Account and Financial Management Journal e-ISSN: 2456-3374
Volume 4 Issue 05 May- 2019, (Page No.-1936-1946)
DOI: 10.31142/afmj/v4i5.03, I.F. - 4.614

Factors Affecting the Compliance of Value Added Tax in Kiambu County

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Abstract: This studyprimarily scrutinises the factors determining the extent of VAT compliance in Kiambu County. The factors considered included the taxpayer's knowledge, compliance cost, fines and penalties, and taxpayer's perception and attitude. The study acquired the data of taxpayers registered for VAT as per December 2018 from Kenya Revenue Authority. The study utilised a Binary Logistic regression analysis using SPSS to establish the influence of the identified variables on the extent of VAT compliance in Kiambu county. All the identified factors had a direct impact on the extent of VAT compliance in Kiambu county. The outcome of the analysis revealed that tax knowledge and understanding, and cost of compliance had a positive and significant impact on the level of tax compliance, whereas fines and penalties, and taxpayer's perception and attitude had a positive and negative impact that was insignificant. From the findings, the study commends that KRA should enrich activities that promote tax knowledge and understanding since it is essential for VAT compliance.

Keywords: Cost of compliance, ETR, tax knowledge, tax penalty, value-added tax, VAT compliance

Introduction

Taxes have existed for a similar length as civilization. The common objectives of any tax system entail raising revenue to fund government operations that assist in the redistribution of both wealth and income and to either encourage or discourage certain activities through the utilization of tax obligations. Although all tax schemes share these purposes, the changes lie with the encumbrance consigned in an individual country to each of these aims. A German businessperson, Wilhelm Von Siemens, is credited with coming up with the idea of a Value-Added Tax (VAT) in the 1920s (Ebrill et al, 2001). A value-added tax (VAT) is a tax on the value that a business firm adds to the things it buys from other firms in producing its own product (Thuronyi, 1996). Indirect taxes such as VAT generate a substantial part of tax revenue in many countries. The VAT was implemented in France in 1954. Its spread has accelerated since, with strong support from the IMF, as it has now been implemented in 156 countries and in these countries, it typically accounts for about one-quarter of all tax revenue (Lejeune, 2011).

Tax compliance implies fulfilling every tax obligation as entailed by the tax laws (Hijattulah& Pope, 2008). In addition, tax compliance is, in its simplest form, customarily cast in terms of the degree to which taxpayers conform to the tax law (James, 1999). Tax compliance is the foremost setback for many tax authorities and it is not an easy task to persuade taxpayers to comply with tax requirements even though 'tax laws are not always precise' (James & Alley, 2004). Surprisingly, there has been no charging of taxes proportionately among small and medium enterprises (SMEs) internationally. Inadequate understanding, high compliance costs, tax penalties, and tax rates penalties are just some of the several variables that could lead to the tax evasion and tax fraud.

Though the governments have to spend money on the collection activities pertaining to tax, some of the expenses, predominantly for keeping the records and filling out of the forms, are borne by the private individuals and by the businesses. These are jointly designated as the costs of compliance. Further complex systems of tax tend to exhibit higher costs of compliance. This fact could be utilised as the core for moral or practical arguments in the favour of simplification tax (such as One Tax or the Fair Tax, and particular Flat Tax propositions). Tax is a very significant stream of revenue for the government's enhancement projects and thus all the efforts have to be crafted by the governments to certify that it is efficiently and accurately collected in order to ease the government's operations.

Consequently, tax compliance is an apprehension of the governments all over the world. Noncompliance, in the United States (U.S.) alone, is projected to amount the federal government of over US$300 billion each year. However, conventional economic architypes of tax compliance, that largely emphasize detection and enforcement variables, are inept in explaining the present levels of compliance. Actually, specifically in the U.S., the compliance is extensively higher than what the economic architypes would suggest (Bobek, Roberts & Sweeney, 2007). Tax evasion is an international phenomenon that transpires in all the societies and even economic systems that incorporate both the developing and developed nations. In the U.S., the magnitude of the tax gap was estimated to be US$ 353 billion for 2001 (IRS, 2006). For developing nations, this concern is intensely severe because of the swift growth of investing within their economies besides their inadequate experience in dealing with a problem of this manner. The tax evasion by transnationals in China occasioned to a revenue loss amounting to US$ 3.88 billion annually. In 2007, the Inland Revenue Department reported that at least US$ 83.1 million was amassed amid 2004 to 2008 penalties and back tax within Hong Kong (IRD, 2008).

VAT was launched in Kenya in 1990 as an instrument of increasing the government's tax collections via the broadening of the tax base. It is a levy on the value appended by the last seller to the supply (Radhakrishnan, 2008). The VAT is an implicit tax on the consumption that is pertinent to the sale of the supplies at all the stages of distribution and production. A distinct attribute of VAT in Kenya is that it has been the fine instrument for dispensing with exceptional situations, and the unanticipated expenses have been financed with the raised rates of VAT (Karingi et al, 2005). VAT offers an essential avenue by which the government is capable of financing its development and recurrent budgets. It has experienced major rationalization thus the current maximum VAT rate is 16% with three distinct tax rates (KRA, 2016). The tax has additionally been utilised as a portion of the industrial strategy.

VAT in Kenya is enacted by the Kenya Revenue Authority (KRA) as per the directives of the VAT Act of 2013. KRA's functions involve offering advice on affairs pertaining to the collection and administration of revenue; enriching efficiency and eradicating tax evasion; enabling economic stability and the control of exit and entrance spots to the nation (KRA, 2007). KRA has since its formation launched various revenue compliance initiatives with a goal to transform into a modern, fully integrated and client-focused organization and increase revenue compliance levels for increased collections. Among the initiatives are automation and integration of ICT into the tax collection, the issuance of unique personal identification numbers (PINs), intense training to its staff, taxpayer education seminars and use of ETR machines.

The VAT registered taxpayers act as the agents in the collection and remittance of the collected VAT to the government. The VAT remunerated on inputs, sequentially, is claimed as a credit when the registered taxpayers affirm the output VAT on their sales. The suppliers of the exempt services and goods (Waruiru, 2013) charge no VAT on their supplies and are unable to claim credit for VAT remunerated on their purchases. Also, the VAT system contains the zero-rated goods and services (Waruiru, 2013). The businesses in this category charge the VAT at a rate of 0% on their supplies and are approved to withhold the input tax given on the purchase of the zero-rated services and goods. Thus, the government formulates the policy and the VAT laws, while the KRA oversees the implementation of the laws. Moreover, the professionals offer the services to guarantee tax compliance, the businesses act as the agents in VAT collection and remittance to the government and ultimately the general public is henceforth concerned with the VAT rate since it impacts their expenditure and how the government utilizes the VAT revenue that is collected.

Main Objective

The research aims to determine the factors affecting VAT compliance in Kiambu County.

Specific Objectives

1. To determine the influence of tax knowledge and understanding of taxpayers in Kiambu County.
2. To investigate the impact of compliance cost on VAT compliance in Kiambu County.
3. To establish how tax penalty affects VAT compliance in Kiambu County.
4. To determine how taxpayers' attitude and perception influences compliance.

Theoretical Review

The Economic Compliance Theory

The hypothesis of economic compliance largely focuses on tax deterrence (Devos, 2014). The deterrence is generally achieved through persuasive and punitive approaches. The deterrence could take the form of the imposition of robust penalties, increased the tax rate and escalated the possibility of detection (Fischer, Wartick, & Mark, 1992). The theory proposes that individual taxpayers, who are risk neutral and perfectly moral, will opt to evade tax at any time when the expected economic gain outweighs the cost of non-compliance.

The theory was first unearthed from the Becker's work in the late 1960s. Becker was analysing the tax evasion behaviour by utilising an economic framework. Becker proposed that deterrents like penalties, sanctions and the likelihood of detection were within the control of the society in limiting tax evasion via enforcement. However, the proposition faced a limitation that at a certain point, tax enforcement became uneconomic and caused a social loss (Devos, 2014).

In the 1970s, Allingham and Sandmo incorporated thresholds to this theory and produced a formula that identified the reputation of taxpayers as a variable in a simplistic manner. From their derivations, they depicted that escalating the level of penalty could not essentially accomplish greater deterrence impact if the tax offender knows that the probability of being detected is certainly high (Allingham, &Sandmo, 1972). Also, Srinivisan, in 1973, argued that when the incomes of taxpayers increased, the extent of evasion could also increase if the prospect of detection was independent of the income. Further studies have since then attempted to address the deficiencies of the pure economic compliance theory and have thus made several modifications. For instance, the study of Jackson and Milliron (1986) revealed that the taxpayers' perceptions of the actual penalty level are greater than the authentic penalties. Thus, skewing research findings and thereby indicates that the true rates could actually not matter in contrast to the perceived penalisation rates (Jackson &Milliron, 1986).

The economic theory of compliance is therefore relevant in determining the extent of tax compliance in Kiambu County, especially by refining the economic theory to incorporate the perception and the attitude of the taxpayers. Through the above modification, this study could achieve a firm conclusion that can be utilised in further understanding the economic compliance theory and its correlation with tax compliance.

Concept of Moral Sentiments and Religiosity

The Philosophy of Moral Sentiments by Adam Smith scrutinised religiosity from an articulate perspective and remarked that religiosity performs as a form of internal moral execution mechanism (Anderson, 1988). Hardin (1997) illustrates that religious conducts sequel religious belief that is moulded through consideration of the benefit and cost. Thus, religion can be perceived as the moral commitment to operating in a systematic manner. Mueller (2001) contends that religious instructions have the capability to fashion individual inclinations so that a specific religion is preferred.

Moreover, Religion grants a specific degree of enforcement to function in adherence to the putative rules and operates as the "paranormal police" (Anderson and Tollison 1992). Religiosity, like habits, has the utility of economising and simplifying our deeds. It causes our social life to be more foreseeable and grants a sense of indemnity to neutralise the anxiety concomitant to ambiguity (Heiner, 1983). Therefore, religiosity reconciles the habits of thoughts unexceptional to every individual. Hence, decreasing the costs of enforcement and transaction.

Similarly, Hull and Bold (1994) explore the responsibility of religious bodies in inspiring the creation of social goods as ethical behaviour that we can, for illustration, obtain in the Ten Commandments. Also, to indorse compliance and penalise misbehaviour, the afterlife doctrine of the church is utilised. The doctrine states that: "Heaven rewards appropriate behaviour and hell intensifies the anticipated cost of misbehaviour", thus the doctrine causes an increase in the effectiveness of enforcement (Hull & Bold, 1994). Equally, Torgler (2003), reveals in a survey that high attendance in church accompanied with high religiosity considerably increase the tax morale. Conversely, the confession variables of being affiliated with a specific religion are insignificant. Thus, indicating that confession does not enhance tax morale, rather it is religiosity that upsurges tax morale and operates as a behavioural constraint that possibly inhibits illegal behaviour (Torgler, 2003).

This theory is germane to determining how religiosity impacts the extent of tax compliance based on the morality of an individual taxpayer. This theory is suitable for this study in understanding the perception and the attitude of taxpayers based on their religious affinity

The Logic of Behaviour hypothesis

Schulz (2014) upholds a notion by James March and Olsen regarding the logic of behaviour based on consequences and appropriateness that affect behavioural inspirations to compliance. The first one is the "logic of aftermaths" which perceives the actors as deciding rationally amid alternatives that are centred on their reckonings of the expected outcomes. The latter is the "logic of suitability" which considers that actions are founded on characteristic obligations and the perceptions of the suitable action. Whereas these two categories of the model of "logic of behaviour" are not mutually complete, they offer a vital starting point for considering the distinctive domestic and universal concepts of compliance that particularly emerge from the two rationalities of actions based on the actor's knowledge.

This philosophy is appropriate for this research in determining the connection amid the taxpayers' knowledge, perception and attitudes, and the extent of tax compliance.

The Fischer Model of Tax compliance

This model grants a framework for comprehending the influence of psychological and socioeconomic constituents of the taxpayers' decision to comply (Fischer et al, 1992). The model is characterised by four components, namely: attitudes and perceptions, noncompliance opportunity, demographic variables, and tax structure and system as indicated in figure2.1. This model thus incorporates the psychological, economic and sociological factors comprehensively. The model illustrates that the level of compliance is dependent on the taxpayers' tax compliance behaviour.

The demographic variables contain three principal individual traits namely education, gender, and age which impact tax compliance (Jackson &Milliron, 1986). Considering age, tax compliance is insignificant in non-adults because they have not attained the age of accountability. The influence of gender on compliance is not clear since both male and females have equal opportunities to decide whether to comply with their tax liabilities or not to. Education and gender both determine the individual's occupation, income source, and income level. Thus, demographic variables affect the noncompliance opportunity and therefore affect tax compliance indirectly via the taxpayers' perceptions and attitudes.

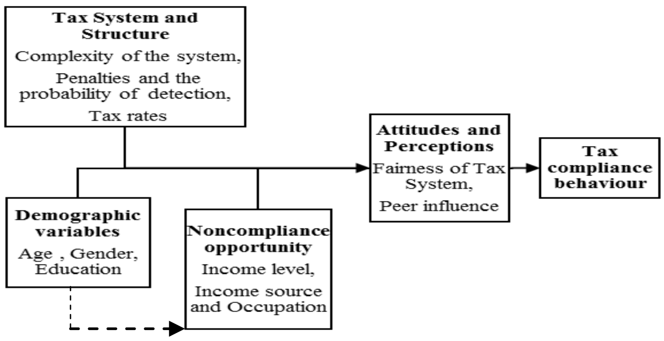

Figure 2.1 The Fischer Model of Tax Compliance (Source: Fischer et al, 1992).

Noncompliance opportunities impact tax compliance directly through occupation, income source, and income level, and indirectly via perception and attitude. A study undertaken by Andreoni (1998) indicates that most financial hypotheses portray that tax evasions could increase over most of the income escalation range. This study outlines that individuals who state improvements in the status of their income during the previous 5 years are more probable to consign to tax evasion as compared to those who have reported a deterioration of their individual income status within the same duration. The noncompliance opportunities accessible to taxpayers for them to understate income and overstate their expenses greatly vary. Hefty noncompliance results from the self-employed and from the income sources that are not subject to the withholding taxes. This indicates that income source significantly influences the tax perception and attitudes thus impacting tax compliance greatly.

Fischer’s model proposes two foremost considerations for modifying taxpayers’ perception and attitudes towards compliance of tax. These proposals encompass peer influence and the impartiality of the tax system. Impartiality of the tax system is believed by the taxpayers and the administrators too to be the principal cause of dissatisfaction with the tax system. This is the key reason for an increase in tax noncompliance. Jackson and Milliron (1986), denote peer influence as the taxpayers’ associations that entail their friends, colleagues, and relatives. Taxpayers with peers who are noncompliant tend to be noncompliant. This is also partly true for taxpayers with tax compliant peers.

Empirical Review

King’oina (2016) carried out a study on “Factors Influencing Value Added Tax Compliance among the Construction Firms in Kisumu County” and concluded that taxpayer’s perception and attitude, taxpayers’ knowledge, fines and penalties, and tax compliance cost have a significant effect on the extent of tax compliance. King’oina employed a descriptive research design accompanied by simple sampling technique. He utilised tabulated raw data to generate the descriptive statistics with a very good response rate at 72.5%.

Kosgei and Tenai (2016) undertook a study on the “Effect of Economic Factors on Tax Compliance in Kenya: A Survey of Limited Liability Companies Within Eldoret Municipality” and concluded that fines and penalties, level of actual income and tax audits have a causal effect on the level of tax compliance. Kosgei and Tenai utilised a descriptive and inferential analysis and a survey design to accomplish their study. They tabulated the raw data to make the descriptive statistics.

Gachiku (2015) tackled a study on “Tax Compliance by Small and Medium Enterprises in North Nairobi Region” and established that tax knowledge, legal framework and tax compliance cost impact the extent of tax compliance. Gachiku employed descriptive and inferential research design with the use of SPSS and statistical analysis to complete the study.

Thiga and Muturi (2015) undertook a research on “Factors That Influence Compliance Cost among Small and Medium Sized Enterprises in Kenya” and concluded that tax rates, tax understanding, fines and penalties, and tax compliance cost have an impact on the extent of tax compliance. The two utilised a descriptive research design and graphics statistical analysis in their research.

Karanja (2014) conducted a study on “Factors Affecting Voluntary Tax Compliance on Rental Income: A Case Study of Nairobi Landlords” and concluded that the attitude and perception toward tax compliance is the major factor determining the extent of tax compliance. Karanja employed a non-probabilistic sampling and a quantitative data analysis to accomplish his study.

Mukabi (2014) carried out a study on “Factors Influencing Turnover Tax Compliance in Kenya Revenue Authority Domestic Taxes Department in Nairobi County” and concluded that taxpayers’ perception of the tax system, the level of awareness, enforcement efforts and compliance costs have an effect on compliance level. Mukabi adopted a descriptive research design, that was complemented with a stratified sampling technique. In addition, Mukabi used the Statistical Package for Social Sciences (SPSS) software after tabulating the raw data and correcting the detected errors and omissions in undertaking the analysis for this study. Moreover, Mukabi had a great response rate at 91% with the respondents being 45.1% retail traders, 19.6 boutiques, 19.6 shops.

Mwangi (2014) embarked on a research on “Factors Influencing Tax Compliance among Small and Medium Enterprises in Nairobi’s Industrial Area” and established that tax rate, tax information, tax compliance cost, and taxpayer’s attitude have an impact on the level of tax compliance. Mwangi adopted the descriptive survey design and a systematic sampling process in this study. Mwangi also utilised SPSS for data analysis.

Nzioki and Osebe (2014) carried out a research on “Analysis of Factors Affecting Tax Compliance in Real Estate Sector: A Case of Real Estate Owners in Nakuru Town” and ascertained that fines and penalties, tax knowledge and education, compliance cost, and perceived opportunity for tax evasion have a causal effect on tax compliance. They adopted an explanatory research design, and descriptive and inferential statistical tests using SPSS for their analysis.

Marti, Wanjohi, Magutu, and Makoro (2010) conducted a research on “Taxpayer’s Attitude and Tax Compliance in Kenya” and concluded that attitudinal factors have an impact on the extent of tax compliance. They used systematic random sampling and descriptive data analysis.

Research Methodology

This study embraced a descriptive research design since it helps portray the characteristics allied to the targeted population, especially with factors that stimulate them to behave in the nature that they do. The design is appropriate for both qualitative and quantitative data, measures and uncovers the origin and the outcome of correlation amid variables (Coopers & Schindler, 2010). A descriptive research design reports the way things are and provides for alternative possible behaviour and attitudes. As it is factual accurate, systematic and suitable for the collection of data from a large population.Moreover, Kosgei and Tenai (2016), and King'oina (2016) have employed the descriptive research design and found it most effective in studying tax compliance.

Population

A population is the unit component of study on which the measurement is undertaken (Cooper and Schindler, 2010). The population of concern for this study comprised of the 9137 VAT registered taxpayers operating within Kiambu County as at December 2018. The taxpayers considered as part of the population for this study include corporate taxpayers, SME firms and sole proprietor entities as per December 2018. Kiambu County is of distinct focus for this research due to the adequate intensity of the corporate entities and the diversity that enabled acquisition of a descriptive cross-sectional sample while utilising minimal money and time.

Sampling frame

A sampling frame denotes a comprehensive list of all the elements which a researcher is interested in studying within a stipulated population (Sarndal, Swensson, &Wretman, 2003). This study involved the utilisation of a stratified sampling frame. The stratified frame is suitable for this study because it involves a cross-sectional sampling of a population in accord to the amount of the subpopulations to be studied.

The minimum sample size required was obtained using the formula

$$n = p\% \times q\% \times (\frac{z}{e\%})^2$$

Where,

n = required minimum sample size

p% = proportion belonging to the highest category based on the pilot survey

q% = proportion not belonging to the highest category

z = z value corresponding to 95% confidence level = 1.96, and

e% = required margin of error = 5% (Saunders, Lewis & Thornhill, 2009)

From the pilot survey, *p*% = 47%, thus substituting the values gives,

$$n = 47\% \times 53\% \times (\frac{1.96}{5\%})^2 = 382.8$$

This gives a minimum sample size of 383 participants. With a total population of 9137 registered for VAT, the amended minimum sample size is obtained using the formula

$$\acute{n} = \frac{n}{1 + \left(\frac{n}{N}\right)} = \frac{382.8}{1 + \left(\frac{382.8}{9137}\right)} = 367.4 \cong 368$$

Where

$\acute{n}$ = the amended minimum sample size,

n = the required minimum sample size, and

N = the total population (Saunders, Lewis & Thornhill, 2009)

With a population of 9137, a sample size of 368 respondents would be adequate based on the research methodology calculations provided by Saunders, Lewis & Thornhill. The stratified sample, therefore, becomes as shown in Table 3.1. The table is obtained by using a linear proportionality on the entire population in order to get the sample of each of the strata. The relational sample is obtained by using the formula:

Sample for every stratum =

$$\frac{Sample\ size}{Total\ population} \times population\ of\ the\ strata.$$

This relational formula ensures that every stratumare represented proportionally in order to minimise the error caused by either over-representation or under-representation of a given strata.

Table 3.1 Stratified Sample

Category of business entity		Population	Sample
1	Corporate entity	988	40
2	SMEs	4121	166
3	Sole proprietors	4028	162
	Total	9137	368

Data CollectionProcedure

This study employed primary data which was collected through administering a questionnaire and interviewing of taxpayers. The questionnaire had open-ended and closed-ended questions. The responses to the questionnaires gave an insight on how taxpayers' knowledge, compliance costs, tax penalties, and perception and attitudes affect VAT compliance in Kiambu County.

The questionnaire gathered information meaningful to the study through a set of predetermined questions. The questionnaire was divided into sections each covering the independent variables and the dependent variable. This was administered to the sampled taxpayers by two research assistants. The researcher supervised the research assistants and gave the assistants some basic training on how to administer the questionnaire.

Interviews targeting business owners, managers, finance directors, and accountants with an insight on tax matters was also conducted. This was done with various taxpayers in all Kiambu sub-counties. Interviews were through the use of unstructured questions. The objective here was to ensure complete response and clear understanding of questions as may be the case in the use of questionnaires. The researcher administered the interviews.

Secondary data was also collected from KRA reports and Institute of Certified Public Accountants. This provided a good understanding of VAT compliance as well as giving the best recommendations to improve tax compliance.

Data processing and Analysis

Complete questionnaires were analysed for accuracy, correctness and consistency of data collected. Data was analysed by coding according to variables in the study for efficiency so as to reduce replies given by respondents to a small number of classes. After this data was classified on the basis of similar characteristics and attributes. The raw data was then tabulated in statistical tables to allow for further analysis using the statistical package for social sciences (SPSS). The statistical package was used to summarise the data for presentation using descriptive statistics like frequencies and mean in order to get a meaningful distribution of the responses. To establish the relationship between the factors affecting VAT compliance within Kiambu County, a Binary Logistic regression model was utilised using SPSS. The binary logistic regression is a dichotomous discrete choice model where the dependent variable only takes two values depending on VAT compliance or non-compliance. The binary logistic regression model takes an equation of the following form;

$$Pr.(TC) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where,

TC = Tax compliance, the dependent variable with a value of 0 for poor compliance and 1 for good compliance.

X_1 = Tax knowledge and understanding

X_2 = Compliance cost

X_3 = Fines and penalties

X_4 = Perception and attitude

α & ε = constant and error term

β_1- β_4 = Coefficients of the model, and

Pr= Probability

Results and Discussion

Response rate and Reliability Analysis output

The study focused on 368 respondents on the factors influencing VAT in Kiambu County. Out of the 368 questionnaires issued, 326 were returned, thus giving a response rate of 88.6% as presented in table 4.1.

Table 4.1 Response rate

Questionnaires	Total
Issued	368
Returned	326
Response rate	**88.6%**

The Cronbach alpha coefficient was utilised in evaluating the dependability of the research instrument. The research required that at an alpha value of at least 0.7, the research instrument would have a dependable accuracy. Table 4.2 indicates the dependability output implying that for all the variables, the research instrument is dependable since all the Cronbach Alpha values were above the threshold value of 0.7.

Table 4.2 Dependability analysis output

Variable	Cronbach Alpha	No. of Items
Taxpayer understanding and knowledge	.793	4
Compliance costs	.787	4
Fines and penalties	.861	4
Perception and attitude	.817	4

Ranking of factors influencing VAT compliance

The factors were ranked and tabulated based on their impact as shown in Table

Table 4.3 Ranking of the factors

Factor	N	L	M	G	Mean	Rank
Taxpayer understanding and knowledge	26	38	77	185	3.30	1
Compliance costs	37	42	68	179	3.20	2
Fines and penalties	27	113	121	65	2.69	4
Perception and attitude	55	82	42	147	2.87	3

From the Table above, N, L, M, and G indicate the impact (based on the mean) of each factor and are None, Little, Moderate, and Great respectively with values of 1 to 4 in order of impact

From Table 4.3, it is evident that the taxpayer's understanding and knowledge has the greatest impact on compliance. Compliance cost, taxpayer's perception, and attitude, and ultimately fines and penalties follow the prime factor respectively in order of significance. Penalisation is thus considered the least impactful in influencing the level of VAT compliance. The reason for this could be that the savings obtained via noncompliance is lower than the penalty thus; it is making most taxpayers to voluntarily comply.

Level of VAT compliance

The researcher sought to determine the level of VAT compliance based on the response provided by the participants and the findings were recorded in Table 4.4. It was also desired to know the frequency at which the participants submitted their tax returns per cycle of submission. The findings on the frequency of VAT submission are recorded in Table 4.5.

Table 4.4 Level of VAT compliance and revenue collection

Item	Low	Moderate	High	Mean	SD
Level of VAT compliance in Kiambu County	8.0 %	39.3%	52.7%	2.4479	0.1104
Amount of VAT revenue collection in Kiambu County	13.7 %	35.1%	51.1%	2.3712	0.1077

The findings from Table 4.4 indicate that most of the participants at 52.7% and 51.1% respectively perceive the level of compliance and the amount of VAT revenue collection in Kiambu County to be high.

Table 4.5 Frequency of Submitting VAT returns on time

Frequency of VAT return submission	Response	Rate
Rarely	58	17.8%
Often	72	22.1%
Always	196	60.1%
Total	326	100.0%

The results in Table 4.5 reveal that most of the participants, 60.1% always submit their VAT returns on time. This explains why the respondents alleged the level of VAT compliance in Kiambu County to be high. The high compliance in Kiambu County explains why the participants disclosed that the amount of revenue collection is high.

Inferential Statistics

The relationship between the factors determining VAT compliance and tax compliance in Kiambu County was established through the use of a Binary Logistic regression model provided in the statistical package for social sciences. Binary regression is a dichotomous distinctly discrete model where the dependent variable takes only a value of zero or one depending on the VAT compliance. The outcome is as follows.

Model significance

Table 4.6 Model significance

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.874	.122	51.706	1	.000	2.396

The model significance solution in Table 4.6 indicated that the Wald statistics value of 51.706 was significant as illustrated by the significance value of 0.000<0.05. This denotes that the binary logistic model is a suitable and reliable predictor of the correlation between the dependent and independent variables.

Model summary

Table 4.7 Model summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	184.644[a]	.476	.677

a. Estimation terminated at iteration number 20, the maximum iteration.

The model summary output on table 4.7 reveals that the Cox & Snell R Square value is 0.476. This signifies that the independent variables (tax knowledge and understanding, compliance cost, fines and penalty, and taxpayers' attitude and perception) explain 47.6% of the change in VAT compliance (dependent variable).

Model coefficients

Table 4.8 Coefficients

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Tax knowledge	.973	.285	11.646	1	.001	2.645
	Compliance cost	1.069	.191	31.344	1	.000	2.912
	Fines	19.002	1785.781	.000	1	.992	178758281.0
	Perception	-17.952	1785.780	.000	1	.992	.000
	Constant	9.530	1785.781	.000	1	.996	13769.909

a. Variable(s) entered on step 1: Tax knowledge, Compliance cost, Fines, Perception.

The output of coefficients on table 4.8 gives the regression equation that is written as

$$Pr.(TC) = 9.530 + 0.973X_1 + 1.069X_2 + 19.002X_3 - 17.952X_4 + \varepsilon$$

The coefficient result on table 4.8 reveals that tax knowledge and compliance cost have a significant (P value = 0.001<0.05 and 0.00<0.05 respectively), positive (0.973 and 1.069 respectively) relationship with tax compliance. Also, the output indicates that fines and perception have an insignificant relationship (both have P values >0.05) with tax compliance. The output ultimately indicates that fines and penalty has a positive (19.002) relationship with VAT compliance whereas perception and attitude have a negative (-17.952) correlation with VAT compliance.

Table 4.9 Factor analysis correlation matrix

		Tax understanding and knowledge	Compliance cost	Fines and penalties	Perception and attitude
Correlation	Taxpayer understanding and knowledge	1.000	.378	-.335	-.722
	Compliance costs	.378	1.000	.095	-.474
	Fines and penalties	-.335	.095	1.000	.271
	Perception and attitude	-.722	-.474	.271	1.000
Sig.	Taxpayer understanding and knowledge				
(1-tailed	Compliance costs		.000	.000	.000
	Fines and penalties	.000		.043	.000
	Perception and attitude	.000	.043		.000
		.000	.000	.000	

a. Determinant = .301

The correlation factor analysis in table 4.9 indicates the correlation between the factor variables. The correlation between the variables is significant since they are all below the significance threshold of 0.05.

Summary of Findings

Taxpayer's knowledge and understanding

The findings on whether taxpayer's knowledge impact VAT compliance in business entities in Kiambu County revealed that tax knowledge and understanding has the greatest impact on VAT compliance. It enhances VAT compliance. The results also disclosed that tax knowledge has a positive and significant effect on the extent of VAT compliance and it ranked the first on the level of its impact on VAT compliance. King'oina (2016) found that tax knowledge and understanding had a positive and significant correlation with VAT compliance among the construction firms in Kisumu County. Gachiku (2015) equally found that tax knowledge had a positive and significant correlation with tax compliance by SMEs in North Nairobi region. Mukabi (2014) also realised that tax knowledge had a positive and significant relationship with compliance of turnover tax in KRA Domestic tax department in Nairobi County. Since VAT isn't a cost to VAT registered business taxpayers are receptive to gaining more knowledge and understanding. 67.2% of taxpayers have attended tax training and those who haven't wouldn't mind attending so long as it's affordable. KRA give more attention to taxpayer training through seminars and workshops without leaving small taxpayers out.

Cost of compliance

The results on whether the cost of compliance impacts VAT compliance indicated that this factor was the second most influential factor affecting VAT compliance in Kiambu County. It had a stronger positive and significant correlation with the level of VAT compliance amongst the business entities in Kiambu County. The study also revealed that hiring professionals was the most expensive cost of compliance. King'oina (2016) found that the cost of compliance had a positive and significant relationship with the level of VAT compliance among the construction firms in Kisumu County. Gachiku (2015) also unveiled that the compliance cost had a positive and significant correlation with tax compliance among the Nairobi North region SMEs. Mukabi (2014) alternatively realised that compliance had a negative and insignificant relationship with the level of compliance of turnover tax in KRA Domestic tax department in Nairobi County. Osebe (2014) and Mwangi (2013) both realised that the cost of compliance had a strong positive and significant correlation with the extent of tax compliance. KRA has in the recent past eliminated the physical filing of tax making filing less costly and more effective. The most expensive compliance cost is the cost of engaging a professional. KRA has removed the requirement to have VAT returns audited before making VAT refund claims. It has also opened KESRA for tax training for non-KRA staff. All this will work towards reducing the cost of compliance.

Taxpayer's perception and attitude

The findings reveal the taxpayer's perception and attitude to be the third most influential factor affecting VAT compliance. The study has found out that poor perception of the need for taxation affects compliance but not to a great extent since the cost of noncompliance exceeds the cost of compliance. Although most taxpayers feel that there is no point of paying taxes when they are being misused they cannot evade taxes due to dire consequences of the same. King'oina (2016) revealed that perception and attitude had a positive and significant connection with the extents of VAT compliance among the construction firms in Kisumu County. Karanja (2014) unveiled that taxpayer's attitude and perception had a positive and significant correlation with voluntary tax compliance on rental income among Nairobi property owners. Mukabi (2014) also realised that perception had a positive and significant relationship with the level of compliance of turnover tax in KRA Domestic tax department in Nairobi County. Marti and colleagues (2010) equally realised that taxpayer's attitude had a positive and significant correlation with the level of tax compliance in Kenya. The government through treasury should also improve on the time taken before VAT refunds are processed to improve perception and attitude. The government should strive to improve taxpayers attitude towards compliance improve by not just educating on the need to pay taxes as they have been doing but also by proper utilisation of raised funds.

Consistent looting from the public coffers dampens the patriotic action of paying tax.

Fines and Penalties

The findings indicate fines and penalties to be the least impactful in influencing the extent of VAT compliance. This is despite the fact that KRA has a penalty and interest regime with an interest of 2% compounded monthly for a period the tax remains outstanding to discourage noncompliance. The findings also disclose that fines and penalties have a very sturdy positive and insignificant correlation with the level of VAT compliance. King'oina (2016) found that the cost of compliance had a positive and significant relationship with the level of VAT compliance among the construction firms in Kisumu County. King'oina (2016) found that fines and penalties a positive and significant relationship with the level of VAT compliance among the construction firms in Kisumu County. Mukabi (2014) equally realised that enforcement efforts through penalisation had a positive and significant relationship with the level of compliance of turnover tax in KRA Domestic tax department in Nairobi County. Nzioki and Osebe (2014) unveil that fines and penalties had a negative and insignificant correlation with tax compliance among real estate owners in Nakuru town.

Despite fines and penalties no being so significant to discourage noncompliance they are still necessary. KRA has streamlined fine and penalties for various form of noncompliance in the various tax laws through the Tax Procedures Act 2015. These help improve certainty on penalties to be applied.

Level of VAT compliance

The findings indicate that majority of the respondents disclosed that the level of VAT compliance and the amount of VAT revenue collection in Kiambu County is high. Moreover, more than half of the respondents always submit their returns on time.

Conclusion

The study findings indicate that all the identified factors have a direct impact on tax compliance in Kiambu County. The results insinuate that tax knowledge and understanding and the cost of compliance have a sturdy and significant effect on the level of tax compliance. This is because tax knowledge and understanding provides significant awareness and comprehension of VAT laws, which encourages compliance.

Though fines and penalties ranks the least impactful, it is evident from the results that effective imposition of penalisation is vital in improving VAT compliance. The reason for this is that fines and penalties had the strongest positive correlation with the level of tax compliance. In addition, the taxpayer's perception and attitude are vital in improving compliance. Most of the respondents indicated that there is no point in complying when tax funds are misused. Through proper utilisation of tax funds, most taxpayers can be motivated to perceive more positively about tax compliance especially when they perceive to benefit greatly from it. Ultimately, the research study concludes that taxpayer's knowledge and understanding is the most significant factor affecting VAT compliance and KRA has to enrich the activities that promote taxpayer education to enable the taxpayers to have informed understanding that is essential for tax compliance. One prime action should involve KRA has furnishing a sufficiently knowledgeable staff to handle issues regarding tax inquiries to ensure that taxpayers get most of the relevant tax information that they seek to find.

The concern of factors influencing VAT compliance by VAT registered businesses is of utmost significance. The study findings should aid in facilitating the management of businesses in effectively dealing with all the identified factors that contribute to noncompliance. With the onset of VAT Auto Assessment, where KRA will be comparing invoices in the sellers and purchaser's return more studies need to be done once KRA & wholly implements this. There are also discussions on the implementation of a Tax Invoice Management System through which all invoicing is expected to be done by entities in Kenya. Depending on how this is implemented more studies on VAT compliance may be necessary. The study proposes the following areas for further study; the effect of withholding VAT compliance on the liquidity of businesses. An investigation of the effect of imposing VAT on petroleum products. The effect of withholding VAT on the growth of medium scale enterprises.

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