced nearly $69 million in revenue by 2019. The rise of online gambling in Nigeria has led to government adopt stringent taxation regulations due to financial uncertainty and the potential negative impact of money laundering. The government has implemented targeted financial intelligence and compliance efforts to curb untaxed gambling activities, such as requiring companies to obtain licenses to conduct gambling activities and adhere to taxation laws (Umar & Oloyede, 2019). For instance, sports betting operators in Nigeria are subject to withholding tax on betting receipts as well as flat-rate taxes on individual wins.

According to Mæhlum Brown & Ramsey (2018), Uganda has placed a heavy emphasis on ensuring that the gambling industry in its borders are abiding by the predetermined tax codes. Gambling activities are seen as a great source of revenue for the country and are key for the economic development of the region. To ensure maximum revenue gain, the government has implemented stringent regulations throughout the gaming industry, to ensure that operators are correctly calculating taxes and making the required governmental contributions (Minister of Finance, 2018). Gatsi, Gadzo and Kportorgb (2013) researched on the effect of corporate income tax on financial performance of firms in Ghana. The study revealed that there was a significant negative relation between corporate income tax and financial performance.

Income tax compliance by gambling companies, in Kenya, is an important issue for the government as the industry is relatively new and is growing rapidly (Kathanj wa Nyarangi, 2017). For gambling companies to be compliant in Kenya they must abide by the Betting, Lotteries, and Gaming Act, 2016 (Betting, Lotteries, and Gaming Act, 2016). This act states that all companies offering betting and gaming services are allowed to do so provided they apply for and obtain a license from the Betting Control and Licensing Board (Betting Control and Licensing Board, 2018). Companies must also ensure all its staff are registered in order to obtain the necessary authorization from the local government (Njuki & Ndegwa, 2016). Furthermore, companies have an obligation to pay all relevant taxes including Value Added Tax, Withholding Tax, Gambling Turnover Tax, and of course corporate income tax (Kishuru, 2017).

1.1.1 Tax Policy and Income tax compliance by Gambling companies

Tax policy and compliance by gambling companies have been a matter of significant contention. Tax policy involves the design, implementation, and collection of taxes by different levels of government, typically to generate income for governments and fund

public services. It helps evolve regulations that reduce the cost of collecting taxes and ensure that taxpayers comply with the tax regime (Becker, 2019). Tax policy, therefore, promotes economic growth by incentivizing certain activities and providing the revenue needed to sustain public services (Royal, 2018). From the effects of taxation on the state economies, to the illicit activities of organized crime syndicates that have infiltrated the gambling industry, it has become increasingly important for gambling businesses to ensure that their operations adhere to relevant tax laws and regulations (Deeb & Ibrahim, 2019).

Over the years, gambling operations have been under tremendous pressure from state and federal governments to improve their tax reporting and compliance in order to protect government revenues and to prevent fraud and other tax abuses (O'Meara & Estes III, 2013). To this end, gambling companies have established comprehensive internal procedures and policies for tax management, such as the appointment of specialized staff to review and file taxes; adopt an appropriate accounting system; and regularly review internal records to ensure compliance with taxation regulations (Deeb & Ibrahim, 2019; O'Meara & Estes III, 2013). Additionally, some companies have implemented automated systems to ensure accuracy and compliance surrounding their tax obligations. Consequently, this has resulted in increased levels of income tax compliance and fairness for the gaming industry.

Tax policy and income tax compliance by gambling companies in Kenya are areas of policy and regulation which have been subject to considerable changes in recent years. As noted by Makoni, Kabeberi and Kapur (2013), in 2005, the Gaming and Lotteries Act was passed in Kenya to provide regulatory oversight of the gambling market. This Act authorized the formation of the Betting Control and Licensing Board (BCLB) to be responsible for the taxation of gambling activities, among other duties. The BCLB was

then responsible for setting the gaming taxes applied to gross gaming revenue earned by the operators.

Mangala (2017) further outlined the most recent developments in the legal framework for taxation of gambling companies in Kenya - the National Treasury Cabinet Secretary of Kenya in 2013 issued the Value Added Tax (VAT) Act, 2013. This Act replaced the then existing system of taxation of gambling companies in Kenya and imposed the standard rate of VAT of 16% of all gaming revenues earned by the operators. In 2017, the Kenyan Parliament passed the Betting, Lotteries and Gaming Act, 2017, which, in addition to providing a comprehensive legal framework for the regulation of gaming and gambling activities, also reduced the rate of taxation from 16% to 7.5% of all gambling revenues and other gaming revenues earned by the operators.

1.1.2 Gambling industry In Kenya

The gambling and lottery industry in Kenya has been taking hold quickly in the country compared to areas like the manufacturing sector (Nderi, 2016), with the sector being a crucial economic sector. The industry, which contributed about Sh4.7 billion over the last three years to Kenya Revenue Authority (KRA), is now facing prospects of leaving tens of hundreds in the cold, cut contribution to the exchequer and roll back on sports sponsorship deals. Online betting is today an income- generating activity for many Kenyans and a full-time career for some, while some betting companies have greatly impact lives through Corporate Social Responsibility activities and payouts to winners.

The number of betting and gambling companies in Kenya is high, it comprises more than 30 licensed companies. They include Betika, 22bet, odibet, shabiki, powerbets, m-cheza, Betway, Mozzartbet, Ken Bookmakers, Lucky 2u, Eazi Bet, Kick off, Eastleighbet, Palms Bet, Bet Boss and helabet among others. The Betting Control and

Licensing Board (BCLB) control the gambling industry in Kenya. The 6 board regulates every gambling activities ranging from lotteries, casinos, sports betting, prize competitions and promotions (BCLB, 2017)

Due to the increase in gambling and lottery companies in Kenya, most companies evade tax. Therefore, Kenya is geared to repeal the gaming and lotteries in the country by introducing another Act of Parliament to streamline the rapidly growing industry in the country (GoK, 2019). In 2018, all the gambling and lottery companies were required to renew the licenses. Further, the betting and lottery firms wasnewly vetted and BCLB declined the renewal of operational licenses for 19 betting companies awaiting crucial security vetting of their operations and their hierarchy (BCLB, 2019).

The government regulates all forms of gambling through Betting Control and Licensing Board (BCLB). The board regulates all gambling activities ranging from lotteries, casinos, sports betting, prize competitions and promotions. Sports betting have recently emerged as one of the most thriving of the gambling businesses with betting on international football, especially the prestigious English Premier League taking center stage. The aim of this study was to determine the effect of tax policy on income tax compliance of gambling companies in Kenya.

1.2 Statement of the Problem

Income tax compliance by gambling companies in Kenya has recently become a key issue for the Kenyan government. While most gambling operators adhere to the strict regulations and pay taxes, a number of them have been using offshore channels and shell companies to avoid tax payments. Additionally, there have been reports of offshore gambling companies operating within Kenya without the necessary licenses and without paying taxes on their revenue. This has caused serious concerns to the

Kenyan government about the lack of good corporate governance and income tax compliance among gambling companies in the country. The government has responded to the crisis by introducing a number of initiatives aimed at improving the corporate governance and income tax compliance practices of gambling companies.

In Kenya, the revenue of betting companies at the end of 2018 was between Sh20 billion and Sh25 billion. SportPesa the biggest betting company in Kenya then, had revenue of Sh20.1 billion in 2018. The revenue for betting firms was nearly $29 million in 2019, depicting an annual growth rate of more than 7%. The industry employs about 5,000 Kenyans. Further, the betting firms in Kenya pay 15 per cent of the Gross Gaming Revenue (GGR) to the government (Majani, 2019). In Kenya, the gross revenues from the industry are projected to be in the region of Sh3 billion and forecasts indicate that the industry will undergo stable growth over the subsequent five years

The gross gambling revenue in Kenya stood at approximately Sh7bn monthly and about Sh100 billion annually (BCLB, 2018). The revenue for betting companies at the end of 2018 was between Sh20 billion and Sh25 billion. However, the companies pay huge taxes from their revenue. For instance, SportPesa records (2018) show that it paid Sh400 million in 2018 as withholding tax on winnings. This was in addition to Sh3.6 billion betting tax, Sh1.12 billion income tax , Sh722.9 million withholding tax, Sh183.4 million withholding value-added tax and Sh269.6 million pay-as-youearn for its 367 employees. This amounted to Sh6.29 billion in taxes up from Sh3.63 billion paid in 2017. Betting tax jumped from Sh1 billion in 2016 to Sh3.6 billion in 2017. Due to the increase in taxes the organizational performance of the betting industry declined by 7% in 2019 (BCLB, 2019).

Several studies have been conducted on taxation in Kenya. Njogu (2016) assessed the general impact of taxation on economic growth in Kenya. In the Gambling industry, Felix (2011) studied how sports–relating betting is organized in the country from a historical and policy perspective. Most research on gambling in Kenya has focused on the pathological sides of gambling, Wanjohi (2012) and Koross (2016) explored the impact of gambling on the youth. Mwandime (2017) explored the impact of robust growth of the sports betting industry in Kenya. Gambling and lottery companies have described the taxation system as punitive.

There however lacks research on tax policy in the gambling industry in Kenya and how the tax policies have affected or contributed to the industry income tax compliance. The gambling industry has risen to become a very large industry in Kenya that cannot be ignored and warrants more research. Segments of the public, gambling operators, Betting Control and Licensing Board, Kenya Revenue Authority and the Government of Kenya (through treasury) seem divided on how the tax policy in the gambling sector has affected income tax compliance in gambling industry. This study aims to bridge this research gap by investigating the intricate relationship between tax policies and income tax compliance among gambling firms in Kenya, shedding light on a pressing concern that involves multiple stakeholders, including the government, industry operators, and the public.

1.3 Research Objectives

1.3.1 General objective

The main objective was to determine the effect of Tax policy on income tax compliance among gambling firms in Nairobi County, Kenya.

1.3.2 Specific Objectives

The following were the specific objectives:

i. To establish the effect of tax regimes on income tax compliance among gambling firms in Nairobi county, Kenya
ii. To examine the effect of tax rates increase on income tax compliance among gambling firms in Nairobi County, Kenya
iii. To find out the effect of tax base on income tax compliance among gambling firms in Nairobi County, Kenya

1.4 Research Hypotheses

H_{o1}: Tax regimes has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya

H_{o2}: Tax rates increase has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya

H_{o3}: Tax base has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya

1.5 Significance of the Study

The following research study is of significance to the following groups of people: This study will be valuable in understanding the effect of tax policy on income tax compliance by the gambling industry in Kenya. It will be useful to different stakeholders including the government of Kenya, Kenya Revenue Authority, policy makers, researchers and academicians, gambling operators, and gambling regulatory body.

1.5.1 Gambling Industry

The study will help to identify ways in which tax policy affects the industry and their income tax compliance and provide options available to them in their consultations with Government of Kenya on this tax policy.

1.5.2 Betting Control and Licensing Board

This study aims at approaching Gambling in Kenya from a new perspective. This study will help BCLB is its efforts towards proper regulation of the industry that has previously lacked proper regulatory mechanisms.

1.5.3 Government of Kenya

This study is aimed at helping the Government of Kenya, particularly the National Assembly and Kenya Revenue Authority (KRA) have in-depth knowledge on effect tax policy on gambling for future legislations, amendments on gambling tax issues and the Kenya Revenue Authority who consider the gambling industry one of its biggest contributors to tax.

1.5.4 Future researchers

Members of the wider academic community wishing to explore the field of gambling in Kenya will find this study a great resource. The aim of the study is to provoke debate and self-examination among the industry stakeholders to find a better way to position gambling in a wide context so that it is not considered harmful or resented.

1.6 Scope of the Study

This study focused on influence of tax policy on income tax compliance among gambling firms in Nairobi County, Kenya. The study adopted explanatory research design and use Questionnaire in data collection. The population of interest consisted of 100 employees from Betika, KwikBet and Jamii Lotto in Nairobi, Kenya. This study

targeted the employees of these companies as they have an understanding on how tax policy affects the industry's income tax compliance. This study was carried out within Nairobi because; all the companies and government institutions have their offices based in Nairobi.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

The chapter looked at the main concepts of the study that is income tax compliance and tax policy as the first part. Theories on which the research is grounded are also reviewed as well as empirical studies that have been done regarding the concepts under study. Further, based on various studies with their results, methodology and critique under empirical review, the study is able to critique the relevant literatures and thereby isolate various research and knowledge gaps which form the basis of this study.

2.1 Review of Concepts

2.1.1 Income tax compliance

Income tax compliance as a social practice where individuals or organizations adhere to the legal tax structure with the very purpose of regarding the very principle it is based on it (Onu, Oats, Kirchler and Hartmann, 2019). Tax system is a primary revenue stream for a government. Revenue may be derived from sources such as citizens, public companies, commerce, natural resource revenues and/or foreign aid. There is greater inefficient tax collection in poverty-stricken nations, a large agricultural sector and large amounts of foreign aid (Bräutigam, 2002). Thus, the government expects the citizens to comply to the system for the income generation.

The existence of the phenomena is in a binary distinction: compliance and non-compliance. However, it is advisable to consider the nuances between the two extremes to gain a deeper understanding of tax decisions that is these aspects give rise to decisions that regard the regulations set by the policy frameworks. Non-compliance to tax regimes may consist of practices such as tax evasion, tax avoidance (Hartmann, 2019). Revenue collection in developing countries is generally afflicted by widespread

evasion, coercion, and corruption (McKerchar & Evans 2009; Bird 2015). Corruption, in particular, creates inefficient tax systems; erodes the legitimacy of tax collection legitimacy; reduces the willingness of individuals and corporate entities to pay their fair share of taxes; and, as a result, reduce tax revenue (Alm, Martinez-Vazquez, & McClellan, 2016). Many authors recommend that developing countries looking to increase income tax compliance must first reduce corruption (McKerchar and Evans 2009; OECD, 2014).

Evidenced by Isbell (2017), if tax revenues are the lifeblood of government policy implementation, tax evasion continues to weaken investment and growth capacity in some of the world's poorest countries. For the eyes of most ordinary Africans, taxes are necessary for development, the tax department rightly collects them, and a good citizen pays them. But many citizens also mistrust the tax department and see tax officials as corrupt. This appears to contribute to attitudes that could affect income tax compliance: If people trust the tax department, they're more likely to endorse paying taxes as a civic duty and the right thing to do.

However, from the perspective of the government, in the event of non-compliance, the imposition of penalties contributes to compliance. Taxation, however legitimate, constitutes a forced extraction of wealth. The conventional idea is that a penalty promotes compliance. The decision to comply to the tax rules can be affected by the laws, restrictions and the policies created by the government itself. The influence of entrepreneurial efforts made towards income tax compliance is higher than the burden of the tax itself; burdensome tax regulations (Fanea-Ivanovici, 2019).

Theoretically, Doran (2009) claims that many taxpayers would comply in order to satisfy their tax obligations because they want to adhere to specific social or personal

norms, such as reciprocating the cooperation of others or respecting legitimate obligations. However, based on the deterrence model, tax penalties should be severe enough that taxpayers expect the costs of non-compliance to exceed the costs of compliance. The norms model, by contrast, implies that harsh tax penalties may undermine compliance (for example, by signaling that many taxpayers shirk their obligations or by crowding out personal commitments to comply).

Empirically, many developed countries have through direct assessment, effected compliance to taxes for instance; Allingham and Sandmo (1972) and Lewis (1982) suggested that taxpayers were likely to comply if the probability of being audited was high. However, in direct assessment, probability of being audited is not the only factor affecting income tax compliance among the taxpayers. Other factors include, gender (Vogel, 1974), level of income (Mason & Lowry, 1981), income source (Wahlund, 1992), and perceptions of equity and fairness among others.

Keen et al. (2015) recommends that since there are irregularities in penalties regarding ensuring income tax compliance, other forms of stimulators can be used. Such as Tax reductions for paper invoices: some countries (such as Bolivia and Turkey), have allowed consumers to credit part of the payments shown on paper invoices that they submit to the revenue authorities against other liabilities-creating significant administrative and compliance costs. Thus, since, non-compliance to tax regimes forms the main agenda of low revenue collected in public economics (which leads to resource misallocation when people alter their behavior to cheat on their taxes), Governments have to come up with better and workable solutions to effect compliance. This forms the basis of the current study's discussion narrowing the scope/focus to the case of gambling industry in Kenya.

2.1.2 Tax Policy

Tax policy refers to the measures and procedures that governments impose on taxpayers. It generally encompasses the laws and regulations that govern the taxation of individuals, businesses, and other entities (Mance, 2017). OECD (2013) characterizes tax policy and links it to the formulation of a tax strategy to support investments. It covers the advantages and disadvantages of alternative tax policy options to achieve the twin objectives of offering an attractive tax system for investment, while increasing revenue to support the key pillars of a business-friendly environment, such as infrastructure.

Tax policies have a significant impact on gambling companies as they affect the supply of money companies use to pay taxes and dividends to their shareholders (Shim, 2018). This in turn affects the cost of gambling company services, the prices they set, and the levels of employment in the industry (Albrizio, 2016). High tax rates on gambling companies can lead to increased costs and limited investment, resulting in a reduced number of jobs and a decline in overall economic well-being (Shim, 2018).

According to Aultman-Moore, A. (2020), the importance of tax policy on gambling companies in Kenya is twofold. First, taxes generated from gambling are necessary to provide essential services to the population. Secondly, effective taxation of gambling activities helps to reduce possible negative effects of gambling, such as illegal activities, money laundering, and corruption. The latter ultimately allows the government to improve public services, reduce poverty, and create jobs for citizens.

Thus, a poorly designed tax policy, in which the rules and their application are not transparent, too complex or unpredictable, can discourage investments that increase the costs and uncertainty of the project. Systems that leave excessive discretion in the hands

of tax officials tend to invoke corruption and undermine the fundamental objectives of good governance to ensure an attractive investment environment. Therefore, policy makers are encouraged to ensure that their tax system imposes an acceptable tax burden which can be precisely determined and which monitors income tax compliance and the costs of tax administration (OECD, 2013).

2.1.3 Tax regime

The tax regime in the gambling industry refers to the specific tax laws, regulations, and practices that govern the taxation of gambling activities. This includes various forms of gambling such as casinos, lotteries, sports betting, online gambling, and other games of chance. The tax regime aims to ensure that the gambling industry contributes its fair share of taxes while addressing regulatory concerns and social implications associated with gambling (Felix 2011).

According to Henn, (2019), the tax regime in the gambling industry can vary significantly from one jurisdiction to another. Some countries impose a specific tax rate on gambling revenue, while others may tax the profits of gambling operators. Additionally, there may be different tax rates or structures for land-based gambling establishments compared to online gambling platforms (Kairu 2018). In many cases, the tax regime for gambling is designed to strike a balance between generating revenue for the government, supporting responsible gambling initiatives, preventing problem gambling, and promoting a competitive and regulated gambling environment. The taxation policies can also consider the economic impact of the gambling industry, including employment opportunities and tourism (Henn, 2019).

In the US for example, gambling winnings are fully taxable and a winner must disclose these winnings in their tax return. One may deduct gambling losses but only if they are

itemized and supported. However, the amount of losses one may deduct cannot be more than the amount of gambling income reported in the return. In the United Kingdom, gambling winnings are not taxable on the punters. The bookmakers are however liable to a 15% tax on their gross profits. In Europe, outside of the UK, tax on punters' winnings is rare (Vaillancourt & Ossa, 2011). In Kenya, the Finance Act, 2016, has streamlined taxation of the industry and encouraged compliance. Similarly, the government removed the taxation of the industry from the provisions of the Income Tax Act to the ambit of the Betting, Lotteries and Gaming Act. This model lays the tax burden on the bookmakers and not the punters (Mwandime 2017).

However, the current government has directed that Betting companies should now pay taxes daily in far-reaching changes that have seen KRA plug into their platforms to allow real-time computation of taxes, as the government moves to tame rogue entities in the sector. The KRA has completed a pilot that saw it interlink its tax system with the betting sector to track the 15 percent tax on betting, gaming and lottery as well as the 20 percent withholding tax on winnings collected from punters every day.The integration of the systems is one of the reforms under the revenue administration (Business Daily, January 2023). Overall, the tax regime in the gambling industry is a crucial aspect of regulatory frameworks aimed at managing and monitoring gambling activities while ensuring that the industry operates within legal and fiscal boundaries.

2.1.4 Tax base

Gambling is among a small group of sectors that is subject to tax policies that are different from the rest of the economy. Gambling can contribute to the tax base through various mechanisms, depending on the specific jurisdiction and the type of gambling activity involved. Many jurisdictions impose taxes on the revenue or profits of gambling operators (Griffins 2014). This can take the form of a percentage of the Gross

Gambling Revenue (GGR), where a certain portion of the total bets placed is subject to tax. Alternatively, it may involve taxing the net profits earned by the gambling operators after deducting expenses and winnings paid out to players (Lambert 2013).

Governments often require gambling operators to obtain licenses and pay fees for the privilege of operating legally within a jurisdiction. These licensing and regulatory fees can contribute to the tax base. In addition to direct taxes on gambling operators, governments may also levy indirect taxes on gambling activities (Felix 2011). This can include value-added taxes (VAT) or sales taxes on certain types of gambling transactions or services provided by the gambling industry. Similarly, some states impose taxes on the winnings of individual gamblers. These taxes are typically applicable when a certain threshold of winnings is exceeded, and they may vary based on the type of gambling activity. For example, in some countries, lottery winnings above a certain amount may be subject to taxation (Mayer 2016).

The gambling industry in Kenya has contributed to the tax base through various mechanisms; there is a specific tax on betting activities known as the Betting Tax (Nyaga and Omenga 2015). This tax is levied on the gross amount of bets placed by customers and is currently set at 20% of the betting revenue (Koross 2016). The gaming sector, which includes casinos, slot machines, and other gaming establishments, also contributes to the tax base in Kenya. The Kenyan government's effort to ensure compliance and collection of taxes across the gambling industry is laudable. There is no doubt that taxation of the gaming industry is one of the government's initiatives to broaden its tax base (Njogu 2015).

However, it will be interesting to see how the Government reacts to these practical challenges, including how to license and net into the tax bracket the slot machine

operators that are now sprouting in the slums (Koross 2016). What is clear is that the taxation of the gambling industry is yet to be streamlined and with gambling (especially online sports betting) looking like it will be around for the long term, the Government has to get over these teething problems as soon as possible to minimize loss of revenue from this booming industry.

2.1.5 Tax rates

Kenya does not have a special tax regime for the gambling industry, the scope of taxes in the industry range from licensing fees to income taxes, though gambling services are exempt from Value Added Tax. Winnings from the gambling businesses in Kenya have remained untaxed for a long period of time. The first attempt to subject such winnings to tax came in 2011 when the finance bill 2011 introduced a 20% withholding tax The Finance Act 2012, however, repealed this tax (Finance Act, 2017). The Finance Act, 2016 introduced a monthly betting tax of 7.5% on the bookmakers' gaming revenue. Gaming revenue is defined as the bookmakers' gross turnover less the winnings paid out to the punters. Also, there will be a monthly lottery tax of 5% chargeable on the lottery turnover. Casinos will now be liable to a monthly gaming tax of 12% of their gaming revenue. For prize competitions and promotions, these will now be chargeable to a monthly prize competition tax of 15% on the total gross turnover (Mwandime 2017).

In recent years, Kenya has simplified gaming tax in the form of a direct charge on the 'gross gaming revenue', tax public lotteries at 5% of the 'lottery turnover', tax bookmakers at 7.5% of the 'gross betting revenues' and tax prize competition whose costs of entry are premium at 15% of the 'total gross revenue'. These tax proposal were solidified in Finance Bill 2015 as well as in the Betting, Gaming and Lotteries Amendment Act 2015 as gaming tax, lottery tax, betting tax prize competition tax

respectively, though the gross revenues and turnovers have not been defined in the current betting, gaming and lotteries law, in the industry, gross gaming revenue (GGR), for example, is either stakes less winnings, where an operator accepts risk, or the revenue that the operator receives, where there is no risk to the game operator. The betting, gaming, lottery and prize competition taxes are payable to the KRA on the 20th day of every month following the month of collection.

The Finance Act 2015 introduced various changes in a bid to improve tax revenues from the industry. The law specifically seeks to tax winnings payable to punters by bookmakers (Betting, Lotteries and Gambling Act, Cap 131). Government of Kenya gazetted The Finance Acts 2016 on 20th September 2016 with significant amendments to the Betting, Lotteries and Gaming Act. Through the Act and in a bid to further streamline taxation of the industry and encourage compliance, the Government of Kenya removed the taxation of the industry from the provisions of the Income Tax Act to the ambit of the Betting, Lotteries and Gaming act with effect from 1st January 2017.

The Finance Act, 2016 introduced a monthly betting tax of 7.5% on gaming revenue which is the bookmakers' gross turnover less the winnings paid out to the punters. Finance bill 2017 which took effect in 2018 imposed a uniform 35% tax rate on all gambling revenue betting, gaming, lotteries and prize competitions which was less than the 50% rate originally proposed. Following upward revision and standardization of tax rates to 35%, discussions are still ongoing on whether the tax will be on Gross turnover (Stake) or Gaming revenue (GGR) (Betting ,Lotteries and Gambling Act, Cap 131).

2.2 Theoretical Review

This study used four theories namely: The Ability to Pay, The Tax Morale Theory and Economic Theory of Income tax compliance to explain the empirical relationship on effect of tax policy on income tax compliance.

2.2.1 The Ability-To-Pay Theory

The theory began from the sixteenth century and was scientifically broadened by the Swiss philosopher Jean Jacques Rousseau (1712-1778), the French political economist Jean Baptiste Say (1767-1832), the English economist John Stuart and Mill (1806-1873). The theory asserts that taxation should be imposed matching to an individual's ability to pay; that is, public spending should come from business. Essentially, this is in fact the foundation of progressive tax system, and has been extensively used in industrialized economies. The common and most reinforced defense of ability to pay is based on sacrifice. The payment of taxes is observed as a deprivation to the taxpayer since he relinquishes money to the government which he would have used for personal use.

On the other hand, there is no solid method for the measurement of evenhandedness of sacrifice in this theory, as it can be gauged in absolute, proportional or marginal terms. Therefore, equal sacrifice can be quantified for each taxpayer's surrenders similar absolute degree of utility gotten from their income or; every taxpayer foregoes the equivalent proportion of utility acquired from their income or; each taxpayer parts with the same utility for the last unit of income.

The Ability-to-Pay Theory suggests that the higher the perceived ability to pay taxes, the lower the tax evasion. Thus, this theory can be used to inform the study by examining the impact of taxation on the perceived ability of the gambling companies

to pay taxes. The Ability-to-Pay theory suggests that an increase in taxation may lead to reduced tax evasion on the part of the gambling companies. The Ability-To-Pay Theory posits that taxation should be based on an individual or entity's ability to pay, taking into account their income and financial capacity. In the case of gambling firms, understanding their ability to meet tax obligations is crucial. The study can assess how specific tax policies affect the financial viability of these firms, whether they align with the firms' ability to pay, and how this influences their compliance behavior.

By considering this theory, this study provides insights into whether tax policies in Kenya's gambling sector are equitable and sustainable, contributing to the broader discourse on tax compliance and fairness within the industry. The Ability-To-Pay Theory is the main theory informing this study because it emphasizes fairness by correlating tax obligations with the financial capacity of taxpayers. Given the unique economic dynamics of gambling industries, this theory provides a nuanced framework for evaluating compliance implications tailored to firms' varying financial capabilities

2.2.2 The Tax Morale Theory

The tax morale theory was first forwarded by German scholars focused on Gunter Schmolders known as Cologne school of tax psychology. Tax morale can be termed as the distinct factor that inspires a person to fulfil his or her tax obligations. As a determinant of tax behavior, tax morals aim to expound how and why a tax payer’s morality affects his or her tax behavior. Many studies have discovered that tax evasion can be ascribed to the tax morale (Mocetti, 2013). On the one hand, taxpayers would be disposed to evade tax when the communities in which they live or operate censure tax evasion and conversely, tax payers are more likely to observe tax obligation if their friends, relatives and acquaintances comply with these obligations. Likewise, taxpayers

are expected to evade taxes if they feel that other people are getting away with tax evasion.

In other words, if a society endures tax evasion, such a society would embolden tax evasion (Waweru, 2014). Religious beliefs are a variable in tax evasion as research have shown that taxpayers who have strong religious obligations or beliefs would likely be tax compliant even if they sense that the tax rate is high (Gee, 2006). In some cases, taxpayers can feel ethically justified in evading taxes if they sense that the quality and quantity of public services and goods are inadequate while in economies where the provision of public goods and services is acceptable the evasion rates are low. Taxpayers will have a tendency to comply with their tax obligation if they feel that their government is honest, democratic and participatory and also if the tax payers sense they play a meaningful role in governance.

This theory can inform this study in several ways. First, it can provide a framework for exploring how tax policy affects taxpayers' psychological motivations to comply with the law. Second, it can help illuminate how changes in tax policy might incentivize certain behaviors and create a higher likelihood of compliance. Finally, it can provide insight into how changes to the tax system or implementations of specific policies might affect a firm's willingness to comply with their obligations. With these insights in hand, the researcher can better study the effect of taxes on the gambling industry and the impact of tax policy on compliance.

This theory suggests that individuals and businesses are more likely to comply with tax obligations when they perceive the tax system as fair and just. In the context of gambling firms, understanding the tax morale of these entities is pivotal. Thus, this study shows how specific tax policies and their perceived fairness influence the tax

morale of gambling firms, affecting their willingness to comply. By examining the role of tax rates, this research can shed light on the behavioral aspects of tax compliance within the industry, offering policymakers guidance on designing tax policies that promote voluntary compliance among gambling firms.

2.2.3 Economic Theory of Income tax compliance (ETTC)

The Economic Theory of Income tax compliance by Johnson (2009), is a long-standing approach to understanding taxpayer behavior. This theory argues that taxpayers make an economic decision in deciding whether to comply with their tax obligations, weighing the costs and benefits associated with paying taxes and engaging in non-compliance. The model seeks to understand the decision-making process of individuals when deciding whether to comply with their tax obligations. The theory also attempts to address the incentives to comply or not comply with the tax system (Allingham & Sandmo, 1972). It is generally accepted that taxpayers are motivated to maximize their economic utility and therefore when deciding whether to comply with tax laws will take into account the associated costs and benefits. The economic theory of income tax compliance is the most direct expression of this rational decision-making process.

According to the Economic Theory of Income tax compliance, taxpayers' behavior in regards to paying taxes is primarily motivated by how economics, through the cost and benefits associated with compliance, shape their decision-making. That is to say, taxpayers will likely comply with the rules and regulations of taxation if the costs associated with non-compliance surpass the benefits of non-compliance. The theory further posits that a incentives such as tax avoidance, lenient enforcement, and convenience in filing taxes, can lead to the increased compliance of taxpayers. Ultimately, the ETTC suggests that tax rules should focus on providing persuasive

incentives that reduce the costs of taxation and/or increase the benefits of compliance (Marples et al., 2017).

This theory holds that individuals choose to comply with tax laws based on a comparison between the costs of compliance and the value of the expected penalty for non-compliance. The theory implies that income tax compliance is affected by tax rate, potential benefits associated with non-compliance, and changes in the perception of risk for those engaging in tax evasion. This research would allow us to analyze how different tax policies affect the incentives facing gambling companies, and how these incentives guide decisions related to income tax compliance. Ultimately, this could help governments formulate more effective tax policies, and improve the overall compliance with their tax regimes.

This theory posits that individuals and businesses are rational actors who weigh the costs and benefits of tax compliance. Applied to gambling firms, this study analyzes how specific tax policies impact the cost-benefit calculus of compliance for these entities. It assesses whether tax policies create incentives for gambling firms to comply with their income tax obligations or encourage tax evasion and avoidance strategies. By examining compliance behavior through an economic lens, this study offers a nuanced understanding of how tax policies influence the financial decisions of gambling firms, informing policy reforms that promote greater compliance and revenue collection.

2.4 Empirical Literature Review of the Variables

The empirical literature indicates that tax policy has a mixed effect on income tax compliance by gambling companies (Dwenger & Lang, 2021; Trenchev, Cole, & Holmes, 2015). Dwenger and Lang (2021) examined the impact of taxes and

government policies on income tax compliance among online gambling companies in the Netherlands. They found that companies were more likely to pay taxes when faced with higher tax rates, but their findings also suggested that companies may reduce their willingness to comply with taxes if the administrative burden of income tax compliance becomes too high.

Similarly, Trenchev et al. (2015) investigated the compliance behaviour of online gambling companies in the United Kingdom. They found that taxation had only a marginal effect on compliance; instead, the influence of sanctions, along with changes in the level of tax avoidance and consumer protection, had a stronger impact on compliance behaviour. Together, this literature suggests that the influence of taxation on income tax compliance by gambling companies is complex and may depend on the broader context of government policies and sanctions. Gellatly (2009) further raises the issue that more generalized gambling facilitates money laundering. Thus, while there may be an increase in direct revenues, in part from increased tourism, there could be a leakage due to easier tax evasion;

Rubenstein and Scafidi (2002) examined the distributive effects of gambling in the United States, more precisely, what kind of redistributive effect the Georgia Lottery for Education has. They use family survey data to estimate the demographic impact of the game. As for benefits, they use county-level data on school performance, income and race to estimate distributional effects on lottery-funded programs. Additionally, Stranahan and Borg (2004) studied the budgetary impact and distributional effects of using lottery tax revenues to fund the Florida Bright Futures merit-based scholarship. They find that the system is regressive, in the way that people from lower socioeconomic groups tend to pay more as game fees and, on the other hand, are less likely to receive scholarships

Ahaibwe, Lakuma, Katunze and Mawejje (2016) who studied socio economic effects of gambling in Kampala City, Uganda indicated that the government might seek to tax a gambling corporation due to the existence of unlicensed outlets and those operating in makeshift premises inhibiting effective tax collection. However, to great extent, Uganda Revenue Authority, (URA) does continue to collect taxes even on unlicensed outlets. The operation of unlicensed outlets is mainly due to the internal incapacity of the National Lotteries Board (NLB). The NLB has only 5 permanent support staff (1 lawyer, 1 economist, 2 inspectors and a secretary). This is far from the necessary human resources required to manage gambling activities. NLB needs to be empowered, by law and human resources, in order to adequately regulate the sector.

Governments generally use enforcement methods, such as audits and the imposition of penalties, to deter noncompliance with tax laws. Although this approach is consistent with most economic modeling of income tax compliance, some scholars caution that enforcement may backfire, "crowding out" taxpayers' intrinsic motivations to pay taxes to such an extent that they reduce their tax payments. This Article analyzes the existing evidence to determine if this occurs. In fact, field studies suggest that enforcement tools, such as audits, are very effective deterrents. Afew recent studies have found that audits have a negative effect on the subsequent tax payments of thosefound compliant on audit. This outcome, while perhaps initially surprising, is consistent with the deterrence model; a favorable outcome after audit may lower that taxpayer's perceived likelihood of subsequent audit and the perceived magnitude of any sanction.

Given the presence of different forms of gaming can lead to the cannibalization of revenue, existing casino operators could be expected to put pressure on local policy makers and the community to support the ban on video gaming terminals (VGTs). Alternatively, officials and local residents may be concerned about the reduction of tax

revenues from existing gaming sources or possible layoffs that may result from the decrease in casino revenue and oppose the adoption of VGT even in the absence of pressure from casino operators. However, it may be that the presence of a casino in or near a municipality may indicate a strong preference for gambling among local residents and these preferences could dominate any opposition to expanding gambling opportunities. Furthermore, the presence of casinos can also involve a lower marginal cost for adding other gambling opportunities if adequate regulatory regimes already exist (Von Herrmann, 1999).

Owing to the field of gambling changing as a result of internet and mobile gambling, generally, gambling consumption has been on the rise annually. However, the distribution of consumption has radically changed from Land Based gambling to Remote gambling. In Austria, Croatia, Italy and Slovenia, Raspor et al. (2019) put the importance of gambling into national GDP in perspective by presenting an analysis of five statistical databases of the last sixteen years to discover some patterns, cyclical or seasonal characteristics or other important information that allow us to predict future revenue with a certain degree of accuracy.

The study recorded the smallest increase in Slovenia, while the largest in Italy. The same effects have also been observed in the GDP of these countries. Therefore, it was concluded that thestate budgets of Croatia and Italy are increasingly dependent on gambling taxes. Game dependencies between clubs have also become more frequent. Therefore, based on the negative effects of gambling addictions, the study recommends decision makers to adopt appropriate policies and fees. States must rethink their views on gambling and excessive reliance on the state budget from gambling taxes.

Toossi and Zhang (2019) who did a study on Video Gambling Adoption and Tax Revenues indicated that in areas where other gambling opportunities already exist, the adoption of VGT gambling may lead to intra-industry cannibalization of revenues. As such, tax incidence of VGT gambling likely falls on lower-income and unemployed residents. For instance, in the US, the adoption of VGTs may be seen as a way to circumvent such issues if taxes on their revenues are perceived as a "benefit tax." The introduction of VGTs may also offer greater spending flexibility if racial heterogeneity makes it difficult to allocate existing tax revenues from traditional sources in a redistributive manner.

In a study bases on the taxation of gambling in Africa, Vaillancourt (2011) provides evidence for 2005 from a sample of 3003 respondents living in three of the nine provinces Gauteng, KwaZulu-Natal and Western Cape. These three provinces account for about 80% of spending on gambling in South Africa. The findings indicate that regular participation is of the order of 85-90% for all income groups except the poorest one. In addition, the findings show a decrease of the share of income spent on gambling as income increases. This implies that taxes on gambling in South Africa are regressive with respect to personal income. This places a burden to the poorest group of people in the economy which necessitates the impact of government taxation.

In addition, according to Gellatly (2009), the movement across borders of illegal machines is one source of revenue losses for tax authorities. Another issue is the informal gambling over phones through the use of text messages to win an in-kind price (farm; car) On that last topic, It is interesting to note that this a frontier of gambling being addressed by for example Tunisia where as of September 2009 a 30% tax is applied to the cost of betting by cell phone either on the amount paid by text message

or on the minutes associated with a voice input. A similar tax at a 40% rate is levied in Algeria since 2006.

Cowell (2004) states that tax administration charged with the responsibility to collect taxes, needs to distinguish between different classes of taxpayers and apply appropriate compliance strategies to each class. All taxpayers need to be treated fairly and with respect. However, potential evaders (or gamblers, according to the basic economic compliance model) need harsher measures to deter them from cheating. However, taxpayers are not a homogenous class. Not all of them will cheat as long as there is an opportunity to cheat. Some of the taxpayers are guided by moral principles and by the need to fulfill their duties as citizens in their taxpaying decisions (Alm, Jackson, McKee, 1992).

According to Elton-Marshall et al. (2017), a range of approaches, such as limiting sales and reducing access to gambling or other potentially risky activities, changing prices and fees/taxes to influence the demand for gaming products or by eliminating environmental facilitators such as ATMs in gaming facilities can be used to ensure fare pricing. Other comparative jurisdictions, including Australia and New Zealand, have successfully implemented these approaches, which in the case of Australia: public awareness, education and training; responsible gaming environments; intervention, consultancy and support services; national research and data collection. In comparison, the strategy implemented in New Zealand, which included an official government recognition that gambling was a public health problem, emphasized: harm minimization; health promotion; and political determinants (such as the alteration of conflicting relationships that are formed between the profits of the game and the government through the defense of public health, surveillance mechanisms and structural responsibility).

The evidence supported by Waddell, Moat, Lavis and Bullock (2018), as well as Gallet (2015), who performed a meta-analysis of gambling price elasticity, which indicates strategies such as price changes or fees, the setting mandatory limits and imposing maximum betting limits are practicable. The price or fees of gambling can be promising for use among those who bet on horseracing or use lottery tickets. However, it has been discovered that people who use casinos operate on an almost inelastic sidewalk, which means that many would be willing to spend large amounts of money on continuing to use these facilities. In addition, as people with a low socioeconomic status already spend a greater share of their gambling revenue than those with a higher socioeconomic status, the implementation of this policy has the potential to increase financial losses among groups. vulnerable and consequently exacerbate other game-related damage.

In South Africa, Nel and Viviers (2015) recommend that where an excise tax is levied on gambling tickets, chips and tokens, tax policy be considered and investigated further as a way to discourage excessive gambling. This option is levied at the source of the gambling activity and has a direct, immediate cost implication for the gambler. This was proof that this option would be more likely to curb excessive gambling than any of the other options based on the qualities of good tax policy. Ultimately, the reason why individuals persist in excessive gambling patterns remains puzzling and there might not be a singular intervention that is the ‘golden standard’ or best practice.

Vidal-Puga (2017) presents proposals on two different tax regimes: The General Betting Tax (GBD) and the Gross Profit Tax (GPT). In all these betting markets, GPT does not influence the odds (fixed odds) and commissions (separate bets and parimutuel), but GBD does. Therefore, the odds and the commission should depend on the specific regulation. For example, Paddy Power Betfair, which includes one of the largest online betting companies, charges a different commission for bets in each

country. This commission is 5% in the UK, Ireland, Italy, Gibraltar and Malta; 7% in Albany, Armenia, Croatia, Monaco, Serbia, Montenegro and Slovakia; and 6.5% in the rest of the countries, including Spain. In addition, the company is limited in Belgium, Greece, Germany, Turkey, Israel, France and Portugal, among other countries.

2.4.1 Effect of Tax regimes on income tax compliance among gambling firms in Kenya

This is a tax charged on winnings from betting, gaming and lottery activities. Betting, gaming, and lottery businesses are required to withhold tax and pay to KRA, a percentage of the winnings being paid out to winners in Kenya. Internationally, different countries have adopted various modes of taxing the gambling industry. For example, for bookmakers, some countries tax them as any other trading company while others ascribe different taxes depending on the various gambling activities, that is, betting, lottery, casinos and prize competitions. For winnings of the punters, some countries tax them as any other ordinary income, others attach a final withholding tax on the payments while others do not tax these winnings (Anderson, 2015).In the US for example, gambling winnings are fully taxable and a winner must disclose these winnings in their tax return. One may deduct gambling losses but only if they are itemized and supported. However, the amount of losses one may deduct cannot be more than the amount of gambling income reported in the return (Gu & Tam, 2011). In the United Kingdom, gambling winnings are not taxable on the punters. The bookmakers are, however, liable to a 15% tax on their gross profits. In Europe, outside of the UK, tax on punters‟ winnings is rare (Loretz & Moore, 2013).

Vidal-Puga (2017) focused on the effect of taxation in the online sports betting market. The study analyzed the effect of taxation in the online sport betting market. 27 The study modeled the two most popular online sport-betting bets: fixed odds and spread,

as compared with another traditional sport betting: pari-mutuel. The study characterized the odds and the bookmaker's payoff in (strong) sub game perfect equilibrium for each of the three types of bets under both taxation schemes. The results showed that taxation on gross profit maximizes the utilitarian social welfare. Moreover, the three types of bets were equivalent when the market is symmetric. Pickernell and Brown (2014) researched on gambling as a base for hypothecated taxation in UK. This study utilized two cases: the UK‟s National Lottery Scheme, and the effects of Electronic Gaming Machine (EGM) proliferation in a low socioeconomic region (Logan), of Queensland Australia, in order to illustrate that, it was found that despite different contexts, scales, and gambling vehicles, the general distributional issues of cost and benefit exist in the two jurisdictions and as a result can also have geographically disproportionate impacts.

Leal, López, Laborda and Rodrigo (2012) studied the inside and outside revenue impact of regional gambling taxes in Spain. Using panel data methods, the estimation performed permits the verification of the hypotheses that the taxation of gaming in a region and the expansion of online gambling negatively affect the revenue accrued by the casinos located in that region, but does not offer evidence that the effect produced by the differences in taxation among neighboring regions is significant. The results obtained also confirm the expected impact on the casinos' 28 revenue of the existence of "type" gamblers (young males, and tourists) and of the economic situation (income and unemployment).

Roukka and Salonen (2019) studied the effects of gambling taxes on different socio-demographic groups in Finland. This study examined how different socio-demographic groups contribute to gambling taxes and how much they are expected to benefit from the redistribution of gambling revenues as public spending. The results show that people who are more disadvantaged (for instance, have lower income, less education,

live in a rural area) pay more into gambling taxes. Yet, they can be expected to receive less benefit from the redistribution of gambling revenues.

Belotti, di Porto and Santoni (2016) researched on the effect of local taxes on firm performance. The study found that taxation exerts a negative impact on firms' employment, capital and sales to such an extent as to significantly affect total factor productivity. Gandullia & Leporatti (2019) researched on distributional effects of gambling taxes in Italy. Results showed that gambling taxes are highly regressive and opens important questions on possible reforms of the current system. Smith (2010) did a study on gambling taxation, public equity in the gambling business and found that gambling taxation is regressive and increasingly so as access widen

Becker, Fooken and Steinhoff (2019) researched on behavioral effects of withholding taxes. Results showed that tax adjustments lead to effort adjustments, which suggests that withholding blurs tax incentives. Nyangau (2017) studied the effect of withholding value added tax on income tax compliance in Kenya. The results for the three categories of taxpayers revealed that there was a significant difference in the one-way Anova. From the results, the research concludes that there was significance improvement in income tax compliance after the enforcement of withholding VAT tax policies in Kenya.

2.4.2 Effect of Tax rate Increase on Income tax compliance of Gambling firmss in Kenya

Segal and Maroun (2014) conducted an empirical review in South Africa, where they analyzed the introduction of a gaming tax in South Africa. The study applied a detailed analysis of the contents of previous academic literature (thematic analysis). These results showed that although there may be several benefits associated with game-

specific additional fees (such as the perceived justice of the proposed tax system to be considered as a legitimate means of expanding the tax base), the Treasury appears to have lost a number of important challenges due to improper planning or a lack of clear political direction regarding gaming industry fees.

Withholding taxes on the game cannot represent an excessive burden for taxpayers because winnings are considered extraordinary winnings. The counter argument is that the proposed flat rate is less desirable than a proportional rate and does not make adjustments due to the effects of inflation and the risk profile of taxable profits. It can also lead to the imposition of amounts that would not have attracted income tax or capital gains, although the economic substance of those capital gains is similar to other revenue currently tax exempt.

PwC (2011) drawing evidence from the UK shows that the government has been at the forefront of the liberalization of online games in Europe for more than ten years. The last significant change in the UK gaming tax system was the change in the tax base of betting in October 2001 from a tax base of 6.75% to a tax base of 15% GGR. In addition, the gambling law of 2007 introduced a regulation for online casino games which establishes the same tax base and the same betting rate (15% of GGR). Land games have generally remained stable during this period, growing by c.2% per year. In the case of all land games (and 0.4% per year when the effect of introducing a large quantity of FOBT (Fixed odds betting terminals) is eliminated). Consequently, this example does not provide clear evidence of a material cannibalization effect. This is also supported by the fact that all major betting operators in the UK. Thus, it can be concluded that regulation of the online market in a way that opens the market and stimulates competition leads to high ‘absorption’. In addition, cannibalization does not

have a material impact on offline market growth and does not appear to be more significant than other influences such as GDP growth.

Oats, Kirchler and Hartmann (2019) sought to investigate system games by focusing on the attitudes of small business owners towards tax evasion, tax planning and tax evasion. The study considered 330 owners of small gaming companies by looking at their attitudes of tax avoidance (significant minimization of tax liability perceived to be legal) and tax evasion (illegal tax minimization). They found that tax evasion tax evasion has been statistically linked with the perception that the tax system is unfair and that tax law has "loopholes" that can be exploited, while tax evasion was predicted by the perception that evasion is a trivial crime. In general, the study provides information that tax avoidance has social implications for the erosion of confidence in the tax system and can also constitute lost revenue for the state through non-payment for instance through the cost of pursuing avoiders in court and recovering tax debt.

Oates and Schwab (2015) also analyzed window tax by focusing on the case study on excess load. This is the study that studied tax with its role in the British tax system and its economic and political ramifications. The study used secondary data from a microfilm dataset of local tax registers during this period indicating the number of windows in individual homes. From the analysis, it was discovered that the problem not only encourages tax avoidance in the gaming sector, but also encourages non-compliance in other business sectors. The tax window provides a clear illustration of the dead weight loss tax. The window tax has led many people to live in very dark houses and in environments that have had significant and harmful effects on their health. The window tax is therefore a rather striking example of a tax leading to radical tax evasion behavior associated with high levels of excessive burden on citizens and business people.

Nel and Viviers (2015) explored the tax options to curb excessive gambling in South Africa.. Exploratory research design was applied on 5 different tax options by measuring it against the qualities of good tax policy to conclude on their ability to discourage excessive gambling. These options included: 1-levying a national gambling tax based on gross gambling revenue, 2-withholding tax levied on winnings, 3-treating gambling winnings as capital in nature, 4-treating gambling winnings as income in nature and 5-excise tax levied on gambling tickets or chips sold. The study observed that a withholding tax on gambling winnings would affect only tax winners and not all gamblers engaging in the excessive. In addition, treating all gambling winnings as capital in nature would not result in the equitable treatment of gamblers pursuing gambling as a career.

Vidal-Puga (2017) analyzed the effect of taxation in the online sport betting market. According to the study, a relevant characteristic of this market is its negligible marginal cost on bet volume. Taxation can be on gross profit (Gross Profit Tax) or on volume (General Betting Duty). By modelling the two most popular online sport betting bets that is, fixed-odds and spread, as compared with another traditional sport betting and pari-mutuel the study characterizes the odds and the bookmaker's payoff in (strong) subgame perfect equilibrium for each of the three types of bets under both taxation schemes. The results show that taxation on gross profit maximizes the utilitarian social welfare. That is, in a competitive market, taxes on volume increase odds and commission, and reduces the utility of bettors. The utility of bookmakers (gambling companies) remains unaffected. The exact value of the maximizing will depend on the distribution of bettors. Taxes on volume in a monopolistic market increase odds and commission, and reduces the utility of bettors and also decrease the utility of the bookmaker. Thus, since competition may arise among different matches, distribution

may depend on the existence of other potential matches, and gamblers strategies are not affected when they have no budget restrictions, so that they are able to bet in all the matches they find profitable.

In view of the above, Usman (2019) investigated the impact of taxpayers' perception of competence and integrity of tax officials on companies' income income tax compliance level in Nigeria. The study relied on the primary source of data, 436 samples were successfully cleaned and analysed. The empirical findings indicated a positive relationship between company's income income tax compliance propensity and companies' income, positive relationship between companies' income income tax compliance propensity and taxpayers' perception of the competence of tax officials, and also a positive relationship between company's income income tax compliance propensity and integrity of tax officials.

2.4.3 Effect of Tax base on income tax compliance among gambling firms in Kenya

Dadayan (2016) analyzed state revenue from gambling and indicated that revenue from legally sanctioned gambling plays a small, but politically important role in state budgets. States are more likely to expand gambling operations when tax revenues are depressed by a weak economy or to pay for new spending programs. Many states have expanded and encouraged gambling during and after the Great Recession in response to historic declines in tax revenues. Given that spending money on gambling and discretionary activities, consumers are less likely to spend difícil more on gambling despite the expansion of gambling activities.

Oates and Schwab (2015) acknowledges that continued use of the window tax was, in part at least, a response to a setting of extreme budgetary tightness in which the government perceived little room for reduction in any tax rates. However, now

governments need to raise significant revenue, even a very bad tax can survive for a very long time. Loo and Phua, (2016) looked at a case study of Malaysia for a commentary on gambling participation and policies, since Malaysia has a unique dual justice system with religious and ethnic diversity that may impact on the way in which gambling activities are regulated. This regulatory ecosystem has important consequences on behaviour change, treatment approaches and recovery processes involved in gambling disorder. The study sought to establish the gambling participation and policies in Malaysia. It was discovered that governmental policies have the capacity to shape the size and form of the legalized gambling which is also responsible for the spread of casino gambling in some nations (Richard, 2010).

As Gitau (2018) states, the inception of sports betting in Kenya has brought forth great excitement to prospective bettors and shrewd betting operators which has resulted in an equal amount of controversy and muddle. This note seeks to address the conflict between the private profit that investors and the economy reap, and the public good that the state owes its citizens by virtue of its fiduciary duty over its people. The author scrutinizes the current law of sports betting in Kenya to demonstrate that it is not sufficient to speak to the two conflicting issues and that a concession is possible. Gitau (2018) analyzed the problem of Sports Betting in Kenya in view to strike a Balance between Private Profit and Public Good. This was done with the aim to bring to light about monopolists and fair competition, of which the gambling industry is a monopolist. Thus, Gitau (2018) indicates that the gambling industry in Kenya should be regulated but need not be made redundant as it is an economically beneficial sector and has contributed to the increase in revenue for the nation, and the employment of people especially in the sports industry, football in particular.

Canale et al. (2017) studied income inequality and adolescent gambling severity from a large-scale Italian representative survey where the data was from the 2013–2014 Health Behavior in School-aged Children Survey (HBSC) (cross-sectional analysis). A total of 20,791 15-year-old students completed self-administered questionnaires. The findings of the study demonstrated that students in regions of high-income inequality were significantly more likely than those in regions of low-income inequality to be at-risk or problem gamblers. Additionally, perceived social support from parents and teachers were at lower-risk to problem gambling. Thus, income inequality may have a contextual influence on risk to problem gambling. More specifically, living in regions of highest income inequality was concluded to be a potential factor that increases the likelihood of becoming an at-risk or problem gambler.

Waddell, Moat, Lavis and Bullock (2018) analyzed the ways to strengthen Collaboration to Optimize Efforts Addressing Gambling-related Harm in Ontario. A number of barriers were found to hinder implementation of the three elements of a potentially comprehensive approach to strengthening collaboration to optimize efforts addressing gambling-related harms in Ontario. The study recommends that most notably this includes the fact that there is positive momentum behind moves towards comprehensive and collaborative approaches to address.

Cowell (2004) states that tax administration charged with the responsibility to collect taxes, needs to distinguish between different classes of taxpayers and apply appropriate compliance strategies to each class. All taxpayers need to be treated fairly and with respect. However, potential evaders (or gamblers, according to the basic economic compliance model) need harsher measures to deter them from cheating. However, taxpayers are not a homogenous class. Not all of them will cheat as long as there is an opportunity to cheat. Some of the taxpayers are guided by moral principles and by the

need to fulfill their duties as citizens in their taxpaying decisions (Alm, Jackson, McKee, 1992).

In South Africa, Nel and Viviers (2015) recommend that where an excise tax is levied on gambling tickets, chips and tokens, tax policy be considered and investigated further as a way to discourage excessive gambling. This option is levied at the source of the gambling activity and has a direct, immediate cost implication for the gambler. This was proof that this option would be more likely to curb excessive gambling than any of the other options based on the qualities of good tax policy. Ultimately, the reason why individuals persist in excessive gambling patterns remains puzzling and there might not be a singular intervention that is the 'golden standard' or best practice.

Vidal-Puga (2017) presents proposals on two different tax regimes: The General Betting Tax (GBD) and the Gross Profit Tax (GPT). In all these betting markets, GPT does not influence the odds (fixed odds) and commissions (separate bets and parimutuel), but GBD does.Therefore, the odds and the commission should depend on the specific regulation. For example, Paddy Power Betfair, which includes one of the largest online betting companies, charges a different commission for bets in each country. This commission is 5% in the UK, Ireland, Italy, Gibraltar and Malta; 7% in Albany, Armenia, Croatia, Monaco, Serbia, Montenegro and Slovakia; and 6.5% in the rest of the countries, including Spain. In addition, the company is limited in Belgium, Greece, Germany, Turkey, Israel, France and Portugal, among other countries

2.5 Firm Size and Income Tax Compliance

In a study by Gieve (2015), he found that the size of firms affected income tax compliance outcomes positively, meaning larger firms were more likely to comply with the tax laws. In particular, Gieve (2015) stated that taxes for larger firms are "beyond

the capacity of a small firm to undertake the necessary calculations" (Para. 2). He concluded that size induced an increase in the complexity of taxes, leading to more compliance with the relevant taxes. However, Gieve (2015) also noted weaknesses in his study; due to data limitation, he was only able to study the effect of size on direct income tax compliance and not indirect taxes such as income tax, payroll tax, etc. Additionally, Gieve (2015) noted that there could be other external factors that could be influencing compliance, such as the type of industry involved, the economic status of the firm among others.

Gieve (2010) conducted a comprehensive empirical review exploring the effect of firm size on income tax compliance. Specifically, the results showed that 'smaller firms were found to have significantly lower earnings, lower capital-asset ratios, lower asset-turnover ratios, higher tax avoidance ratios, higher cash conversion cycles, higher cash-to-total assets ratios, lower capital-intensities and higher levels of compliance'. Furthermore, the data suggested that size correlated positively with compliance: as firm size increased, compliance also increased, signifying that larger corporations have a greater compliance requirement (Gieve, 2010). Thus, it can be concluded that size indeed plays a key role in income tax compliance. In this study, firm size is a crucial control variable as it accounts for variations in organizational structures and resource capacities. It helps isolate the impact of tax policies on compliance by controlling for the potential influence of firm size on tax-related behaviors.

2.6 Research Gaps

According to Ssewanyana and Bitanihirwe (2018) it was recommended for policies that enforce the gambling establishments to be situated far apart from one another that is the outlet density is necessary to be rolled out in the SSA countries such as Uganda, Tanzania, and South Africa. These results were concrete however, the mention of the

regulatory policies in Kenya has not been addressed. Segal and Maroun (2014) conducted an empirical review in South Africa, where they analyzed the introduction of a gaming tax in South Africa. The study applied a detailed analysis of the contents of previous academic (thematic analysis) and professional tax literature to explore possible weaknesses / bankruptcies of a gambling income tax in South Africa. This means that the analysis was purely qualitative in nature. Given the disadvantages that ride along the qualitative paradigm such as biased findings, the study presents a methodological gap. Thus, the current study seeks to incorporate both the quantitative and qualitative approach for reinforcements.

2.7 Summary of Empirical Literature

Table 2.1: Summary of Empirical Literature

Author &Year	Focus of the study	Country	Research Gap
Ssewanyana and Bitanihirwe (2018).	Problem of gambling among young people in sub-Saharan Africa.	Sub-Saharan Africa	The study presents a conceptual gap since it did not focus on income tax compliance
Segal, and Maroun (2014).	The introduction of a gambling tax in South Africa-what are the odds on the implementation thereof?	South Africa	Due to the qualitative in nature. Given the disadvantages that ride along the qualitative paradigm such as biased findings, the study presents a methodological gap.
Onu, Oats, Kirchler and Hartmann (2019).	Gaming the System: An Investigation of Small Business Owners' Attitudes to Tax Avoidance, Tax Planning, and Tax Evasion.		The study presents a conceptual gap since the focus was on minimization of tax liability and illegal tax minimization as opposed to the current study focusing on tax increase
Oates and Schwab (2015).	The window tax: A case study in excess burden.	England	The use of window tax was, was assessed in the periods of 18th century. However, much has changed up to now in terms of tax policies.
Nel and Viviers (2015).	Exploring Tax Options to Curb Excessive Gambling in South Africa	South Africa	Contextual gap since the study looked into the tax policy in south Africa. This current study is done on gambling policy in Kenya
Usman (2019)	Impact of taxpayers' perception of competence and integrity of tax officials	Nigeria	Apart from a contextual gap, the study presents a conceptual gap since the focus did not precisely

	on companies' income income tax compliance level in Nigeria.		look at the gambling market players despite the relevant findings.
PwC. (2011).	Taxation and online sports betting in Germany: considering the relative merits of a tax on gross gaming revenue and a tax on stakes for the potential regulation of online sports betting	Europe	The findings were based in a developed country that is Europe, however given the economic differences Kenya presents, the findings need to be extrapolated to the current scope for a more concise focus/applicability

2.8 Conceptual Framework

Yamauchi, Ponte, Ratliffe and Traynor (2017) describe a conceptual framework as one that allows the researcher to conceptualize the relationship between variables in the study and shows the relationship diagrammatically. It is a hypothesized model identifying the concepts under study and their relationship. In this study, the independent variable is tax policy which comprise of tax regimes, tax rates and tax base and the dependent variable is income tax compliance as illustrated in figure 2.1 below.

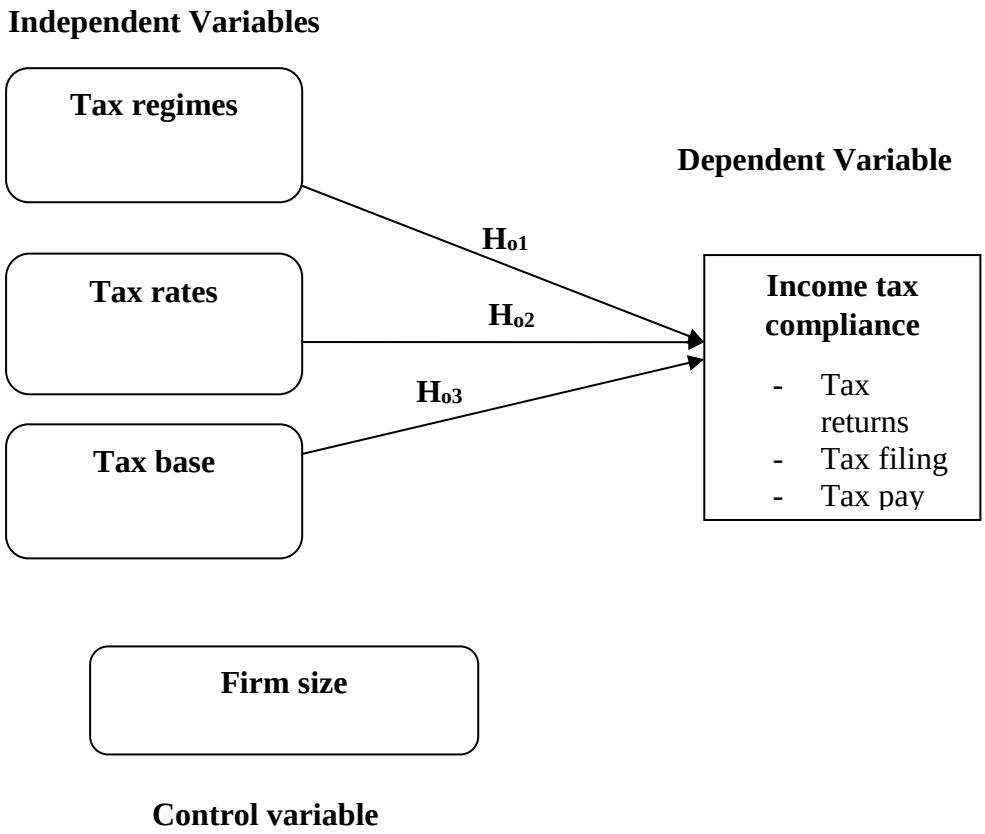

Figure 2.1: Conceptual Framework
Source (Researcher 2023)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

This chapter covers the various research methods and procedures that were used in conducting this study. The chapter was organized in the following structure: research design, population and sampling design, data collection methods, research procedures, data analysis methods and concludes with a summary of what was pointed out.

3.1 Research Design

Research design can be considered as the structure of a research. Deutch & Cook (1965), defines research design as the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy and procedure. This study adopted explanatory research design. An explanatory research explains the subject of the research and thereby answers what, why, and how one variable influence or is responsible for changes in another variable. Adopting an explanatory research design in this study was essential to understand the causal relationships between variables. This design allows for the exploration of how tax policies directly influence compliance behaviors, providing insights for effective policy recommendations and interventions.

3.2 Target Population

Kombo & Trump, (2006) define target population as the universe or the entire group of persons or elements from which samples are taken. The target population represents subjects or elements possessing common observable characteristics that conform to a given specification. A population refers to a group of individuals, objects or items from which samples are taken; it refers to the entire group of persons or elements that have at least one thing in common (Denscombe, 2008). Target population refers to all the

members of a real or hypothetical set of people, the entire group of individuals, events or objects to which we wish to generalize the results of the study (Cooper & Schindler, 2010). The target population of this study was top and middle level managers of gambling firms in Nairobi County. As per the Betting and Licensing Control Board currently there are 30 gambling and lottery companies in Nairobi County, Kenya with bookmakers licenses (BLCB, 2022) (Appendix IV). Therefore, the target population for this research was the senior and middle level managers in the gambling and lottery companies in Nairobi County, Kenya. From the human resources report of the gambling and lottery companies there were a total of 250 managers. Collecting data from top managers in this study was crucial as they possess comprehensive insights into corporate decision-making processes. Their perspectives offer valuable information on how tax policies influence compliance strategies, ensuring a nuanced understanding of organizational responses. Therefore, target population of this study was 250 senior managers and middle level managers from gambling and lottery companies as illustrated below.

Table 3.1: Target population

Statement	Target Population
Top level managers	68
Middle level managers	182
Total	250

Source: (BLCB, 2022)

The senior and middle managers was selected because they are involved in the management of their companies and are in a position to explain how tax policy has affected compliance. Similarly, the betting companies were targeted because they provide platforms for gambling which is the focus of the study.

3.3 Sampling Techniques and Sample Size

A sample is a fraction of the study population and is necessitated when the study population is relatively large (Etikan & Bala, 2017). On the other hand, sampling is the procedure of obtaining the sample from the study population. A sample is also a collection of units chosen from the population to represent it (Bryman & Bell, 2015). According to Cooper and Schindler (2011), a sampling frame is an inventory of elements from which the sample is really drawn and closely related to the population. In this study, the sampling frame was drawn from employees in gambling companies in Nairobi City. This was used so as to make sure that the sampling frame is current, comprehensive and pertinent for the achievement of the study objective.

Simple random sampling technique was adopted to pick out the respondents obtained from managers of gambling companies. In simple random sampling each individual was chosen entirely by chance and each member of the population has an equal chance of being included in the sample. This sampling technique was used since it offers an equal chance of selection for everyone within the population group. Thus, the researcher picked the respondents randomly during data collection. The table of random numbers was generated and by using a random number table, all members in the population had an equal and independent chance of being selected for the sample group. Additionally, the sample size was determined by use of Yamane (1967) formula for calculating sample size.

The formula is

$$n = \frac{N}{[1 + N(e)^2]}$$

Where;

n = sample size,

N = population size

e = error term (0.05)

$$Therefore, n = \frac{250}{[1 + 250(0.05)^2]} = 154$$

The study sample size was 154 senior managers and middle level managers as elaborated below.

Table 3.2: Target population

Categories	Target Population	Sample
Top level managers	68	42
Middle level managers	182	112
Total	250	154

3.4 Data Collection Methods

The study used primary data. According to (Ajayi, 2017), primary data refers to the data originated by the researcher for the first time. Primary data is the original information collected in relation to the specific research objective (Cooper & Schindler, 2010). Primary data is collected from first-hand-experience and usually involves data that has not been published yet and is more reliable, authentic and objective. Primary data is essential in statistical surveys and it is necessary to get information from primary sources and work on primary data. If required, it may be possible to obtain additional data during the study period (Buchanan, 1981). Primary data represents data collected from the source by the researcher. Thus, primary source of data was obtained through questionnaire.

3.5 Data collection Research Instruments

This study obtained data through use of Questionnaires and Interviews. Rotich (2016), reiterate that questionnaire is cost effective and easy to administer. In this study, the questionnaire was chosen because study participants are presumed to be well educated

and able to properly answer questions. Questionnaires are relatively quick and easy to prepare code and interpret, especially in the case of closed questions (Cooper & Schindler, 2011).The questionnaire included both open ended and closed ended questions and was divided into four sections; A to D. The questions had multiple choice options and the five-point Likert-type scale items of 1 to 5 where 1= strongly disagree and 5 = strongly agree, to reflect the appropriate levels of measurement necessary for statistical analysis.

3.6 Data Collection Procedure

Data from primary sources was gathered for this research. Given the nature of the survey interaction, the researcher physically distributed questionnaires (through drop and pick approach) to the respondents and followed up for the completion to ensure they are completed and returned back within 5 days. A follow up on the issued questionnaires was done through telephone calls and visits to the respondents' location by the researcher.

3.7 Pilot Study

A pilot study was conducted to reduce obscurity of questionnaire items and enhance data integrity. According to Mugenda and Mugenda (2003), a pilot study with a sample of a tenth of the total sample with homogenous characteristics is appropriate for the pilot study. In this study, there a pilot test of the questionnaire was carried out to ensure efficiency in gathering data. The purposive of the pilot test was to determine the validity and reliability of the questionnaire. The pilot test was done by administering questionnaire to individuals who were not part of the actual study. The pilot test was conducted in Machakos County because of its proximity to Nairobi City and many gambling companies have settled there. At the pilot stage, the questionnaire was issued to 15 individuals in selected gambling firms in Machakos County who were not

engaged in the actual data collection process. The feedback received from the pilot test aided in the comprehending and relevance of the inquests in the questionnaire.

3.7.1 Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument gives consistent results after repeated trials (Mugenda, and Mugenda, 2013). To enhance the reliability of the research instruments, a pre-test was conducted and the aim of pre-test was to measure consistency of the research instruments so that those instruments found to be insufficient for measuring variables would be rejected or adjusted to improve the quality of data analysis. Reliability relates to the consistency of the data collected and degree of accuracy in the measurements made using a research instrument. The greater the ability of the instrument to produce consistent results, again and again, or rather the repeatability of the measure the greater its reliability. An item analysis was conducted to determine internal consistency and reliability of each individual item as well as each sub-scale of the data collection instrument in accordance with Kumar (2005). Cronbach's Alpha reliability coefficient, was used for the internal reliability test which showed Cronbach's alpha coefficients greater than 0.7, implying that the instrument is reliable as shown below.

Table 3.3: Reliability test

Variables	Cronbach's Alpha value	No. of Items
Tax regime	.895	15
Tax rate	.799	15
Tax base	.908	15

Source: (Pilot study, 2023)

3.7.2 Validity of Research Instruments

Validity is the ability of an instrument to measure what it is designed to measure. It is the correctness or credibility of a description, conclusion, explanation, interpretation, or other sorts of account (Kumar, 2005). Face validity is the extent to which a test is subjectively viewed as covering the concept it purports to measure. Face validity was determined by reviewing the questionnaire items. On the other hand, construct validity indicates the extent to which a measurement method accurately represents a construct. To achieve face and construct validity, the study ensured that the indicators and measurements are carefully developed based on relevant existing knowledge. Content validity of the research instrument was ascertained through careful definition of the research on the basis of the reviewed literature. Additionally, opinion was sought from professionals in the field of tax administration especially the Kenya Revenue Authority officers and research supervisors. The submissions given enabled researcher do the necessary revision and amendment of the research instrument thereby enhancing its validity.

3.8 Measurement of Variables

This is the process of defining variables into measurable factors and ensuring that the survey items of each construct are quantified (Steimberg et al., 2019). The variables were measured using five point Likert scale of 1 – 5 where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strong agree. The study has two variables namely; dependent and independent.

Table 3.4: Operationalization and Measurement of Variables

Variables	Cronbach's Alpha value	No. of Items
Tax regime	.895	15
Tax rate	.799	15
Tax base	.908	15

3.9 Data Analysis and Presentation

Collected data were edited to remove errors then coded before being entered into computer software Statistical Package for Social Science (SPSS).The data analysis process helped in reducing a large chunk of data into smaller fragments, which makes sense. In this study, quantitative data analysis methodologies was adopted due to the nature of the study.

3.9.1 Descriptive statistic

Collected data was coded using SPSS (version 26), consequently, data collected was analyzed by the use of descriptive statistics which include percentages, means, standard deviations and frequencies. Descriptive statistics was used because is was easy to analyze and convenient for both the researcher and the study. For describing properties, descriptive statistics was used to measures mean, standard deviation, the researcher, summarized the data in a useful way, with the help of numerical and graphical tools such as charts, and tables represent data in an accurate way.

3.9.2 Inferential statistic

The study conducted a correlation analysis to establish the strength of the relationship between the independent and the dependent variable. The correlation coefficient values ranges between -1.0 and 1.0. Correlation value of 0, show that there is no relationship between the dependent and the independent variables, whereas, a correlation of ±1.0

mean that there is a perfect positive or negative relationship. Furthermore, multiple regression model wasconducted to determine the perceived effect of tax policy on income tax compliance of gambling and lottery companies in Nairobi City, Kenya. The following regression model was used;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

Y = Income tax compliance

β_0 = is the Y intercept/Constant term/Regression coefficient

$\beta_1, \beta_2, \beta_3,$= are the coefficients of the independent variables/predictor variables

$X_1, X_2, X_3,$= are the independent variables/predictor variables

e = is the residual/disturbance/error term

Where

X_1= Tax regime

X_2= Tax rates

X_3= Tax base

3.10 Test of Regression Assumptions

In order to adopt an appropriate model for the study, necessary diagnostic tests were carried out. These include Linearity test, Normality test, Multicollinearity test and Heteroscedasticity test (Williams et al., 2013).

3.10.1 Multicollinearity

There exists a multicollinearity if the relationship between the two variables being tested in the study related moderately or highly in the multiple regression model. The multiple regression model results are skewed by the multicollinearity. The Variance Inflation Factor (VIF) will be used in determining the multicollinearity's severity. If the

independent variables have a correlation with the dependent variable the variance of the coefficient's estimates is measured through the Variance Inflation Factor (VIF). There is a moderate correlation showed by independent variables if the VIF indication is above 1 while a problematic multicollinearity is seen where there is an indication of between 5 and 10 VIF.

3.10.2 Normality Test

The level of significance in the study was compared to the computed significant value using both skewness and kurtosis so as to make effective conclusions using the test. Residuals indicated to be normally distributed if the level of significance is lower than that of the computed significant value.

3.10.3 Linearity test

Linearity concept assumes that the relationship between the independent variables and dependent variable is linear that is there is relationship between the independent variables and dependent variable. This was shown/checked using F statistic in ANOVA. Probability value (p value) < 0.05 implies Linearity Probability value (p value) >0.05 implies that variables are not Linearity related.

3.10.4 Autocorrelation test

This test was conducted to check whether the values of the residuals are independent and that will be to ensure that the observations are independent from one another and uncorrelated. Marshall (2018) explained that The Durbin-Watson test was conducted to indicate the level of autocorrelation. The statistic's value ranges from 0 to 4. Non-autocorrelation is shown by a number near 2; positive autocorrelation is indicated by a value near 0; and negative autocorrelation between independent variables is indicated by a value near 4.

3.10.5 Homoscedasticity

This occurs when the results of the regression become unreliable. This was checked based on the scatter-plot output below; when spots appear diffused and do not form a clear specific pattern, it is concluded that the regression model does not have homoscedasticity problem.

3.11 Ethical Consideration

Ethical considerations form a major element in a research. The researcher was required to adhere to promote the aims of the research imparting authentic knowledge, truth and prevention of error. Furthermore, following ethics enables scholars to deal collaborative approach towards their study with the assistance of their peers, mentors and other contributors to the study. This requires values alike accountability, trust, mutual respect and fairness among all the parties involved in a study (Chetty, 2016).Prior to collection of data, first the researcher applied for a research permit from National Commission for Science Technology and Innovation (NACOSTI). The permit showed that the researcher has been cleared to carry research in the various gambling firms Rights and privacy of the data was put into consideration by the researcher.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents an analysis of the data that was gathered using the tools of research discussed in chapter three. First section 4.2 provides information on the response rate of respondents. Section 4.3 then presents and discusses the demographic information of the respondents including; age distribution, level of education attained, and occupation of the respondents. Section 4.4 presents the descriptive results based on the objectives of the study. Section 4.5 assumptions of the study and finally 4.6 discusses inferential results particularly, correlation, regression and hypothesis testing. Section 4.6 provides discussion of the findings.

4.2 Response Rate

The study's planned sample size was 154 respondents, but only 151 of them returned the questionnaires after they had been completely filled out and returned, representing 98.0% response rate. Only the completely filled questionnaires were used by the researcher for analysis. The response rate was deemed appropriate for this study's analysis, interpretations, and conclusions. Table 4.1 displays the response rate for each category of respondents.

Table 4.1 - Response rate for the respondents during the study

Questionnaires	**No.**	**Response rate in %**
Returned	151	98.0
Fail to return	3	2.0
Total	**154**	**100**

Source: (Author 2023)

4.3 Demographic information

4.3.1 Age distribution of the respondents

Table 4.4 depicts the age distributions of the respondents during the study. Majority of the reformed respondents66(43.7%) were aged 30−40 years, which was followed by those aged between18−30 years, 31(20.5%), while those aged between 40-50 years were 30(19.9%) and finally those above 50 years were 24(15.9%). Thus, the present results reveal that most of the sampled respondents were aged 30−40 years, which is still regardless as youthful age.

Table 4.2: Age distribution

	Frequency	Percentage (%)
18-30 years	31	20.5
30-40 years	66	43.7
40-50 years	30	19.9
Above 50 years	24	15.9
Total	151	100.0

Source: (Author 2023)

4.3.2 Level of education

Figure 4.1 shows the educational backgrounds of the respondents in gambling sector in Nairobi, Kenya. The findings revealed that majority of the players in gambling sector have university degrees (graduates) 65(43.0%), followed by those with college trainings (Diploma & Certificates) 56(37.1%), and then followed by those with postgraduate qualifications 15(9.9%) and secondary qualifications 15(9.9%) as shown in the figure 4.1 below. The findings suggest that a significant proportion of individuals engaged in the gambling sector possess higher education, with university graduates forming the largest group.

This challenges the stereotype that gambling primarily attracts individuals with lower educational backgrounds. The presence of college-trained individuals and those with

postgraduate qualifications indicates a diverse participant pool, possibly driven by differing motivations and strategies. These results underscore the need for tailored approaches in industry marketing, responsible gambling measures, and policy considerations to accommodate the varied educational backgrounds of gamblers.

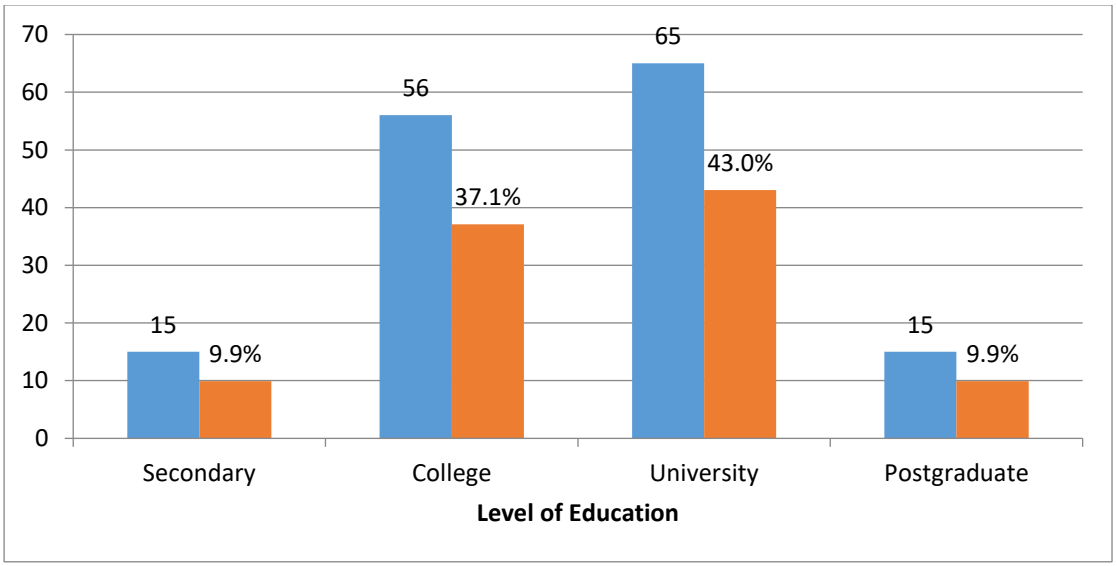

Figure 4.1: Education level
Source: (Author 2023)

4.4 Descriptive tests

4.4.1 Tax regime

A tax regime is the set of rules, regulations, policies, and practices that govern the taxation system within a particular jurisdiction. In gambling sector, it outlines how taxes are levied on gambling operators, the types of gambling activities subject to taxation, and the administrative procedures for tax collection and reporting. A gambling tax regime is designed to generate revenue for the government while also regulating the gambling industry and addressing potential social and economic concerns associated with gambling. One of the objectives of this study was to establish the effect of tax regimes on income tax compliance among gambling firms in Nairobi County, Kenya. The descriptive findings indicate that the income tax charged by the government are

high (M=3.9, SD=0.8), and that failing to pay betting and gaming tax usually leads to huge fines and prosecutions in Kenya (M=4.2, SD=1.0).

Similarly, the findings showed that high tax rates and harsh tax system on gambling industry have led to reduced betting operations in the Nairobi (M=4.3, SD=1.0) and that Excise tax have been adopted as tax revenue and to bring discipline and good practice in gambling (M=4.1, SD=1.1), and there was an agreement that most gambling companies comply with the tax regulations given by KRA (M=4.0, SD=0.9). However, it was not clear whether the income tax system takes a lot of funds from gambling firms (M=3.1, SD=0.9) and whether high corporate income tax rates encourage betting firms to store their foreign earnings abroad (M=3.3, SD=0.8) as shown in table 4.3 below.

The descriptive results highlight several significant implications regarding the taxation and regulatory environment in Kenya's gambling industry. The findings suggest that income tax rates are perceived as high and that non-compliance with betting and gaming tax regulations can result in substantial penalties and legal actions. The high tax rates and strict tax framework have seemingly contributed to a decline in betting activities in Nairobi. The adoption of Excise tax is viewed as an approach to both generate tax revenue and promote responsible gambling practices. Furthermore, there is a general perception that gambling companies comply with tax regulations, although the impact of income tax on these firms' financial resources and the potential influence of high corporate income tax rates on the storage of foreign earnings abroad remain less clear.

Table 4.3:Tax regime descriptive results

	Mean	Std. Dev.	Skewness	Kurtosis	N
The income tax system takes away a lot of funds from the company	3.1	.9	-.2	-1.2	151
High corporate income tax rates encourage betting firms to store their foreign earnings abroad instead of investing it into expansion and employment.	3.3	.8	.0	.0	151
The income tax charged by the government are high	3.9	.8	.1	-.6	151
Failure to pay betting and gaming tax in Kenya leads to huge fines and prosecutions	4.2	1.0	-.5	-.5	151
High tax rates and harsh tax system on gambling industry have led to reduced betting operations in the city	4.3	1.0	-.5	-.5	151
Excise tax have been adopted as tax revenue and to bring discipline and good practice in gambling	4.1	1.1	-.4	-.3	151
We comply with the tax regulations given by KRA	4.0	.9	-.5	-.1	151
Mean & Std. Dev	**3.9**	**1.0**			

Source :(Author 2023)

4.4.2 Tax rates

Tax rate is the percentage at which taxes are levied on various forms of income, goods, services, or assets. The tax rates for gambling companies can vary widely depending on the jurisdiction and the type of gambling activity. Gambling taxes are usually imposed on the revenue or profits generated by these companies. The other objective of this study was to examine the effect of tax rates increase on income tax compliance among gambling firms in Nairobi County, Kenya. The descriptive findings showed that gambling tax rates have resulted to high cost of operating gambling businesses (M=3.9, SD=0.8), and again, increase in gambling tax rates have encouraged tax evasion and close of some businesses (M=4.2, SD=0.8) and that betting and gaming tax rates are so harsh, leading to close of some businesses leading to job losses (M=3.9, SD=1.4).

More so, the findings revealed some level of uncertainty on some aspects related to tax rates for gambling businesses in Kenya. For instance, it was uncertain to establish

whether gambling has led to low tax returns by gambling companies, (M=3.2, SD=1.1), whether gambling tax rates have discouraged investment in the sector (M=3.1, SD=0.8). It was further disagreed that both betting and gaming tax rates are friendly and affordable to gambling companies (M=2.5, SD=0.8) as shown below.

Therefore, the results suggest that the high tax rates have escalated the operational expenses for gambling businesses, impacting their cost-effectiveness. Furthermore, the increase in tax rates has led to unintended consequences, with tax evasion becoming a concern and some businesses being forced to shut down. The harshness of betting and gaming tax rates is highlighted as a contributing factor to business closures, potentially leading to job losses in the sector. However, there is a notable degree of uncertainty surrounding certain aspects of the tax rates, including the relationship between gambling and low tax returns, as well as whether the tax rates discourage investment in the industry.

This uncertainty underscores the complexity of the tax environment in the gambling sector. Additionally, the disagreement that betting and gaming tax rates are friendly and affordable indicates a perception that the current tax structure might not be conducive to the financial viability of gambling companies. These findings collectively emphasize the intricate interplay between tax policies, business operations, investment incentives, and their far-reaching impact on the gambling landscape in Kenya

Table 4.4: Tax rates descriptive results

	Mean	Std. Dev.	Skewness	Kurtosis	N
Gambling has led to low tax returns by gambling companies, thus the higher non compliance rates in the gambling sector.	3.2	1.1	-.3	-.9	151
Betting and gaming tax rates are so harsh, leading to close of many gambling companies and leading to job losses	3.8	1.4	.0	-1.3	151
Gambling tax rates have resulted to high cost of operating gambling businesses	3.9	.8	-.6	.0	151
Gambling tax rates discourage investment in the sector	3.1	.8	.0	-1.1	151
Increase in gambling tax rates will encourage tax evasion and close of businesses	4.2	.8	.0	.0	151
Both betting and gaming tax rates are friendly and affordable to gambling companies	2.5	.8	-.1	-.4	151
Mean & Std. Dev	**3.4**	**1.0**			

Source: (Author 2023)

4.4.2 Tax base

The tax base is the total value of economic activity, assets, or transactions that are subject to taxation within a specific jurisdiction. The tax base for gambling refers to the specific economic activities, transactions, or revenue streams within the gambling industry that is subject to taxation. The gambling tax base varies based on the type of gambling activity and the regulations of the jurisdiction in which the gambling takes place. The other objective of this study was to find out the effect of tax base on income tax compliance among gambling firms in Nairobi County, Kenya.

Descriptive findings showed that the industry contributes towards the support of the government according to its ability to pay (M=4.4, SD=1.1) and that there is certainty about the time of payment, the manner of payment and the quantity to be paid by the industry (M=3.9, SD=1.2) and that the tax does not distort the market (M=4.0, SD=1.0). However, it was not clear whether the tax is levied at the time and in the manner in

which it is likely to be most convenient for the industry (M=3.3, SD=1.1) and whether the cost of collection of the gambling tax is small in proportion to yield and the tax does not obstruct in any manner the economic development of the country (M=3.2, SD=1.1) as shown below.

Thus, the perception that the industry contributes in accordance with its financial capacity reflects a positive alignment with progressive taxation principles, where those who can afford to pay more contribute more. Additionally, the certainty surrounding payment terms and amounts provides stability for both the industry and the government. The lack of market distortion due to the tax indicates a positive impact on the industry's operations and the market's equilibrium. However, the uncertainties regarding the timing and convenience of tax payment raise questions about the efficiency of the current taxation process. Similarly, the ambiguity surrounding the proportionality of the collection cost in comparison to the yield and the potential impact on economic development suggests the need for further examination.

Table 4.5: Tax base descriptive results

	Mean	**Std. Dev.**	**Skewness**	**Kurtosis**	**N**
Principle of equality: the industry contributes towards the support of the government according to its ability to pay	4.4	1.1	.2	.2	151
Principe of certainty: there is certainty about the time of payment, the manner of payment and the quantity to be paid by the industry	3.9	1.2	.2	-.2	151
Principle of convenience: the tax is levied at the time and in the manner in which it is likely to be most convenient for the industry to pay it	3.3	1.1	.2	.3	151
Principle of economy: the cost of collection of the gambling tax is small in proportion to yield and the tax does not obstruct in any manner the economic development of the country	3.2	1.0	.2	.0	151
Principle of efficiency: the tax does not distort the market	4.0	1.0	.2	.8	151
Mean & Std. Dev	**3.8**	**1.1**			

Source: (Author 2023)

4.5 Study Assumptions

These assumptions helped define the boundaries and scope of the regression model in the study, and played a critical role in determining the model's accuracy, validity, and applicability. This study carried out the following assumptions tests; linearity, normality, Multicollinearity and Autocorrelation tests.

4.5.1 Linearity test

Linearity test in this study was conducted to assess the relationship between variables and determine whether a linear model is appropriate for representing that relationship. This was achieved by observing Pearson correlation value (r); if the correlation coefficient is close to 1, then there is a linear relationship between the variables. In this case, all variables tax regime, tax rates and tax base showed coefficients 0.710, 0.845 and 0.974 respectively which are all greater than 0.5, showing that there is linear relationship between variables.

Table 4.6: Linearity test

Variables	Pearson Correlation value
Tax regime	.710
Tax rates	.845
Tax base	.974

Source: (Author, 2023)

4.5.2 Normality test

A normality test was performed in this study to assess whether the distribution of a dataset follows a normal (Gaussian) distribution. This was achieved by conducting Shapiro-Wilk test. From the findings, the Shapiro-Wilk test statistic is the p-values as; 0.071, 0.053, 0.102 and 0.303 for tax regime, tax rate and tax base respectively. Thus, based on the Shapiro-Wilk test results and a significance level of 0.05, it appears that the data for all four variables (tax regime, tax rates, tax base and income tax compliance) does not significantly deviate from a normal distribution as shown below.

Table 4.7: Normality test

	Shapiro-Wilk		
	Statistic	df	Sig.
Tax regime	.954	151	.001
Tax rates	.957	151	.000
Tax base	.790	151	.002
Income tax compliance	.938	151	.003

Source: (Author, 2023)

4.5.3 Multicollinearity test

Multicollinearity is a situation in which two or more independent variables in a regression model are highly correlated with each other. This can cause issues in regression analysis and can lead to unstable parameter estimates, difficulty in interpreting the effect of individual variables, and reduced predictive power of the model. In this study, this was tested by observing Variance Inflation Factor (VIF) values, whereas VIF value of 1 indicates no multicollinearity, while values greater than 10 indicate high multicollinearity. In this case VIF values are less than 10, (1.079, 1.117, and 1.100) indicating that there is absence of multicollinearity as shown in table 4.8 below. .

Table 4.8 – Multicollinearity test

	Collinearity Statistics	
	Tolerance	**VIF**
Tax regime	.927	1.079
Tax rates	.895	1.117
Tax base	.909	1.100

Source: (Author, 2023)

4.5.4 Auto correlation test

Autocorrelation test was conducted to verify whether the values of the residuals are independent and to ensure that the observations are independent from one another and uncorrelated. The Durbin-Watson test was conducted to show the level of autocorrelation. The statistical value ranges from 0 to 4. Non-autocorrelation is shown

by a number near 2; positive autocorrelation is indicated by a value near 0; and negative autocorrelation between independent variables is indicated by a value near 4. Table 4.9 results show Durbin Watson statistic value is 1.842, hence the study concluded that there was no autocorrelation between the independent variables

Table 4.9: Autocorrelation Test Durbin Watson

Model	Durbin-Watson
1	1.842

Source: (Author, 2023)

4.5.5 Homoscedasticity tests

Violation of this assumption leads to heteroscedasticity, where the variance of the residuals is not constant across the range of the independent variable, and can lead to biased and inconsistent estimators of the regression coefficients. This phenomenon is known as heteroscedastic dispersion. By looking for patterns in the spread of residuals, it is evident that there is random, constant spread of residuals indicates homoscedasticity as shown in figure 4.2 below. This imply that the variance of the residuals is roughly constant across different levels of the independent variable(s), which is a preferred assumptions underlying many regression models, including linear regression.

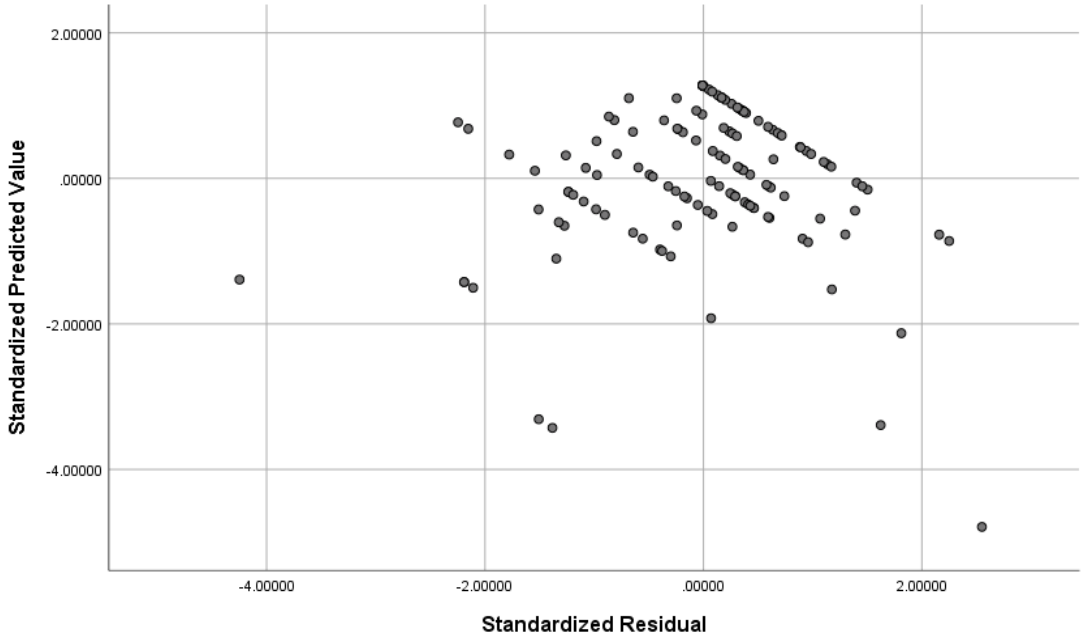

Figure 4.2 – Homoscedasticity test
Source: (Author, 2023)

4.6 Inferential tests

4.6.1 Correlation

Correlation test was carried out to determine the kind of relationship that existed between predictor variables and the predicted variable. From the findings, the correlation coefficient between tax regime and income tax compliance is 0.410. This positive correlation suggests a moderate significant linear relationship between these two variables since the p-value (p=0.000) is less than 0.05, the correlation is statistically significant. Similarly, the correlation coefficient between tax rate and income tax compliance is 0.645; this is a positive strong and significant linear relationship between these two variables since the p-value (p=0.026) is less than 0.05.

Lastly, the correlation coefficient between tax base and income tax compliance is 0.274; this is a positive weak and significant linear relationship between these two variables since the p-value (p=0.001) is less than 0.05 as shown in table 4.10 below. These results

suggest that changes in tax regime tend to coincide with changes in income tax compliance, implying that alterations in how taxes are structured could impact taxpayer behavior.

Secondly, the correlation between tax rate and income tax compliance points to a strong and significant positive linear relationship. This signifies that variations in tax rates are closely associated with shifts in income tax compliance levels, implying that higher tax rates might impact taxpayer willingness to adhere to compliance norms. Lastly, the correlation between tax base and income tax compliance highlights a weak yet statistically significant positive linear relationship. This indicates that changes in the tax base might be connected to changes in income tax compliance behavior.

Table 4.10 – Correlation

		Tax Regime	Tax Rate	Tax Base	Income tax compliance
Tax Regime	Pearson Correlation	1			
	Sig. (2-tailed)				
Tax Rate	Pearson Correlation	.231	1		
	Sig. (2-tailed)	.004			
Tax Base	Pearson Correlation	.198	.268	1	
	Sig. (2-tailed)	.015	.001		
Income tax compliance	Pearson Correlation	.410*	.645*	.274*	1
	Sig. (2-tailed)	.000	.026	.001	
	N	151	151	151	151

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

Source: (Author, 2023)

4.6.2 Regression analysis

Regression analysis has been used to examine the relationship between independent variables (predictor variables) and a dependent variable. In this study, predictors are tax regime, tax rates and tax base, while income tax compliance is a predicted variable. From the model summary, the adjusted R Square value of 0.191 indicates that the model

explains only about 19.1% of the variability in the income tax compliance by gambling firms. This suggests that the included independent variables (Tax Base, Tax Regime, Tax Rate) collectively have a limited ability to predict or explain the variation in the income tax compliance by gambling firms.

Table 4.11 - Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.455[a]	.207	.191	.05157

Source: (Author, 2023)

The ANOVA results, showed regression sum of squares as 0.102. This represents the variability in the dependent variable (income tax compliance) that is explained by the regression model, which is the sum of squared differences between the predicted values and the mean of the dependent variable. The F-statistic is 12.769, which is the ratio of the regression mean square to the residual mean square. The F-statistic measures the significance of the overall regression model. The significance value (p-value) associated with the F-statistic is 0.000; which indicates that the regression model is statistically significant because the p-value (0.000) is less than the conventional significance level of 0.05 as shown in table 4.12 below

Table 4.12: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.102	3	.034	12.769	.000[a]
	Residual	.391	147	.003		
	Total	.493	150			

a. Predictors: (Constant), Tax Base, Tax Regime, Tax Rate

b. Dependent Variable: Income tax compliance

Source: (Author, 2023)

Finally, the coefficient for tax regime is 0.298 which indicates that, holding other predictors constant, a one-unit increase in tax regime is associated with an estimated increase of 29.8% units in income tax compliance. The p-value is 0.000 which is

statistically significant at the significance level (0.05). the coefficient for tax regime is 0.298 which indicates that, holding other predictors constant, a one-unit increase in tax regime is associated with an estimated increase of 29.8% units in income tax compliance. .

Also, the p-value is 0.000 which is statistically significant at the significance level (0.05). Lastly, the coefficient for tax base is 0.108 which indicates that one-unit increase in tax base is associated with an estimated increase of 10.8% units in income tax compliance; this is a weak positive effect on income tax compliance of gambling companies. Moreover, the p-value for this predictor is 0.011, which is also statistically significant at the conventional significance level (0.05)as shown in table 4.13 below.

In general, the analysis reveals substantial and statistically significant relationships between tax policy factors and income tax compliance for gambling companies. An increase in tax regime is linked to a notable 36.9% rise in compliance, while a higher tax rate corresponds to a significant 34.9% compliance increase. Although the effect of tax base is weaker, with a 19.9% compliance increase per unit change, it remains statistically significant. These findings underscore the importance of tax regime and tax rate in promoting compliance, potentially aiding policymakers in crafting effective strategies. Furthermore, even a modest impact from tax base highlights its relevance, showcasing the multifaceted nature of driving compliance in this industry.

Table 4.13: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.897	.097		9.281	.000
	Tax Regime	.298	.062	.369	4.837	.000
	Tax Rate	.434	.061	.349	7.086	.000
	Tax Base	.108	.042	.199	2.584	.011

a. Dependent Variable: Income tax compliance

4.6.3 Role of control variable (Firm size and Income tax compliance)

This study carried out a cross tabulation between firm size and income tax compliance to determine the control effect of firm size on income tax compliance of gambling firms in Kenya. The findings revealed the following:

- **Small Firms:** had representation of 54 out of 151 respondents fall under this category, accounting for 35.8% of the total.
- **Medium Firms:** had representation of 59 out of 151 respondents fall into this category, representing 39.1% of the total.
- **Big Firms**: had representation of 38 out of 151 respondents belong to this category, making up 25.2% of the total.

The Chi-Square results indicate that there is a statistically significant relationship between firm size and income tax compliance. The Pearson Chi-Square value is 25.961 with 34 degrees of freedom and an associated p-value of 0.037. This p-value is below the typical significance level of 0.05, suggesting that the association between firm size and income tax compliance is unlikely to have occurred by chance as shown in table 4.14 below.

Thus, these results suggest that firm size and income tax compliance are related factors. The significant p-value indicates that firm size has an influence on income tax compliance behavior among the companies. Further analysis could explore the nature of this relationship. For example, it's possible that larger firms might have more resources to allocate to compliance efforts, leading to better income tax compliance rates. On the other hand, smaller firms might face challenges in terms of compliance due to limited resources. Understanding this relationship could help tax authorities

tailor their compliance strategies based on firm size, potentially improving overall tax collection efficiency and equity.

Table 4.14: Crosstab between Firm size* Income tax compliance

		Frequency	Percentage
	Small	54	35.8
	Medium	59	39.1
	Big	38	25.2
	Total	151	100.0
Chi-Square Tests (x^2)			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.961	34	.037
N of Valid Cases	151		

Source: (Author, 2023)

4.7 Hypotheses testing

The provided hypothesis test results show the outcomes of three separate tests with their associated null hypotheses, p-values, and decisions. The significance level (alpha) is set at 0.05 for all tests.

Null Hypothesis (Ho1): Tax regimes have no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya.

- P-Value: 0.000 (which is less than 0.05)
- Decision: Reject

The p-value of 0.000 is smaller than the significance level of 0.05. Therefore, there is strong evidence to reject the null hypothesis. This suggests that tax regimes do have a significant effect on income tax compliance among gambling firms in Nairobi County, Kenya.

Null Hypothesis (Ho2): Tax rate increases have no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya.

- P-Value: 0.000 (which is less than 0.05)
- Decision: Reject

Similar to the first test, the p-value of 0.000 is smaller than 0.05. This provides compelling evidence to reject the null hypothesis. Thus, tax rate increases do indeed have a significant effect on income tax compliance among gambling firms in Nairobi County, Kenya.

Null Hypothesis (Ho3): Tax base has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya.

- P-Value: 0.011 (which is less than 0.05)
- Decision: Reject

Once again, the p-value of 0.011 is smaller than 0.05, leading to the rejection of the null hypothesis. This indicates that tax base also has a significant effect on income tax compliance among gambling firms in Nairobi County, Kenya.

In summary, for all three hypotheses, the p-values are less than the chosen significance level of 0.05. This prompts the rejection of all null hypotheses, indicating that tax regimes, tax rate increases, and tax base have significant effects on income tax compliance among gambling firms in Nairobi County, Kenya. These results suggest that changes in these factors are associated with changes in income tax compliance behavior within the studied context.

Table 4.15 – Hypothesis testing

Null Hypothesis	Beta values	P-Value	Decision
H_{o1}: Tax regimes has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya	0.369	. 000<0.05	Reject
H_{o2}: Tax rates increase has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya	0.349	. 000<0.05	Reject
H_{o3}: Tax base has no significant effect on income tax compliance among gambling firms in Nairobi County, Kenya	0.199	011<0.05	Reject

Source: (Author, 2023)

4.8 Discussion of the Findings

Tax policy and income tax compliance are integral components of a country's fiscal framework that have significant implications for revenue generation, economic development, and governance. Tax policy refers to the government's strategy and decisions regarding taxation, encompassing aspects such as tax rates, exemptions, deductions, and incentives. It serves as a tool to achieve various economic and social objectives, including promoting investment, redistributing wealth, and funding public services. Effective tax policies are crucial for balancing revenue needs with economic growth and ensuring fairness within the tax system (Bird, and Zolt, 2015). This study focused on the effect of Tax policy on income tax compliance among gambling firms in Nairobi County, Kenya. Income tax compliance, pertains to individuals and businesses adhering to tax laws and fulfilling their obligations by accurately reporting income, calculating taxes owed, and submitting payments in a timely manner. Compliance is influenced by many factors, however in this study we looked at tax regime, tax rate and tax as the factors.

The study findings underscore the significant effect of tax regimes on income tax compliance within the gambling industry in Nairobi County, Kenya. The research reveals that changes in tax regimes directly influence the compliance behavior of gambling firms, implying that alterations in taxation policies can lead to noticeable shifts in compliance practices. This aligns with existing literature, as research by Johnson et al. (2018) and Kariuki and Mwaura (2020) similarly demonstrated that tax policy changes have profound effects on taxpayer behavior and compliance. Johnson et al. emphasized the role of tax policy clarity in shaping compliance intentions, while Kariuki and Mwaura highlighted how modifications in tax incentives can drive compliance behavior. Together, these findings underline the critical link between tax

regimes and compliance, emphasizing the need for policymakers to carefully consider the design and communication of tax policies to foster a cooperative income tax compliance environment.

Similarly, the study's findings provide compelling evidence that tax rates exert a substantial influence on income tax compliance behaviors within the gambling sector of Nairobi County, Kenya. The research demonstrated that fluctuations in tax rates directly impact the compliance practices of gambling firms, highlighting the sensitivity of taxpayer behavior to changes in the cost of compliance. This resonates with existing research, as observed in the work of Brown and Mazur (2013) and Smith and Johnson (2016), who emphasized the significance of tax rate adjustments in shaping taxpayer responses and compliance decisions. Brown and Mazur underscored the role of perceived fairness in tax rate compliance, while Smith and Johnson emphasized the impact of tax rate changes on taxpayer incentives.

Also, the study findings illuminated the noteworthy influence of tax base on income tax compliance behaviors within the gambling industry of Nairobi County, Kenya. The research underscores that alterations in the tax base directly impact the compliance practices of gambling firms, underscoring the role of tax structure in shaping taxpayer behavior. This alignment with existing research is evident in the work of Andrews and Rickard (2015) and Thompson and Smith (2019), who emphasized the implications of tax base modifications on taxpayer responses and compliance decisions. Andrews and Rickard highlighted the complexity of tax bases and their impact on taxpayer interpretations, while Thompson and Smith emphasized the interconnectedness of tax base design and compliance. Together, these findings emphasize the multifaceted role of tax base in influencing income tax compliance and call for comprehensive policy considerations to encourage optimal compliance practices.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings in line with the specific objectives of the study, conclusions drawn and recommendations made for the study including suggested areas of further study to enrich relevant knowledge under the study.

5.2 Summary of Findings

This study aimed at examining the effect of Tax policy on income tax compliance among gambling firms in Nairobi County, Kenya. The descriptive findings offered significant insights into the taxation and regulatory policy of Kenya's gambling industry. The study underscores the perception of high income tax rates and the substantial penalties associated with non-compliance in the betting and gaming sector. The strict tax framework has seemingly led to decreased betting activities in Nairobi, while the adoption of Excise tax is seen as promoting responsible gambling practices while generating revenue.

Despite a general perception of income tax compliance among gambling companies, uncertainties remain regarding the impact of high income tax rates on financial resources and foreign earnings storage. High tax rates have escalated operational expenses for gambling businesses, affecting their cost-effectiveness and leading to unintended consequences like tax evasion and business closures, possibly resulting in job losses. While the alignment of contributions with financial capacity and stable payment terms reflect positive aspects, questions about the efficiency, proportionality of collection cost, and impact on economic development call for further examination.

The correlation analysis was aimed to understand the relationships between predictor variables and the predicted variable. The findings revealed valuable insights into these relationships. Firstly, the positive correlation coefficient of 0.410 between tax regime and income tax compliance suggests a moderate and significant linear connection between the two variables, as indicated by the p-value (p=0.000) being less than 0.05. This implies that alterations in tax regime structure could potentially impact taxpayer behavior. Similarly, the strong positive correlation coefficient of 0.645 between tax rate and income tax compliance, with a p-value (p=0.026) less than 0.05, indicates that fluctuations in tax rates are closely linked to changes in compliance levels, potentially affecting taxpayer willingness to adhere to regulations. Lastly, the correlation coefficient of 0.274 between tax base and income tax compliance, with a p-value (p=0.001) less than 0.05, underscores a weak yet statistically significant positive relationship, suggesting that shifts in the tax base might influence compliance behavior. Overall, these results provide valuable insights into the intricate connections between tax-related variables and their potential impacts on taxpayer compliance behavior.

The regression analysis in this study aimed to examine the relationships between the predictor variables (tax regime, tax rates, and tax base) and the predicted variable (income tax compliance) among gambling firms. The adjusted R Square value of 0.191 suggests that the included predictors collectively explain approximately 19.1% of the variability in income tax compliance. While this indicates a limited predictive ability of the model, the F-statistic of 12.769, with a significant p-value of 0.000 (less than 0.05), confirms the overall statistical significance of the regression model. Individually, the coefficients provide valuable insights: the coefficient for tax regime (0.298) suggests that a one-unit increase is associated with a 29.8% estimated increase in income tax compliance, tax rate's coefficient (0.434) implies a 43.4% estimated

increase per unit increase in tax rate, and tax base's coefficient (0.108) indicates a weak positive effect of 10.8%. All three predictors' p-values are statistically significant at 0.05 level. These results highlight the intricate relationships between tax-related factors and their varying impacts on income tax compliance behavior within the gambling industry.

The presented hypothesis testing outcomes encompassed three distinct tests, each with its corresponding null hypothesis, p-value, and decision. The chosen significance level of 0.05 (alpha) was upheld throughout the tests. For the first hypothesis, involving tax regimes and income tax compliance, the p-value of 0.000 was notably lower than 0.05, compellingly leading to the rejection of the null hypothesis.

This implied that tax regimes significantly influence income tax compliance among gambling firms in Nairobi County, Kenya. The second hypothesis, concerning tax rate increases and compliance parallels this result with a p-value of 0.000, reinforcing the rejection of the null hypothesis. Similarly, the third hypothesis, exploring tax base and compliance, bears a p-value of 0.011, which, while slightly higher, is still less than 0.05, warranting the rejection of the null hypothesis. These findings collectively accentuated the substantial effect of tax regimes, tax rates, and tax base on income tax compliance behavior within the context of gambling firms in Nairobi County.

5.3 Conclusion

In conclusion, this study delved into the intricate relationship between tax policy and income tax compliance within the gambling industry of Nairobi County, Kenya. The descriptive findings revealed a complex taxation and regulatory landscape characterized by high income tax rates, stringent penalties for non-compliance, and a mixed impact on gambling activities due to the strict tax framework. While the adoption

of Excise tax was viewed as a means to promote responsible gambling practices and generate revenue, uncertainties persisted regarding the effects of high income tax rates on financial resources and foreign earnings storage.

The correlation analysis illuminated meaningful connections between tax-related variables and their potential influence on taxpayer compliance behavior. The positive correlations between tax regime, tax rate, and tax base with income tax compliance underscored varying degrees of impact, ranging from moderate to strong, while also pointing to the potential for shifts in these factors to impact taxpayer behavior. The regression analysis further substantiated these relationships, highlighting the limited but statistically significant ability of the model to predict income tax compliance based on tax regime, tax rates, and tax base.

The consistent rejection of null hypotheses in the hypothesis testing phase reinforced the significant role of tax regimes, tax rates, and tax base in driving income tax compliance behavior among gambling firms. These comprehensive findings collectively underscore the importance of thoughtful tax policy design in fostering taxpayer cooperation and compliance within the gambling sector in Nairobi County, Kenya.

5.4 Recommendations

Based on the findings of the study, several recommendations can be made to inform policy, practice and theoretical implications:

5.4.1 Policy Recommendations

Review Tax Regime Structure: Considering the perceived impact of tax regimes on income tax compliance, policymakers should undertake a thorough review of the existing tax regime structure. This should include a balance between revenue generation

and compliance promotion through the adoption of tailored tax policies that incentivize adherence to regulations.

Tax Rate Optimization: Given the observed link between tax rates and compliance levels, policymakers should carefully consider the implications of tax rate changes on taxpayer behavior. A balanced approach is needed to ensure that tax rates do not lead to unintended consequences like tax evasion or business closures. This could involve gradual adjustments and consultations with industry stakeholders.

Income tax compliance Education: KRA need to develop educational initiatives for gambling firms to enhance their understanding of income tax compliance regulations. Clear guidance and resources can help businesses navigate complex tax requirements more effectively.

5.4.2 Managerial and Practice Recommendations

Collaborative Approach: Encourage collaboration between KRA, industry associations, and gambling firms to develop and implement tax policies that strike a balance between regulatory requirements and industry sustainability.

Responsibility Promotion: Leverage the adoption of Excise tax to further promote responsible gambling practices. Allocate a portion of the generated revenue to initiatives that raise awareness about responsible gambling and support individuals affected by gambling-related issues.

Cost-Effective Collection: Address the concerns raised about the proportionality of collection costs to the yield by exploring cost-effective tax collection mechanisms. This could involve leveraging technology and digital platforms to streamline tax collection processes.

Continual Monitoring: Establish mechanisms for ongoing monitoring and evaluation of the implemented tax policies' impact on compliance behavior. Regular assessments will enable policymakers to identify emerging challenges and make timely adjustments as needed.

5.4.3 Theoretical Implications

Behavioral Insights: Future research could delve deeper into the behavioral and psychological factors driving taxpayer responses to changes in tax regimes, rates, and bases. Understanding the underlying motivations can inform the design of more effective tax policies.

Cross-Industry Comparisons: Comparative analyses of income tax compliance dynamics across different industries could provide a broader understanding of how tax policies impact various sectors. This could uncover sector-specific patterns and insights that inform tailored policy strategies. Longitudinal studies can reveal trends and changes in compliance patterns over time, helping policymakers anticipate challenges and opportunities.

5.5 Suggestions for Areas of further research

Further research could delve into the behavioral aspects of income tax compliance in the gambling industry, investigating how psychological factors influence taxpayer behavior. Comparative studies across different regions could provide insights into regional variations in compliance patterns. Additionally, exploring the economic impact of tax policy changes on job creation, revenue generation, and economic growth would enrich understanding. Longitudinal analyses tracking compliance trends over time would reveal the long-term effects of tax policy adjustments. Lastly, qualitative research involving stakeholder perspectives and exploring industry-specific

compliance strategies could provide practical insights for policymakers and businesses aiming to enhance income tax compliance in the gambling sector.

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APPENDICES

Appendix 1: Introductory Letter to the Research Respondents

Dear respondent,

I am a master's student, at the Kenya School of Revenue Administration (KESRA) in collaboration with Moi University and as part of my course requirement I am currently conducting a study on **"Effect of tax policy on income tax compliance among gambling firms in Nairobi County, Kenya".**

You are requested to kindly participate in the survey. The information you will provide is for academic purpose only and shall be treated with utmost confidentiality.

Thank you in advance for your co-operation and active participation to this academic effort.

Yours Faithfully,

MUTUA MUTAVA

Appendix II: Questionnaire

SECTION A: DEMOGRAPHIC INFORMATION

This questionnaire is designed to collect data on influence of tax policy on income tax compliance among gambling firms in Nairobi County, Kenya. The data will be used for academic purposes only and it will be treated with the confidentiality it deserves.

Please tick (√) where appropriate in the boxes provided below:

1. What is your age bracket?

a) 18-30 [ ]

b) 30-40 [ ]

c) 40-50 [ ]

d) Above 50 [ ]

2. What is your highest level of education?

a) Secondary [ ]

b) College [ ]

c) University [ ]

d) Postgraduate [ ]

e) Others [ ]

SECTION A: TAX REGIME

To what extent do you agree with the following statements relating to tax regime and income tax compliance? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Uncertain (U), 4. Agree (A), 5. Strongly agree (SA)

Statement	**1.SD**	**2.D**	**3.U**	**4.A**	**5.SA**
The income tax system takes away a lot of funds from the company					
High corporate income tax rates encourage betting firms to store their foreign earnings abroad instead of investing it into expansion and employment					
The income tax charged by the government are high					

Failure to pay betting and gaming tax in Kenya leads to huge fines and prosecutions					
High tax rates and harsh tax system on gambling industry have led to reduced betting operations in the city					
We comply with the tax regulations given by KRA					

SECTION B: TAX RATES

To what extent do you agree with the following statements relating to tax rates and income tax compliance? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Uncertain (U), 4. Agree (A), 5. Strongly agree (SA)

Statement	**1.SD**	**2.D**	**3.U**	**4.A**	**5.SA**
Gambling has led to low tax returns by gambling companies, thus the higher non-compliance rates in the gambling sector					
Betting and gaming tax rates are so harsh, leading to close of many gambling companies and leading to job losses					
Gambling tax rates have resulted to high cost of operating gambling businesses					
Gambling tax rates discourage investment in the sector					
Increase in gambling tax rates will encourage tax evasion and close of businesses					
Both betting and gaming tax rates are friendly and affordable to gambling companies					

SECTION C: TAX BASE

To what extent do you agree with the following statements relating to tax base and income tax compliance? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Uncertain (U), 4. Agree (A), 5. Strongly agree (SA)

Statement	**1.SD**	**2.D**	**3.U**	**4.A**	**5.SA**
Principle of equality: the industry contributes towards the support of the government according to its ability to pay					

Principe of certainty: there is certainty about the time of payment, the manner of payment and the quantity to be paid by the industry					
Principle of convenience: the tax is levied at the time and in the manner in which it is likely to be most convenient for the industry to pay it					
Principle of economy: the cost of collection of the gambling tax is small in proportion to yield and the tax does not obstruct in any manner the economic development of the country					
Principle of efficiency: the tax does not distort the market					

SECTION D: INCOME TAX COMPLIANCE

To what extent do you agree with the following statements relating income tax compliance? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Uncertain (U), 4. Agree (A), 5. Strongly agree (SA)

Statement	**1.SD**	**2.D**	**3.U**	**4.A**	**5.SA**
The filing of returns done within set deadlines					
The business states the correct income and pays the right amount of taxes					
The business usually abides by tax regulations and files tax returns online					
We Accurately file returns and make payment.					
There is reduced cost of compliance-hire experts					
There is reduction on fines and penalties due to non payment of taxes					
There is reduction in defaulting					

-----END-----

Thank you