Social Economic Attributes and Tax Compliance by Individual Taxpayers in Kenya

John Kihuria Muturi¹, Farida Abdul²

¹Student, Master of Business Administration (Accounting), Kenyatta University, Kenya
²Department of Accounting and Finance, School of Business, Kenyatta University, Kenya

ABSTRACT

Tax revenues are crucial financial resources for any economy and play a key role in economic development. In Kenya tax revenues are the major source of government budgetary resources besides other sources such as grants and loans. The average GDP growth rate in Kenya from FY 2006/17 to FY 2016/17 has been 5.6 percent which is higher than the global GDP growth rate of 2.3 percent. Conversely, Kenya’s tax revenue has not grown at the same pace as the economic growth. Weaknesses in revenue performance have triggered fiscal pressures. Budget deficits have fueled external borrowing amid efforts for the country to capitalize on domestic resource mobilization. Social economic attributes are crucial with regards to tax compliance by individual taxpayers since individual taxpayers have to be aware as well as being sensitive to tax legislation for them to be tax compliant. This study was set out to ascertain effects of taxpayer knowledge, tax complexity and individual taxpayer’s characteristics on tax compliance by individual taxpayers in Kenya. The study further sought to ascertain the moderating effect of tax penalties on relationship between social economic attributes and tax compliance by individual taxpayers in Kenya. The study was anchored on Social Learning Theory, Economic Deterrence Theory and Theory of planned behavior. Cross sectional descriptive research design was adopted in this study. This study targeted the individual taxpayers who were registered with KRA. The study targeted on 4806 staff from five Public Universities in Nairobi City County. Researcher used primary data which was gathered through administering questionnaires to respondents. Data collected was analysed using descriptive statistics and multiple regression. The results postulated that tax knowledge had a significant effect on tax compliance by individual taxpayers in Kenya. The study also found that tax complexity had a significant effect on tax compliance by individual taxpayers in Kenya. In addition, individual taxpayer’s characteristics had a significant effect on tax compliance by individual taxpayers in Kenya. Further, the study found tax penalties had a significant moderating effect on the relationship between social economic attributes and tax compliance by individual taxpayers in Kenya. The study found that the taxpayers sought tax consultants to file their returns. The study moreover found that the taxpayers did not seek updates regarding changes in tax law and regulations and were not conversant with Income Tax Act CAP 470. The study therefore recommends that KRA should educate the public regarding to any changes in tax laws and also ameliorate the readability of the tax laws hence reduce the complexity of the tax law. For KRA to achieve their target compliance level, there is need to have taxpayers understand the reasons why need to pay tax on time. KRA should sensitize the taxpayers on the importance of paying tax via civic education.

Key Words: Income Tax, Social Economic Attributes, Tax Complexity, Tax Compliance, Tax Knowledge, Tax Legislation, Tax Penalties

DOI 10.35942/ijcfa.v4i1.232

Cite this Article:

Muturi, J., & Abdul, F. (2022). Social Economic Attributes and Tax Compliance by Individual Taxpayers in Kenya. International Journal of Current Aspects in Finance, Banking and Accounting, 4(1), 123-136. https://doi.org/10.35942/ijcfa.v4i1.232
1.0 Introduction

Taxation is vital for sustainable economic development. Administration of tax is crucial for success of an economy. According to Moore et al. (2005), taxes as well as tax system are key aspects in nation building which involves capacity building for substantial economic development. Tax revenues are the major source of government budgetary resources in Kenya besides other sources such as grants and loans. Lymer and Oats (2010) suggested that in order for a leverage to be created in between taxpayers and tax collection authority, the latter need to come up with ideal mechanisms to enhance tax procedures and requirements. Taxation gaps and budget shortfalls lead to dependence on grants and loans to seal the revenue–expenditure gap. The worst affected by this challenge are developing countries. The loans are composed of external debt and local debts.

According to IMF (2018), a typical lower-income country raises just 15% of GDP in taxes, in contrast with 40% collected by a typical advanced economy. Tax collection capability is crucial for a country’s capacity to fund social services like facilitating education, security, health facilities and infrastructure development. In consideration of extreme needs among the low income countries, the low level of tax collection put economic development of these countries at risk. Rahayu (2010) posits that the reason of low tax collection is as a result of a range factors, key among them being low level of taxpayers` compliance. According to OECD (2014), revenue raised from taxation provide economies with funds that are essential for them to invest in development, relieving poverty as well as delivering public services. Fostering domestic resource mobilization, is not just a matter of raising revenue but it rather involves designing revenue system that that encourages good governance, inclusiveness, improves accountability of government to citizens and promotes social justice.

Globally most economies have recorded a significant improvement in their revenue collection over the past decade. Conversely, about half of countries in the sub-Saharan African tend to generate tax revenues that is less than 17% of their respective GDP, this is below the minimum threshold as stipulated by the United Nations for the Sustainable Development Goals to be realized. The challenge of increasing revenue from domestic sources has been eminent in low-income countries (OECD, 2010). Uganda tax collection accounted 14% of the nation’s GDP which is less than regional peers and below government’s target of 16%. Poor tax collection is due to poor tax compliance by Uganda’s taxpayers (Sebudde et al., 2018). International development community have been supporting developing countries in the taxation area as well as domestic resource mobilization (OECD, 2014). According to Kloeden (2011), in most of the developing countries, tax revenues tend be the major performance indicator, conversely, in developed economies tax collection authority conduct a variety of assessments for tax performance, whereby economies can be categorized based on degree of tax performance such as high, low or average. The assessment of tax performance tends to depend on tax compliance level, hence the terms tax performance and tax compliance are used correspondingly. Compliance level is ideal for good tax revenue performance.

1.1 Statement of the Problem

According to KRA (2019) tax to GDP ratio in Kenya declined by 0.7 percentage points from 19.0% in FY 2013/14 to 18.3% in FY 2014/15. In the financial year 2015/2016, tax to GDP ratio further declined by 0.3 percentage points from 18.3% in FY 2014/15 to 18.0%. Tax to GDP ratio in declined by about 0.2 percentage points from 18.0% in FY 2015/16 to 17.8% in FY 2016/17. There was a further declined by 0.9 percentage from 17.8% in FY 2016/17 to 16.9% in FY 2017/18. Tax to GDP ratio in Kenya decreased by 0.2 percentage points from 16.9% in FY 2017/18 to 16.7% in FY 2018/19.
According to World Bank (2017) the average GDP growth rate in Kenya from FY 2006/17 to FY 2016/17, has been 5.6 percent a growth that is higher than the global GDP growth rate of 2.3 percent. Conversely to robustness of Kenya’s GDP, tax revenue growth trend has not been linearly uniform with economic growth trend. This has led induced fiscal pressures due to poor tax revenue performance by KRA. Level of revenue collection has been bypassed with the expansion expenditures hence leading to fiscal deficits in the economy. In the FY16/17 revenue increased by 13.3 percent in nominal terms whereas tax revenues grew by less than nominal GDP 14.9 percent. This triggered tax-to-GDP ratio to decline to 16.9 percent of GDP, the lowest level in a decade.

The government expenditures have been increasing while revenue generation has been missing set targets. Recurrent expenditures alone absorbed 90.2 percent of revenue collected hence leaving limited space for development expenditures (National Treasury, 2017). Actual collected Income tax in FY 2013/14 failed to meet targeted income tax by KES 1.3 billion. In the FY 2014/15 actual income tax collected failed to meet targeted income tax by KES 23.9 billion. In the FY 2015/16 actual income tax collected failed to meet the target income tax by KES 17.2 billion. Conversely in the FY 2016/17 actual income tax collected surpassed targeted income tax by KES 1.18 billion. In the FY 2017/18 actual income tax collected missed targeted income tax by KES 69.6 billion. In the FY 2018/19 actual income tax collected failed to meet targeted income tax by KES 53.5 billion (KRA, 2019). The study on social-economic attributes is crucial towards establishing its effects on tax compliance by individual taxpayers in Kenya.

1.2 Objectives of the Study

The general objective was to examine the relation between social economic attributes and tax compliance by individual taxpayers in Kenya.

This study was guided by the following specific objectives:

i. To establish effects of tax knowledge on tax compliance by individual taxpayers in Kenya.

ii. To ascertain effect of tax complexity on tax compliance by individual taxpayers in Kenya.

iii. To assess the impact of individual taxpayer’s characteristics on tax compliance by individual taxpayers in Kenya.

iv. To ascertain whether tax penalties have moderating effect on the relationship between social economic attributes and tax compliance by individual taxpayers in Kenya.

2.0 Literature Review

2.1 Theoretical Review

2.1.1 Social Learning Theory

Social learning theory postulates that a person can acquire new behaviours via observations and also via direct experience (Bandura, 1977). Social learning is a cognitive process and can only be featured in a social setting. The social learning cycle involves: process of attention, retention, motoric reproduction and reinforcement exercise. Good practices are regularly rewarded whereas negative practices are punished in order to desist bad behaviours. This enhances or promotes good behaviour within the society (Bandura, 1977).

According to Jatmiko (2006) social learning theory is salient in featuring how the taxpayers conduct themselves with regards to complying with tax legislations. Taxpayers tend to follow the precedent norm that does not attract punishment. Taxpayers are willing to meet their tax obligation once their orientation towards the government is enhanced. If they find out that tax collected is well utilized in financing public goods hence these enhances their will to abide
with tax rules and regulations. Taxpayers have a tendency of complying with tax regulations in order to avert being fined, in the event they have been fined before or they observed another taxpayer being fined. This cultivates the norm of taxpayers paying attention to details of the whole taxation system within their jurisdiction. This study sought to examine whether social-economic attributes which includes individual taxpayer’s characteristics, tax knowledge and tax complexity affects tax compliance by individual taxpayers in Kenya. This study endeavoured to ascertain if tax penalties do moderate relation between social economic attributes and tax compliance by individual taxpayers in Kenya. It is upon this modern theory that the objective of this study was based.

2.1.2 Economic Deterrence Theory

Economic Deterrence theory was developed by Becker (1968). Over the years there has been great development towards Economic deterrence theory with particular reference to different forms of sanctions. This theory is guided by the principle, in the event punishment or fine exceed the merits of doing a crime, the individual practicing crime get deterred from committing that particular offence. Punitive sanctions tend to inhibit individual from committing offence since they find them too harsh as compared to the benefit they accrue when committing the crime. According to deterrence theory rational taxpayers will either opt to comply or contravene with tax law depending on the merits and disadvantages of their respective actions. Allingham and Sandmo (1972) augmented the expected utility model on criminal activity established by Becker (1968) to taxation. The rationale of this model is that a rational taxpayer will tend to evade remitting his tax dues when the material gain as proceeds of tax evasion exceeds the cost of sanction for contravening tax legislation. The model involves various aspects including: the taxpayers have some degree of risk aversion. A risk averse taxpayer tends to reduce the risk of committing tax evasion since it leads the taxpayer to incur sanctions. During decision making, the taxpayer considers avenues that will enable him to optimize expected utility. In cases whereby audit is conducted, underreporting of tax liabilities by taxpayers is reduced. This theory implies that taxpayers pay taxes since they do not want to be sanctioned for not complying with tax legislation. Knowledge of tax law is salient as far as compliance and contravention of tax regulation is concerned. This study aimed at ascertaining if tax penalties do moderate relation between social economic attributes and tax compliance by individual taxpayers in Kenya.

2.1.3 Theory of Planned Behaviour

This theory of planned behaviour posits that human traits are triggered by three attributes, these include: normative beliefs, behavioural beliefs and control beliefs (Fishbein & Ajzen, 1975). Behavioural beliefs lead to either positive or negative orientation towards the respective trait. Normative beliefs lead to subjective norms whereas control belief result to perceived behavioural control. Positive orientation towards a certain character besides subjective norm do shape individual’s moral norms. Actual control is necessary for individual conduct; it regulates individual intentions. In the event taxpayers believe that by remitting their tax returns to the government they will have a return by accessing social amenities, they do develop positive orientation towards the government. The no quid pro quo basis used for distribution public goods and services tend to demotivate taxpayers from paying their taxes since they feel being disenfranchised by the model, this is prevalent among the largescale taxpayers. Tax penalties are used to regulate the taxpayer’s behavior hence control beliefs. Taxes penalties do inhibit non-tax compliance and promotes tax compliance by individual taxpayers. The degree of taxpayer compliance was attributed by taxpayer's perception on whether tax penalties fortifies the taxpayers in adhering to their respective tax obligations (Arum, 2012). Behavioral beliefs, control beliefs, and normative beliefs are key attribute to taxpayer’s behavior. These
factors dictate taxpayer’s intention on regards adherence of tax law and regulation (Mustikasari, 2007). Theory of planned behaviour is crucial to this study, this is because the study aimed in assessing if tax knowledge, tax complexity, individual taxpayer’s characteristics affects tax compliance by individual taxpayers in Kenya. Further, the study assessed tax penalties besides individual taxpayer’s characteristics in order to establish whether it triggers tax compliance by individual taxpayers in Kenya.

2.2 Empirical Review

Wadesango and Mwandambira (2018) carried out a study to assess effect of tax knowledge with regards to tax compliance by small medium enterprises in Zimbabwe. That research’s findings ascertained that small medium enterprises possessed basic knowledge appertaining to tax matters but lacked deeper insight on issues of taxation such as contrasting presumptive taxation with income based taxation. That study ascertained that tax knowledge doesn’t possess a significant influence on non- tax compliance by the taxpayers. However, the current study assessed the impact not only of tax knowledge but also tax complexity and taxpayer’s individual characteristics on tax compliance by individual taxpayers in Kenya. The indicators for the current study are: ability to compute tax liability, consulting tax experts and ability to file returns timely. The measurement indicators of tax knowledge for the study are: ability to compute tax liability, ability to file returns timely and consulting tax experts.

Mukasa (2011) carried a study on tax knowledge, perception on fairness in taxation and tax compliance in Uganda. That study suggests that tax knowledge had a positive relation with tax compliance as well as perception on fairness in taxation have positive relation with tax compliance. The indicator used for measure of tax knowledge were: abstract and concrete knowledge. However, the current study was conducted in Kenya focusing on KRA taxpayers. The measurement indicators for the study are: ability to compute tax liability, ability to file returns timely and consulting tax experts. This study assessed if tax knowledge affects tax compliance by individual taxpayers in Kenya.

Pau et al. (2007) assessed efficiency of newly written Income Tax law in New Zealand and binding rulings using readability measures. It was established that there were significant changes on regards to tax simplification since the newly written income Tax law was readable hence comprehensive to taxpayers. Taxpayers could read the new written tax law with ease and comprehending what the law requires them to abide. Sawyer (2007) concurred that simplification of tax law leads to positive change in terms of taxpayer’s capability to read and comprehend the written tax law. The current study assessed whether tax complexity impacts tax compliance by individual taxpayers in Kenya. Saad (2014) studied on whether tax knowledge, tax complexity affects tax compliance. The research utilized data gathered via telephone interviews and the study was done in Malaysia. It was established that tax complexity is a contributing factor to taxpayers not being compliant. It was established that if a tax system is complex taxpayers tend to incur more costs associated with compliance. Tax system that has tedious procedures is perceived to be inherently complex. Taxpayers tend to be non-compliant when they possess negative perceptions towards a tax system that they deem to be complex. However, the current study assessed on whether tax complexity affected tax compliance by individual taxpayers in Kenya.

Chau and Leung (2009) argued that apart from demographic attributes like taxpayer’s age, gender and education, various environmental attributes also affect individual taxpayers’ knowledge. The study established that as level of income increases, non-compliance rises. Taxpayers tend to pay less tax in order for them to have better net income. The social-economic factor, known under Fischer model as non-compliance opportunity can potential affect tax knowledge. These variables include: income level, income source and occupation. The study
mainly focused on partial enhancement to Fisher Model by integrating environmental factor, culture and interaction impact on making decision between non-compliance opportunity and tax system that enhances tax compliance. The current study involved both demographic factors which consists of age and level of education with an addition to level of income of the taxpayer, which is an environmental factor. These factors were used in ascertaining whether individual taxpayers’ characteristics affects tax compliance by individual taxpayers in Kenya.

Taiwo et al. (2020) studied on national culture and taxation performance within Africa. That study assessed the impact of national cultural dimensions: self-centeredness, proximity to power, perception and satisfaction on performance of taxation within ten African countries. The study ascertained that satisfaction had a significant positive influence on taxation performance whereas proximity to power, self-centeredness and perception have got significant negative influence on tax performance. The current study aimed at assessing if tax knowledge, tax complexity and individual taxpayer’s characteristics affect tax compliance by individual taxpayers in Kenya. The indicator to be measured under individual taxpayer’s characteristics are individual taxpayer’s age, income and level of education. Palil (2010); Ross and McGee (2012) suggested that taxpayer’s age positively affects tax compliance among taxpayers. Both researches did establish that older taxpayers possessed experience regarding tax administration hence this enabled them to comprehend the taxation matters more easily than young taxpayers. The older taxpayers have got a tendency to be more tax compliant. Palil (2010) argued that taxpayers possessing high level of education tend to be more informed of their tax respective tax obligations as well as the likely penalties they are imposed for contravening tax laws. The above research was done in Malaysia and Netherlands. The current study ascertained whether individual taxpayers’ characteristics affects tax compliance by individual taxpayers in Kenya.

Nuridayu et al. (2017) studied on whether tax penalties affect tax compliance by small and Medium Enterprises in Malaysia. It was established that tax penalties significantly affect tax compliance behavior. Key indicators used to measure of tax penalties were: level of punishment, knowledge and education as well as taxpayer’s attitude. All elements of tax penalties in this study were established to have positive relationship with compliance behavior of taxpayers. However, the current study sought to establish whether tax penalties do moderate the relation between social economic attributes and tax compliance by individual taxpayers in Kenya. The indicators for tax penalties in this study is available forms of tax penalties for non-remittance of income tax and non-filing returns for income tax on time and correctly. According to Jatmiko (2006) tax penalties aim at inhibiting taxpayers from contravening tax law and regulations. Rational taxpayers that are proponent of being risk averse, hence they will tend to avoid to losses by being sanctioned for contravening tax law and regulations. Taxpayers will prefer to comply with tax law with a perspective that penalties will be more devastating. Penalties tend to deter taxpayers from violating the tax laws and provisions as stipulated in the income tax law. Deborah et al. (2003) studied on role of economic and behavioural factors on tax compliance level by the taxpayers in context where there is tax amnesty system. The research focused on examining how economic and behavioural factors affect tax compliance among taxpayers in Arkansas City. It was found that the respondents did not to remit their tax dues, within the stipulated time as well as not filing their respective correct tax returns was based on various grounds including; complexity of the tax legislation, propensity to pay, ignoring tax legislations and the perception regarding high rates of taxation as well as unfairness of the taxation system. However, this current study focused on moderating effect of tax penalties on correlation between social economic attributes and tax compliance by individual taxpayers.
3.0 Research Methodology

Cross sectional descriptive design was adopted in this study. The study targeted staff from public university since they are charged PAYE. The study focused on staff of five Public Universities in Nairobi City County, these include: Cooperative University, Kenyatta University, Multimedia University, Technical University of Kenya and University of Nairobi. According to Commission of University Education (CUE, 2019) the total number of staff among the five public universities is 4806. The study targeted staff of five public universities in Nairobi City County with a total of 4806 staff (CUE, 2019). Stratified random sampling technique was employed for selection of staff who were sampled in this study.

Primary data collection tools were utilized in this research. This was done using self-made questionnaires. The design of the structure of research questionnaire was founded on the research hypothesis. It was made up of two parts: the first part the biodata of the respondents and their professional background. The second part consisted of questions relating to the tax knowledge, tax complexity, individual taxpayer’s characteristics, tax penalties and tax compliance by individual taxpayer.

Data collected was analysed through the utilizing both descriptive statistics and multiple regression. The descriptive statistics was utilized to outline level of tax compliance by individual taxpayer, tax knowledge, tax complexity and individual taxpayer’s characteristics. Multiple regression was done to test the relation between tax knowledge, tax complexity and individual taxpayer’s characteristics on tax compliance by individual taxpayer in Kenya. SPSS was used in analysing the data.

4.0 Data Analysis Results

Multiple regression analysis was done in ascertaining the relation between tax knowledge, tax complexity and individual taxpayer characteristics against the dependent variable tax compliance by individual taxpayers in Kenya. After running the selected data through SPSS, a statistical model was generated. The model generated is what is popularly called a multiple regression model.

This was \( Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon \)

Y = Tax compliance by individual taxpayers in Kenya
\( \beta_0 = \) Constant Term
\( \beta_1, \beta_2 \) and \( \beta_3 = \) Beta coefficients
\( X_1 = \) Tax knowledge
\( X_2 = \) Tax complexity
\( X_3 = \) Individual taxpayer’s characteristics
\( \varepsilon = \) Error term

The following null hypothesis were tested:

- **H01** Tax knowledge has no significant effect on tax compliance by individual taxpayers in Kenya.
- **H02** Tax complexity has no significant effect on tax compliance by individual taxpayers in Kenya.
- **H03** Individual taxpayer’s characteristics have no significant effect on tax compliance by individual taxpayers in Kenya.
Table 1: Model Summary

| Model | R    | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|------------------|---------------------------|
| 1     | 0.884 | 0.782    | 0.780            | 0.592                     |

Source: Study data (2021)

a. Predictors: (Constant), Tax knowledge, Tax complexity, Individual taxpayer characteristics

Table 2 is a model fit describing if the model equation is suitable to fit the data. The adjusted $R^2$ was utilized to assess the estimating power of the model which was ascertained to be 0.780 implicating that 78.0% of tax compliance by individual taxpayers in Kenya is described by tax knowledge, tax complexity and individual taxpayer characteristics.

Table 2: ANOVA Results

| Model     | Sum of Squares | Df | Mean Square | F         | Sig. |
|-----------|----------------|----|-------------|-----------|------|
| Regression| 335.44         | 2  | 167.720     | 477.524   | 6.50E-89 |
| Residual  | 93.778         | 267 | 0.351       |           |      |
| Total     | 429.218        | 269 |             |           |      |

Source: Study data (2021)

a. Dependent Variable: Tax compliance by individual taxpayers in Kenya

b. Predictors: (Constant), Tax knowledge, Tax complexity, Individual taxpayer characteristics

The probability value of 6.50E-89 shows that the relation of regression was substantial in determining the extent tax knowledge, tax complexity and individual taxpayer characteristics affect tax compliance by individual taxpayers in Kenya. The F measured at 5 percent level of significance was 477.524. Since F is more than the F critical (value = 3.0295), this depicts that the model was significant.

Table 3: Regression Coefficients

| Model                  | Unstandardized Coefficients | Standardized Coefficients | T      | Sig. |
|------------------------|----------------------------|----------------------------|--------|------|
| (Constant)             | 11.91                      | 4.398                      | 2.708  | 0.007|
| Tax knowledge          | 0.895                      | 0.300                      | 0.876  | 2.983| 0.003|
| Tax complexity          | 0.888                      | 0.278                      | 0.867  | 3.194| 0.002|
| Individual taxpayer’s  | 0.742                      | 0.286                      | 0.691  | 2.594| 0.013|
| characteristics        |                            |                            |        |      |

Source: Study data (2021)

a. Dependent Variable: Tax compliance by individual taxpayers in Kenya

$$Y = 11.91 + 0.895X_1 + 0.888X_2 + 0.742X_3 + \varepsilon$$

From the findings, if all independent variables were held constant at zero, then the tax compliance by individual taxpayers in Kenya will be 11.91.

The first objective of this study aimed at ascertaining whether tax knowledge affects tax compliance by individual taxpayers in Kenya. From the findings, the coefficient for tax knowledge is 0.895 which is significant since $p=0.003$ is less than 0.05, meaning that a one delta in tax knowledge leads to 0.895 change in tax compliance by individual taxpayers in Kenya. Further, the null hypothesis that states that tax knowledge has no significant effect on and tax compliance by individual taxpayers in Kenya, was rejected.

The findings were in line with Mukasa (2011) carried a study on tax knowledge, perception of fairness in taxation and tax compliance in Uganda. That study suggested that tax knowledge...
was positively related with tax compliance as well as perception of fairness in taxation was positively related with tax compliance.

The second objective of this study aimed at ascertaining whether tax complexity affects tax compliance by individual taxpayers in Kenya. The study further found that a unit change in tax complexity would lead to a 0.888 unit change in tax compliance by individual taxpayers in Kenya. This variable was significant since p-value=0.002<0.05. The null hypothesis that states that tax complexity has no significant effect on tax compliance by individual taxpayers in Kenya, was therefore rejected. These findings are consistent with Saad (2014), established that tax complexity is a contributing factor to taxpayers not being compliant. It was established that if a tax system is complex taxpayers tend to incur more compliance costs hence influence compliance behaviour of the taxpayers.

The third objective of this study aimed at ascertaining whether individual taxpayer’s characteristic affects tax compliance by individual taxpayers in Kenya. The study further revealed that a unit change in individual taxpayer characteristics would lead to a 0.742 change in tax compliance by individual taxpayers in Kenya. The variable was significant since p-value=0.013<0.05. The null hypothesis that states that individual taxpayer characteristics have no significant effect on tax compliance by individual taxpayers in Kenya, was therefore rejected. These findings are congruent with those of Palil (2010); Ross and McGee (2012) who suggested that taxpayer’s age positively affects tax compliance among taxpayers. Both researches did establish that older taxpayers possessed experience regarding tax administration hence this enabled them to comprehend the taxation matters more easily than young taxpayers. Further, Palil (2010) argued that taxpayers with high level of education have a tendency of being more enlightened of their tax obligations as well as the likely sanctions they are imposed for contravening tax laws. Generally, tax knowledge had the greatest effect on tax compliance by individual taxpayers in Kenya followed by individual taxpayer’s characteristics while tax complexity had the least effect on tax compliance by individual taxpayers in Kenya. The three variables were significant at 0.05.

The study established the null that tax penalties does not moderate the relationship between social economic attributes and tax compliance by individual taxpayers in Kenya. The moderating effect in a regression model depicts the effect of an independent variable on the dependent variable as a function of the third variable. The focus was to assessing and test the moderating effect of tax penalties on the relation between social economic attributes and tax compliance by individual taxpayers in Kenya. The model on the moderating effect was:

\[ Y = \beta_0 + \beta_1X_1 * X_4 + \beta_2X_2 * X_4 + \beta_3X_3 * X_4 + \varepsilon \]

where:
- \( Y = \) Tax compliance by individual taxpayers in Kenya
- \( \beta_0 = \) constant
- \( X_1 = \) Tax knowledge
- \( X_2 = \) Tax complexity
- \( X_3 = \) Individual taxpayer’s characteristics
- \( X_4 = \) Tax penalties
- \( \varepsilon = \) Error Term

Stepwise regression technique containing two models was adopted for testing moderating effect of tax penalties on the relations between social economic attributes and tax compliance by individual taxpayers in Kenya.

In the first model, the effect of the social economic attributes (tax knowledge, tax complexity and Individual taxpayer’s characteristics) on tax compliance by individual taxpayers in Kenya was assessed. In the second model, Tax penalties was brought in to the model.
The outcome of the regression models was as described in Table 4 and 5. Table 4 portrayed the model summary and change in R².

**Table 4: Regression Results for Moderation**

| Model | R Square | Adjusted R Square | Std. Error of Estimate | Change Statistics | R Square Change | F Change | df1 | df2 | Sig. F |
|-------|----------|-------------------|------------------------|-------------------|----------------|----------|-----|-----|------|
| 1     | .888a    | .788              | 1.512                  | 159.960           | 2              | 267      | .000|
| 2     | .912b    | .832              | 1.500                  | 8.896             | 1              | 266      | .000|

**Source: Study data (2021)**

a. Predictors: (Constant), Tax knowledge, Tax complexity, Individual taxpayer’s characteristics

b. Predictors: (Constant), Tax knowledge, Tax complexity, Individual taxpayer’s characteristics, Tax penalties

Table 4 describes how model 1 fits the data coefficient of determination was 0.783 with a sig. F change p < 0.05 of 0.044. Based on the model, 78.3% of tax compliance by individual taxpayers in Kenya was recorded for by social economic attributes whereas the remaining 21.7% of tax compliance by individual taxpayers in Kenya was as a result of other factors outside this particular study.

The change statistics in the model as depicted in Table 5 describes an increment in R² by 4.4% from 78.8% to 83.2%. The increment of 4.4% was brought about by the moderating variable being brought in the second model which is significant since p<0.05. This implicates that tax penalties moderate the relation between social economic attributes and tax compliance by individual taxpayers in Kenya.

The coefficient for the moderating effect of tax penalties on the relation between social economic attributes and tax compliance by individual taxpayers in Kenya was described in Table 5.

**Table 5: Regression Coefficients**

| Model | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
|-------|-----------------------------|---------------------------|----|------|
|       | B | Std. Error | Beta |       |    |
| 1     |   |            |      |      |    |
| Tax knowledge | 25.792 | 10.843 | 2.379 | 0.019 |
| Tax complexity | 0.895 | 0.300 | 0.876 | 2.983 | 0.003 |
| Individual characteristics | 0.888 | 0.278 | 0.867 | 3.194 | 0.002 |
|       | 0.742 | 0.286 | 0.691 | 2.594 | 0.013 |
| 2      |   |            |      |      |    |
| (Constant) | 27.917 | 10.9 | 2.561 | 0.011 |
| TK*TCIT | 0.904 | 0.324 | 0.879 | 2.790 | 0.006 |
| TCX*TCIT | 0.892 | 0.231 | 0.875 | 3.861 | 0.000 |
| ITC*TCIT | 0.813 | 0.291 | 0.703 | 2.965 | 0.009 |

**Source: Study data (2021)**

a. Dependent Variable: Tax compliance by individual taxpayers in Kenya

Where: TK = Tax knowledge
TCX = Tax complexity
ITC = Individual taxpayer’s characteristics
TCIT= Tax compliance by individual taxpayers in Kenya

The Fourth objective of this research aimed at ascertaining whether tax penalties moderates the
relation between social economic attributes and tax compliance by individual taxpayers in Kenya. The findings show that tax penalties moderates significantly the relation between social economic attributes and tax compliance by individual taxpayers in Kenya. This is described by increment in value of the regression coefficients when moderating variable was brought into the model. Therefore, hypothesis that tax penalties does not moderate the relationship between social economic attributes and tax compliance by individual taxpayers in Kenya was rejected and concluded that tax penalties moderates the relation between social economic attributes and tax compliance by individual taxpayers in Kenya. These findings are congruent with that of Nuridayu et.al (2017), studied on whether tax penalties impact tax compliance in Malaysia. That study established that tax penalties significantly influenced tax by compliance taxpayer’s in Malaysia. The findings are also congruent with that of Jatmiko (2006) which established that tax penalties inhibit taxpayers from contravening tax laws and regulations.

5.0 Conclusions and Recommendations

5.1 Conclusions

The study deduced that tax knowledge has a significance influence on tax compliance by individual taxpayers in Kenya. The study further concluded that lack of suffice tax knowledge attracts non-compliance by individual taxpayers, either willfully or unknowingly. Moreover, the individual taxpayers may unintentionally remit incorrect taxes and file incorrect tax return due to low level of tax law knowledge. This research deduced that tax complexity positively and significantly affects tax compliance by individual taxpayers in Kenya. The study further deduced that tax complexity arises due to the subtle nature of tax law. The study also concluded that tax complexity does possess a variety of forms such as computational complexity, legal complexity, and operation complexity.

The study concluded that individual taxpayer characteristics significantly affects the tax compliance by individual taxpayers in Kenya. This study concluded that each taxpayer is entitled to rights and obligations to comply with tax law despite their individual characteristics. Moreover, Individual taxpayers possessing high level of education do have the tendency of being more tax compliant than those with low level of education. Young individual taxpayers tend to be dynamic and they seek updates regarding changes in tax laws and regulation hence more tax compliant than old taxpayers.

The study concluded that tax penalties significantly moderated the relation between social economic attributes and tax compliance by individual taxpayers in Kenya. The study deduced that tax penalties can be used as a catalyst to influence tax compliance by individual taxpayers. Taxpayers have got the tendency to comply with tax legislations in the event they will be imposed tax penalties for contravention of any tax laws and regulations. Tax penalties can be used as deterrence and motivation tool that influences taxpayers’ decision hence play a crucial role in enhancing tax compliance.

5.2 Recommendations

This research recommends KRA to develop an online government to citizen platform with few procedures required when filing individual tax returns. KRA need to keep updating the taxpayers when there are changes in tax laws and regulation to enable the individual taxpayer to be aware of such changes hence enhancing tax compliance by individual taxpayers in Kenya. KRA need to simplify the methodology used in computation of tax liability this is because a complex methodology for computation of tax liability hinders individual taxpayers from being tax compliant since they tend to remit incorrect taxes against their actual tax liability.
This study recommends that tax penalties should be applied in-order to motivate taxpayers, and not to be designed for the purpose of raising additional revenue. In the event tax penalties are used for enhancing compliance level among individual taxpayers, tax penalties should not be capitalized in terms of being source of revenue by itself. For individual taxpayers to have positive orientation towards KRA, tax penalties should also be equitable, proportionate and well defined, to encourage voluntary tax compliance among the individual taxpayers and to deter them from contravening the tax laws.

The study further recommends KRA to interpret tax laws to the taxpayers by availing the tax laws and regulations in writing that enhances the readability of tax legislation by individual taxpayer, hence reducing the complexity of understanding tax law. KRA should sensitize the individual taxpayers on the necessity of them being updated on regards to changes in tax law and regulation in-order to enhance tax compliance among individual taxpayers. The study recommends KRA to consider increasing tax education to taxpayers with to taxpayer who are not seasoned with tax law knowledge. This will enhance tax compliance especially to individual taxpayers that cannot access tax experts due to factors such as financial constraints. Further, institutions of higher should consider offering taxation modules to all programmes they do offer, hence not confined to business related majors only.

References
Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Allingham, G, & Sandmo, A. (1972). Income Tax Evasion: A Theoretical Analysis. *Journal of Public Economics*, 1 (4) 323-340

Arum, P. (2012). *Effect of Taxpayer Consciousness, Tax Authorities Services and Tax Sanctions on individual Taxpayer Compliance, who conducting Independent Business and Employment: Empirical Study in KPP Cilacap*. Thesis, Bachelor of Accounting, University of Diponegoro.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191–215. doi:10.1037//0033-295X.84.2.191

Becker, G.S. (1968). Crime and punishment: an economic approach. *Journal of Political Economy*, 76 (2), 169-217.

Chau, G. & Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of Accounting, Auditing and Taxation*, Vol.1 (2), pp. 034-040.

Christina, M. R., Deborah, W.T. & Gary, D.F. (2003). *Economic and Behavioural Determinants of Tax Compliance; Evidence from the 1997 Arkansas Tax Penalty Amnesty Program*. A paper presented at the IRS research conference June 2003.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Commission of University Education (2019). *University Statistics: 2017/2018*. Nairobi, Kenya: CUE. ISBN978-9966-009-27-2

Cooper, D.R., & Schindler, P. S. (2007). *Business Research Methods*. 9th Ed. New Delhi, India: McGraw-Hill Publishing, Co. Ltd.

Cooper, D.R. & Schindler, P. S. (2010). *Business Research Methods* (11thEd.). Boston: McGraw- Hill

Fishbein, M., & Ajzen. I. (1975). Belief, attitude, intention, and behaviour: An introduction to theory and research. Reading, MA: Addison - Wesley.

International Monetary Fund (IMF), 2018. “Raising Revenue.” IMF Policy Paper, Washington, DC
Jatmiko, A. N. (2006). Pengaruh Sikap Wajib Pajak Pada Pelaksanaan Sanksi Denda, Pelayanan Fiskus dan Kesadaran Perpajakan Terhadap Kepatuhan Wajib Pajak (Studi Empiris Terhadap Wajib Pajak Orang Pribadi di Kota Semarang). Tesis, 86.

Kenya Revenue Authority (2019). Annual Revenue Performance Report for FY 2018/2019. KRA, Nairobi.

Kloedan, D. (2011). Assessing tax performance and tax administration effectiveness. International Monetary Fund-Fiscal affairs department, unpublished manuscript.

Lymer, A. & Oats, L. (2010). Taxation: Policy and Practice. 17th ed., Fiscal Publication.

Moore, M., Bautigam, D., and Fjeldstad, H. (2005) Taxation and State-Building in Developing Countries: Capacity and Consent. Cambridge University Press, Cambridge, 1-33.

Mugenda, O.M. & Mugenda, A.G. (2003). Research Methods: Quantitative and Qualitative Approaches. Nairobi: African Centre for Technology Studies.

Mukasa, J. (2011) Tax Knowledge, Perceived Tax Fairness and Tax Compliance in Uganda. Master of Science, Makerere University, Kampala.

Mustikasari, E. (2007). Kajian Empiris Tentang Kepatuhan Wajib Pajak Badan di Perusahaan Industri Pengolahan di Surabaya. Simposium Nasional Akuntansi X Makasar.

National Treasury. (2017). Budgetary Review and Outlook Paper 2017. September. Nairobi.

National Treasury. (2019). Budgetary Review and Outlook Paper 2019. September. Nairobi.

Nuridayu, Y., Rosiati, R. & Norul, A. (2017). Tax Penalties and Tax Compliance of Small Medium Enterprises (SMEs) In Malaysia. International Journal of Business, Economics and Law, 12, (1), 2289-2552.

OECD (2010). African Economic Outlook 2010, OECD Publishing, Paris.

OECD (2014). Principles for supporting developing countries in revenue matters, in Accountability and Democratic Governance: Orientations and Principles for Development. OECD Publishing, Paris.

Palil, M.R. (2010). Tax Knowledge and Tax Compliance Determinants in Self-Assessment System in Malaysia. Dissertation from Department of Accounting and Finance, University of Birmingham, United Kingdom.

Pau, C., Sawyer, A., & Maples, A. (2007). Complexity of New Zealand’s tax laws: An empirical study. Australian Tax Forum, 22(1), 59 – 92.

Riley, J. & Gary, K. (2002). Increasing Survey Response: The Drop-Off/Pick-Up Technique. The Rural Sociologist, 22(1), 6-9.

Ross, M. A., & Robert, M. (2012). Attitudes toward Tax Evasion: A Demographic Study Program: Study of the Netherlands. Journal of Legal, Ethical and Regulatory Issues,11(2),1-44.

Saad, N. (2014). Tax Knowledge, Tax Complexity and Tax Compliance: Taxpayers’ View. Procedia-Social and Behavioral Sciences, 109(5), 1069-1075.

Saad, N., Mansor, M., & Ibrahim, I. (2003). The self-assessment system and its compliance costs. Paper presented at the Accounting Seminar, Malaysia.

Saunders, M. L. (2007). Research Methods for Business Students. SAGE Publications Ltd, London.

Sawyer, A. (2007). New Zealand’s tax rewrite program – in pursuit of the (elusive) goal of simplicity. British Tax Review, 4(2), 405 – 427.

Sebudde, R. K., Kajubi, M. M., Stucka, T., Mawejje, J., & Walker, R.A. (2018). Uganda Economic Update, 11th edition: financing growth and development-options for raising more domestic revenues (English). Washington, D.C. World Bank Group.

Steele, J., Lisa B., Luoloff, A.E., Pei-Shan, L., Gene, L., & Richard, K. (2001). The Drop-Off/Pick-Up Method for Household Survey Research. Journal of the Community Development Society 32(2),238-50.
