

Tax Complexity and Compliance Behaviour of Large and Medium Sized Business Tax Payers in Kenya

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ABSTRACT

This study investigates the role of tax fairness and complexity in tax compliance decisions among large and medium sized business tax payers in Kenya. The impact of perceived behavioural control is also examined. The study utilizes the Partial Least Square (PLS) approach with a sample of 142 businesses. The findings reveal that although fairness perceptions are multidimensional, only exchange fairness affects tax compliance behaviour of the business tax payers, however complexity affects the different aspects of fairness. Perceived behavioural control was found to have a significant negative effect on compliance behaviour. The findings point to the fact that tax authorities in Kenya and similar tax jurisdictions should strive to achieve exchange fairness as well as reduce instances where tax payers can have unchecked control over their business dealings in order to increase tax compliance.

Keywords: Tax compliance, Tax complexity, Tax fairness, Perceived behavioural control.

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1. INTRODUCTION

Tax compliance is an important government policy for Kenya as tax revenue is the single largest source of government revenue and as Puspita, Subroto and Bardwan (2016) observe that tax compliance is a necessary ingredient in efforts to increase tax revenue. Corporate tax payers are an important source of revenue contributing about 75% of domestic revenues collected in Kenya (KRA, 2016). Due to the significance of tax revenues, tax administrators in most countries usually put an enormous effort into understanding and dealing with noncompliance (Richardson & Sawyer, 2001). However, most of the previous tax compliance studies have focused on developed countries, mainly in the US, UK and Australia. There is still very little literature on tax compliance behaviour of African countries and more so focusing on the corporate taxpayers-notwithstanding the role played by this segment in overall tax revenue mobilization. To reduce noncompliance, deterrence has been the most widely utilized policy instrument of choice used by most tax authorities (Schneider, 2011). However a number of studies have acknowledged that enforcement is costly, and that most tax authorities have limited resources to address the scale of noncompliance in their respective tax jurisdictions (McKerchar, 2001 & Frey, 2003). Consequently, there is an increasing need for tax researchers to focus on behavioural determinants of tax compliance, rather than rely on the traditional models, in order to better understand and address noncompliance in the current tax environment. The importance of studying behavioural aspects of tax compliance is reinforced by the fact that the tax subject cuts across several disciplines. For example to determine tax liability one requires knowledge in accounting and law. McKerchar (2008) notes that although

the various experts in the field of accounting, law, psychology and political science are experts in their own fields, they may encounter challenges in applying their skills and knowledge to solving taxation problems. This study focuses on both traditional and the behavioural / demographic determinants (e.g. age, tax liability, size as measured by total turnover) of tax compliance as well as incorporating the measures of tax fairness, complexity and perceived behavioural control in order to offer alternatives to reducing noncompliance. The contribution of the study particularly is in examining the role of tax fairness and complexity on compliance behaviour among the key taxpayers in Kenya i.e. the medium and large taxpayers.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This section provides an overview on the relevant literature on the effect of tax complexity, tax fairness and perceived behavioural control on tax compliance behaviour. This is followed by hypothesis development

2.1 Tax compliance behaviour

Although there is extensive literature on the drivers of tax compliance, there is no agreement among tax researchers on a universal definition of tax compliance. A number of studies clearly describe the concept of tax compliance and how it is applied but a surprisingly large number of studies fail to do so (Richardson and Sawyer, 2001). Some studies (Wenzel, 2004; Gilligan and Richardson, 2005; Ho and Wong, 2008; Kirchler, Hoetzl and Wahl., 2008; Kastlunger et al., 2010) use various theories from psychology or econometric domains to explore the concept of tax compliance and what should be taken into consideration, but they do not define explicitly the concept of tax compliance. This study adopted the compliance obligations as defined by OECD (2008), which contend that tax compliance include: (i) registering for tax purposes; (ii) submitting a tax return when legally obliged to do so; (iii) disclosing all taxable income and making a proper claim for deductions on the tax return; and (iv) settling the assessed tax by due dates.

2.2 Perceived behavioural control and tax compliance behaviour

The Theory of Planned Behaviour (TPB) posits that Perceived Behavioural Control (PBC) is a key element in determining a person's intentions to engage in a target behaviour, and ultimately influences the performance of the behaviour (Ajzen, 1991). Ajzen (1991) contends that a behaviour that is easy to perform is high in perceived behavioural control, while one that is difficult to perform is low in perceived behavioural control. In tax compliance behaviour research, if a taxpayer believes that he or she can avoid paying tax without being caught by a tax audit, the person will be deemed to have a high perceived behavioural control, and thus, is more likely to avoid paying tax.

There are only a handful of studies that have examined the relationship between PBC and tax compliance behaviour. Bobek and Hatfield (2003) finds two control factors of income visibility or opportunity and probability of detection or perceived probability of detection as important factors for noncompliance and as an impediment to non-compliance. Saad (2010) applied two aspects of PBC: control factor (knowledge, skill and resources) and perceived ease or difficulty in understating income as an encouragement or obstacle to the taxpayer. PBC was found to be significant in the behavioural intention to comply with the self-assessment system. In Mohammed (2016) PBC was found to have a significant negative relationship with respect to tax compliance. He found that tax payers are less likely to comply with import tax payments when there are fewer obstacles and greater opportunities for tax non-compliance.

Several researchers have also found PBC to be insignificant in explaining tax compliance behaviour. Trivedi et al. (2005) indicates that perceived behavioural control is not strong enough to influence tax compliance behaviour. Smart (2012), who used individual taxpayers and tax agents as samples in New Zealand, also supports the non-significant effect of perceived behavioural control on the intention to comply with the tax law for samples in the study. Perceived behavioural control was also found to have no effect on the behaviour of tax agents to comply with the tax law. Similar findings of a non-significant effect of perceived behavioural control is also provided by Langham et al. (2012). The study found that based on three tax scenarios provided in the study, perceived behavioural control of small and medium entrepreneurs in Australia does not influence the intention to comply with tax obligations as the level of tax complexity increases.

The effect of PBC on tax compliance behaviour thus has mixed results and thus this study seeks to add literature to this area by examining the effect of PBC on tax compliance behaviour using three variables as discussed in the next section. It is hypothesised that:

H₁: Perceived behavioural control negatively affects tax compliance behaviour.

2.3 Tax Fairness and compliance behaviour

Gerbing (1988) observes that tax fairness is a multidimensional construct, and existing tax fairness literature suggests that there are four tax fairness dimensions: horizontal equity, vertical equity, exchange equity, and procedural fairness. These four dimensions will be used to assess fairness in this study.

A study by Erich et al. (2006) observed that fairness perceptions can take various forms. First, vertical fairness, asserts that taxpayers with different economic situations should be taxed at different rates. This would result in higher income earners paying tax at higher rates than low-income earners. The second component is horizontal fairness, defined as ‘the equal treatment of equally circumstanced individuals. In other words, horizontal fairness recommends that taxpayers of similar economic positions should pay the same amount of tax. These two dimensions of fairness are derived from the Distributive Justice Theory. From the definition, one can assert that vertical fairness is a very subjective concept because the rich would deem it unfair for them to pay higher taxes just because they have higher income; they may even feel that they are being penalized for having a higher income. On the other hand it may be argued that in a developing country like Kenya, which is still building its infrastructure, it may be necessary to tax the rich more as the poor may not have sufficient taxable income.

In addition to vertical and horizontal fairness, Reithel et al. (2007), identified procedural fairness which refers to whether or not the processes accompanying resource allocations are applied in an equitable manner, and in a tax context refers to whether the processes used by a tax authority are applied in an equitable manner. Another significant fairness dimension is exchange fairness discussed by Gilligan and Richardson (2005) and Gerbing (1988), which represents the exchange of contribution and benefit between taxpayers and government. This dimension of fairness holds that taxpayers will have fair perceptions of the tax system if the benefits received from the government are equitable compared to their tax contributions.

Exchange fairness is a difficult dimension to measure as the definition of taxation asserts that tax is compulsory and one should not expect an equivalent amount of benefit from the government. The question then is how much should we expect from government given the tax we have paid. In Kenya the government has multiple obligations, for example the provision of health care, education, security, etc., with limited resources from taxation. So what will be exchange fairness for an economy like Kenya? I expect business tax payers to be concerned

more with whether the government has provided sufficient infrastructure and security to enable them operate efficiently.

Several studies indicate that tax fairness tends to show a positive association between fairness and tax compliance (Azmi and Perumal, 2008; Puspita et al., 2016). However studies from different countries indicate different results for individual fairness dimensions. Thus, a complete understanding regarding which dimensions of fairness are likely to impact compliance in various national contexts remains to be achieved. Saad (2009), Kirchler et al. (2006), Trivedi et al. (2003), and Wenzel (2002b) found a positive association between horizontal equity and tax compliance. Saad (2009) was set in Malaysia, Kirchler et al. (2006) and Wenzel (2002) in Australia, and Trivedi et al. (2003) in Canada. Vogel (1974), Maroney et al. (1998), Maroney et al. (2002), and Kirchler (2006) found a positive association between vertical equity and tax compliance but Saad (2009) found no positive association. Although Saad's (2009) results were different, her study was Malaysian, while the other studies were set in Sweden, the United States and Australia, which suggests that there may be cross-national differences that impact the association between vertical equity and compliance.

Exchange equity is positively associated with tax compliance in Vogel (1974), Spicer and Lundstedt (1976), Scott and Grasmick (1981), Warneryd and Walerud (1982), Wallschutzky (1984), Porcano (1988), Alm et al. (1992), Maroney et al. (2002), Kim (2002), King and Sheffrin (2002), Wenzel (2002b), and Richardson (2006b). There was no significant positive association between exchange equity and tax compliance in Mason and Calvin (1978), Keenan and Dean (1980), and Saad (2009). Again the results could be affected by national differences. The existing literature, which has been examined in various countries other than Kenya, demonstrates that procedural fairness is positively associated with tax compliance in Porcano (1988), Worsham (1996), Wenzel (2002b), Murphy (2004a), and Murphy (2004b).

H₂: Tax fairness perceptions have a positive effect on tax compliance behaviour.

2.4 Tax complexity and compliance behaviour

In tax compliance literature, the term 'complexity' refers to an excessive burden of record keeping, tax form completion or other compliance activity placed on the taxpayer (McKerchar, 2007). Complexity in the tax compliance domain can be expounded in various forms of complexity such as complexity in tax computation (Hanefah, 1996; McKerchar, 2001), law complexity (Kirchler et al., 2006; Krause, 2000), readability (Hanefah, 1996; Saad et al., 2014), and procedural complexity of tax administration (Cox and Eger, 2006). Literature suggests that tax complexity, is one of the determinants of tax compliance (Chan et al., 2000; Chau, 2009; Fischer, Wartick, and Mark, 1992; Forest and Sheffrin, 2002; McKerchar, 2007; Richardson, 2006; Saad, 2010). It has been established that a more complex tax system leads to non-compliance behaviour among taxpayers. Richardson (2006) using data from 45 countries, indicates that non-economic determinants have the highest correlation with tax evasion. The results also show that complexity is the most important determinant of tax evasion. The findings indicate that the lower the level of complexity, the lower the level of tax evasion, across countries. Since this study is examining business tax payers, complexity will be defined using the four aspects as discussed below:

- (i) Policy complexity which examines the number of taxes that a tax payer has to abide with at various levels. In Kenya business tax payers have to contend with national and county taxes and the greater the number of taxes the higher the policy complexity.
- (ii) Statutory complexity examines whether the income tax law itself is clear in terms of readability, length etc.,

- (iii) Administrative complexity this dimension examines how easy it is to comply with the administrative requirements of a tax. The more demands there are on a tax payer, the higher the complexity.
- (iv) Compliance complexity examines how easy it is to comply with the requirements of a given tax. For instance, what is the extent of IT usage in submitting returns and paying taxes? The lower the use the higher the compliance complexity.

Several studies indicate that tax complexity negatively affects perceptions of fairness among taxpayers. For example (Milliron, 1985) in a study of jurors concluded that complexity and fairness are distinct but incompatible features of the income tax system. Erich et al. (2006) also observes an inverse relationship between complexity and fairness perceptions. Their study focused on Australian taxpayers and tax officers where it was observed that complexity in tax law resulted in a negative perception of the tax system and consequently encouraged an unwillingness to comply. Based on the previous findings it is hypothesised that:

H₃: Tax complexity perceptions have a negative effect on tax compliance behaviour

H₄: Tax complexity perceptions have a negative effect on tax fairness perceptions.

H₅: Tax complexity perceptions have a negative effect on perceived behavioural control perceptions.

2.5 Corporate Characteristics and Compliance Behaviour

A review of past literature identified some corporate characteristics such as size and age, as determinants of corporate taxpayer compliance decisions although the results were mixed. For example, Rice (1992) did not find a relationship between firm size and tax compliance. However, Hanlon, Mills and Slemrod (2007) observed that the non-compliance rate for corporations, relative to their size, was U-shaped: larger companies were observed to be more non-compliant than their smaller counterparts, but medium-sized companies had the lowest non-compliance rate. According to the authors, the unexpected finding was connected with the opportunity for non-compliance. Other researchers such as Blackwell (2000) found firms that are larger, older and have less complicated tax situations are more compliant than firms that are smaller, younger and have more complicated tax situations. Pratama and Padjadjaran (2017) finds that profitability, size and the age of company influence tax avoidance behaviour. Profitability presents a negative sign, which means the higher the profitability, the lower the effective tax rate. Although limited the studies have identified some of the corporate characteristics that affect compliance behaviour. The results also highlighted that the significance of the relationship between the determinants and tax compliance behaviour should be confirmed through empirical work in other tax jurisdictions. Four demographic factors which include (i) size (turnover), (ii) tax liability, (iii) ownership structure and (iv) length of time the company has been in business, will be examined in this study as identified from the literature review:

H₆: There is a relationship between corporate characteristics (firm size, age, sector and legal Structure) and the tax compliance of business taxpayers

This study intends to use the model suggested below to explain tax compliance behaviour:

3. METHODOLOGY

3.1 Data collection and sampling

The population for this study included large sized and medium sized business tax payers in Kenya. The Kenya Revenue Authority (KRA), the tax authority in Kenya, defines large tax payers as those with an annual turnover of USD7.50million and above whereas a medium tax payer company as one with an annual turnover of between USD.3.50 million and USD.7.50 million. These two groups of taxpayers are spread over 15 different sectors of the economy, consisting of private, public businesses and government owned companies. An effective

sample of 250 was then adopted. The researcher then sought to obtain responses from 115 large-sized firms and 135 medium-sized firms. . A total of 142 questionnaires were duly filled and returned. This represents a 56 percent response rate.

3.2 Measurement techniques

In this study Perceived Behavioural Control (PBC) measures control over noncomplying with tax obligations. Three items were used to measure PBC: income subject to third party reporting (PBC1), presence of opportunity not to report/comply (PBC2) and a measure that captures compliance behavior when financial distress is experienced (PBC3). A higher number reflects higher control over non-compliance. Seventeen items were used to measure the three dimensions of fairness, namely exchange fairness (EF1-3), procedural fairness (PF1-11) and horizontal fairness (HF1-3). Exchange fairness is concerned with reciprocal exchange between taxpayers and the government, procedural fairness is concerned with the procedures employed by the tax authority and horizontal fairness deals with equal tax treatment among taxpayers in similar economic positions. The items were scaled such that a higher number reflects a fairer perception. The item complexity was measured using three constructs, statutory complexity (SC1-5), which measures the difficulty of complying with state and local government and, administrative complexity (AC1-6) and legal complexity (LC 1-7) which examines the legal hurdles of complying with the tax laws, the higher the score the more the complexity. The tax compliance behaviour was measured using three variables: Paying the correct amount of taxes paying on time and filling returns on time which are the requirements of KRA to be deemed compliant.

All items were developed based on the 7-point Likert Scale, from strongly disagree (1) to strongly agree (7). In addition, respondents provided demographic background information, including size (turnover), tax liability, ownership structure (company (public/private), partnership and other forms of business structures) in addition to the length of time the company has been in business will be examined.

3.3 Demographic information

The firm activities are spread out in 18 diverse sectors of the economy. This gives an indication of the extent to which analysis can be used to make generalizations about the economy. 59.15% of the businesses lie in the age bracket between 2-20years, the rest (40.85%), had their age distributed between 21 - 115 years. As such, the sample represented a wide range of businesses at various age categories in Kenya. The age groups seem to be well spread out across the age distribution spectrum, with no particular significant notable clustering of businesses within any of age brackets. Findings of preliminary analysis indicate that 70 businesses out of a total of 142 businesses that participated in the survey were drawn from the medium size category while 72 business were from the large business size category. One business did not indicate the turnover level. But within the medium sized category, 50 businesses reported turnovers of between USD 3.50-5.50 million while 20 businesses had their turnovers between USD 5.51 million and USD 10 million. The sample data shows that 19 businesses (representing 13.3%) had tax liabilities of less than USD2.95 million, 35 businesses (or 24.5%) had tax liabilities in the category class 2, 19 businesses (13.3%) tax liability was in the class category 3, 22 businesses (or 15.4%) tax liability was in category 4, 11 businesses (7.7%) fell in class category 5 and 36 businesses (25.2%) were in the tax liability bracket 6. Notable insight from this is that high tax liability holders were proportionally equal to the lowest category group and as such some symmetry in analysis is likely to be preserved. The rest of the businesses are well distributed in the income tax liability.

Table 3.0 Firm sector

| Sector | Freq. | Percent |
|---|------------|---------|
| Electricity, gas, water supply, waste services | 10 | 7 |
| Construction | 4 | 3 |
| Wholesale trade | 4 | 3 |
| Transport , postal and warehousing | 8 | 6 |
| Information, media and telecommunications | 8 | 6 |
| Finance, insurance services | 31 | 22 |
| Rental, hiring and real estate services | 8 | 6 |
| Professional, scientific and technical services | 14 | 10 |
| Administrative and support services | 3 | 2 |
| Agriculture, forestry and fishing | 10 | 7 |
| Mining | 3 | 2 |
| Manufacturing | 11 | 8 |
| Retail trade (includes shops) | 8 | 6 |
| Accommodation and food services | 6 | 4 |
| Education and training | 8 | 6 |
| Health care and social assistance | 3 | 2 |
| Art and recreation services | 1 | 1 |
| Public administration and safety | 2 | 1 |
| | 142 | 100 |

3.3.1 Descriptive Statistics of the Study Variables

Table 3.1: Descriptive Statistics for the Perceived Behavioural Control (PBC) Measures

| PBC Indicator | Obs | Mean | Std Dev |
|---------------|-----|-------|---------|
| TPBC1 | 141 | 5.879 | 1.645 |
| TPBC2 | 141 | 5.227 | 2.186 |
| TPBC3 | 141 | 5.858 | 1.815 |

There are three measures of PBC which capture income subject to third party reporting (PBC1), presence of opportunity not to report/comply (PBC2) and a measure that captures compliance behaviour when financial distress is experienced (PBC3). The standard deviation measures capture the degree to which the responses were varied from the mean position; the larger it is the more the variability in the responses. For instance, PBC2 recorded the highest standard deviation of 2.19 implying that on average responses on PBC2 were largely varied compared to say PBC3 which reported a smaller standard deviation of 1.81. It is evident from the mean scores that lack of income subject to third party reporting, opportunities and financial distress could prevent firms from their intentions to comply with their tax obligations. Because of the lowest mean, opportunities seem to be the most important measure influencing tax-payers intentions to comply or not comply. This is followed by presence of financial distress and finally presence/absence of income subject to third party reporting. In this regard, presence/absence of financial distress and income subject to third party reporting are rated as the second and third most important measures influencing intentions to comply, respectively.

In general the tax payers do not perceive the statutory and legal complexity to be an issue of concern but they seem to perceive the tax system as complex from an administrative perspective.

Table 3.2: Measures of Tax System Complexity

| STATUTORY COMPLEXITY | Indicator | Mean | Std Dev |
|----------------------------------|------------------|-------------|----------------|
| Complexity 1 | SC1 | 3.486 | 2.013 |
| Complexity 2 | SC2 | 3.746 | 1.980 |
| Complexity 3 | SC3 | 3.641 | 1.764 |
| Complexity 4 | SC4 | 3.627 | 1.824 |
| Complexity 5 | SC5 | 3.493 | 1.923 |
| LEGAL COMPLEXITY | Indicator | Mean | Std Dev |
| Complexity 6 | LC1 | 3.782 | 1.553 |
| Complexity 7 | LC2 | 4.254 | 1.504 |
| Complexity 8 | LC3 | 4.387 | 1.472 |
| Complexity 9 | LC4 | 4.465 | 1.500 |
| Complexity 10 | LC5 | 3.782 | 1.972 |
| Complexity 11 | LC6 | 3.549 | 2.175 |
| Complexity 12 | LC7 | 4.866 | 1.719 |
| ADMINISTRATIVE COMPLEXITY | Indicator | Mean | Std Dev |
| Complexity 13 | AC1 | 3.739 | 2.009 |
| Complexity 14 | AC2 | 3.796 | 2.002 |
| Complexity 15 | AC3 | 4.007 | 1.922 |
| Complexity 16 | AC4 | 6.204 | 1.241 |
| Complexity 17 | AC5 | 6.338 | 1.254 |
| Complexity 18 | AC6 | 5.451 | 1.781 |

3.4 Frequency distribution of measures of fairness (Exchange, procedural, horizontal)

Tax system fairness as earlier outlined is measured in three different forms applicable for corporate tax payers: procedural, horizontal, and exchange fairness. Table 3.3 shows distribution of frequencies (number of responses) that capture measures of perceptions of firms on tax system fairness. Over half of the firms sampled agree that the tax system is fair (in terms of exchange) when measured from the point of view of the income taxes paid to government are unreasonably high and that tax revenues in Kenya are not well utilized by the government. Measurement of tax system fairness from the perspective of procedural fairness is represented by 11 measures (Fairness 4-14). In terms of horizontal fairness- i.e. the extent to which a firm pays a similar share of income tax with other companies (whether in the same industry or not) earning an equivalent amount of income. These measures are captured by Fairness 15-17.

Evidence shows that 61 % of firms agree that it is fair for their firms to pay a similar share of income tax compared with other firms earning an equivalent amount of income. However, 27% of the firms are more neutral on this but leaning towards a disagreement with this statement. However, 31% of firms strongly agree with the assertion that two firms with same income should pay the same amount of income tax irrespective of the industry in which they operate.

Table 3.3 Frequency distribution of measures of fairness (Exchange, procedural, horizontal)

| | Code | Strongly disagree | | | | Strongly agree | | | Total |
|---------------------|-------------|-------------------|----|----|----|----------------|----|----|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Exchange Fairness | Fairness_1 | 34 | 10 | 11 | 20 | 9 | 6 | 10 | 100 |
| | Fairness_2 | 12 | 9 | 5 | 15 | 14 | 10 | 35 | 100 |
| | Fairness_3 | 16 | 3 | 4 | 11 | 9 | 14 | 43 | 100 |
| Procedural Fairness | Fairness_4 | 11 | 11 | 9 | 32 | 17 | 15 | 5 | 100 |
| | Fairness_5 | 19 | 17 | 12 | 20 | 15 | 11 | 6 | 100 |
| | Fairness_6 | 12 | 7 | 6 | 29 | 23 | 15 | 8 | 100 |
| | Fairness_7 | 12 | 12 | 7 | 25 | 26 | 10 | 8 | 100 |
| | Fairness_8 | 11 | 5 | 13 | 22 | 27 | 11 | 11 | 100 |
| | Fairness_9 | 8 | 7 | 11 | 32 | 20 | 17 | 4 | 99 |
| | Fairness_10 | 18 | 13 | 11 | 25 | 24 | 5 | 4 | 100 |
| | Fairness_11 | 27 | 13 | 11 | 22 | 14 | 5 | 8 | 100 |
| | Fairness_12 | 5 | 4 | 8 | 12 | 17 | 19 | 34 | 99 |
| | Fairness_13 | 7 | 2 | 5 | 13 | 7 | 33 | 33 | 100 |
| Horizontal Fairness | Fairness_14 | 24 | 16 | 14 | 25 | 9 | 7 | 5 | 100 |
| | Fairness_15 | 6 | 3 | 2 | 27 | 19 | 9 | 34 | 100 |
| | Fairness_16 | 13 | 9 | 8 | 14 | 12 | 13 | 31 | 100 |
| | Fairness_17 | 28 | 6 | 3 | 15 | 9 | 11 | 28 | 100 |

3.5 Data analysis

The analysis of the model hypothesized was done using Partial Least Square (PLS) approach. PLS has the ability to robustly handle more descriptor variables while providing more predictive accuracy and a much lower risk of chance correlation (Cramer III, 1993). The model used comprised of four endogenous variables (three dimensions of tax fairness and the tax compliance behaviour) and four exogenous variables (one dimension of perceived behavioural control and three dimensions of complexity), of which three were formative constructs (with a total of 20 items) and four were reflective constructs (with a total of 17 items). According to Chin (1988), formative constructs do not measure the same underlying phenomenon and therefore are not expected to correlate while reflective constructs are latent variables that measure the same underlying phenomenon. Since these two types of constructs require different evaluation methods.

3.5.1 The validity and reliability of formative constructs

The validity of the formative constructs was analysed by assessing the PLS weights and T-values results from the PLS bootstrapping procedure. The results in Table 3.4 shows that all items were not significant. According to Diamontopolous and Winklhofer (2001), it is advisable to ignore any items that are not significant in order that significant paths can be achieved. However, some researchers like Roberts and Thatcher (2009) on the contrary argue that despite their insignificance, such items need to be retained in the analysis to preserve content validity. But just as Petter et al., (2007) advised, that a careful review of each item is done to ensure that the construct is still measuring the whole domain and still preserves content validity, only a few items would be deleted because they were highly insignificant.

Table 3.4: FORMATIVE CONSTRUCTS, INDICATORS AND WEIGHTS

| Construct and Items | PLS Weights | T-Statistics | p value |
|--------------------------------|-------------|--------------|---------|
| Procedural Fairness | | | |
| PF1 | 0.3849 | 1.8099 | 0.0709 |
| PF2 | 0.0502 | 1.7628 | 0.0785 |
| PF3 | -0.1753 | 0.7083 | 0.4791 |
| PF4 | -0.0877 | 0.9067 | 0.365 |
| PF5 | -0.1267 | 0.3551 | 0.7226 |
| PF6 | -0.2953 | 0.4826 | 0.6296 |
| PF7 | 0.1132 | 1.6845 | 0.0927 |
| PF8 | 0.5903 | 1.8704 | 0.062 |
| PF9 | -0.1064 | 0.2864 | 0.7747 |
| PF10 | -0.0614 | 0.4922 | 0.6228 |
| PF11 | -0.0118 | 1.8946 | 0.0587 |
| Horizontal Fairness | | | |
| HF1 | 0.1767 | 1.0074 | 0.3142 |
| HF2 | -0.2745 | 1.1967 | 0.232 |
| HF3 | 0.2734 | 1.2414 | 0.215 |
| Legal Complexity | | | |
| LC1 | 0.019 | 0.0826 | 0.9342 |
| LC2 | -0.2486 | 1.1705 | 0.2423 |
| LC3 | -0.1074 | 0.4561 | 0.6485 |
| LC4 | -0.0319 | 0.1806 | 0.8568 |
| LC5 | -0.1026 | 0.5474 | 0.5843 |
| LC6 | 0.5262 | 1.6185 | 0.1062 |
| LC7 | -0.0212 | 0.0595 | 0.9526 |
| <i>Significance level 0.05</i> | | | |

The reliability of the constructs was done using a multicollinearity test. Petter et al., (2007) suggests that high multicollinearity is an indication of an unsteady model. Variance inflation factor and tolerance levels were used to guide the analysis of the constructs reliability. Diamantopoulos & Sigauw (2006) suggest that if the value of tolerance is less than 0.2 and the VIF is above 3.3 then there is a multicollinearity problem. Table 3.5 shows that the VIF and tolerance values are below the threshold levels. This suggested an absence of multicollinearity thereby confirming the reliability of the measures used in the study.

Table3.5 Variance Inflation Factors and Tolerance levels

| Items/Constructs | Un-standardized Coefficients | | | Standardized Coefficients | | Collinearity Statistics | |
|---------------------------------------|------------------------------|--------|--------|---------------------------|----------|-------------------------|--------|
| | Beta | STDEV | Beta | T-Statistics | P Values | Tolerance | VIF |
| Horizontal Fairness -> Tax Compliance | 0.3602 | 0.332 | 0.3602 | 1.085 | 0.2784 | 0.75818 | 1.3189 |
| Legal Complexity -> Tax Compliance | 0.0356 | 0.1148 | 0.0356 | 0.3102 | 0.7565 | 0.83327 | 1.2001 |
| Procedural Fairness -> Tax Compliance | 0.362 | 0.3523 | 0.362 | 1.0277 | 0.3046 | 0.73903 | 1.3531 |

3.5.2 The validity and reliability of reflective constructs

The reflective construct was assessed by observing the convergent and discriminant or divergent validity as in the table 3.6 below. For convergent validity, an examination of the item loadings of individual items of the construct together with the average variance extracted was done. According to Dibbern & Chin (2005), construct items are retained for analysis only if

they indicate significant loading of 0.7 or higher unless there is an indication that they may still be significant by other loadings. From the examination of the items, SC4 and SC5 - measuring statutory complexity; AC1 and AC2- measuring administrative complexity; and PBC1 and PBC3- measuring perceived behavioural control would straight away go for analysis. However, EF2 and EF3; SC2 and SC3; AC3; and PBC2 would be retained for analysis although they did not achieve the 0.7 threshold, due to their high t- values and high p-values. Based on Chin's suggestions, not all items with loadings below 0.7 may be considered for deletion. Some of these items may still be considered should there be other additional indicators for the construct (Chin, 1998). For this reasons some of the items which recorded low loadings were retained.

Table 3.6: REFLECTIVE CONSTRUCTS, INDICATORS AND LOADINGS

| REFLECTIVE CONSTRUCTS, INDICATORS AND LOADINGS | | | |
|---|---------------------|---------------------|-----------------|
| Construct and Items | PLS Loadings | T-Statistics | p values |
| EXCHANGE FAIRNESS | AVE=0.485 | | |
| EF1 | *0.3102 | 1.4256 | 0.1571 |
| EF2 | 0.5445 | 2.2447 | 0.027 |
| EF3 | 0.5286 | 2.0898 | 0.0392 |
| STATUTORY COMPLEXITY | AVE=0.479 | | |
| SC1 | *0.2554 | 1.5762 | 0.1181 |
| SC2 | 0.3691 | 2.5225 | 0.0132 |
| SC3 | 0.6497 | 3.1999 | 0.0018 |
| SC4 | 0.7736 | 3.5736 | 0.0005 |
| SC5 | 0.7216 | 3.2048 | 0.0018 |
| ADMINISTRATIVE COMPLEXITY | AVE=0.393 | | |
| AC1 | 0.7756 | 3.0285 | 0.0031 |
| AC2 | 0.7608 | 3.0414 | 0.003 |
| AC3 | 0.5135 | 2.528 | 0.013 |
| AC4 | *-0.3435 | 1.6377 | 0.1046 |
| AC5 | *-0.2848 | 1.1773 | 0.2419 |
| AC6 | *0.4078 | 1.7523 | 0.0828 |
| PERCIVED CONTROL | AVE=0.527 | | |
| PBC1 | 0.7464 | 4.7993 | 0 |
| PBC2 | 0.6554 | 3.9549 | 0.0001 |
| PBC3 | 0.776 | 2.7588 | 0.0069 |

Significance level 0.05

**Items with loadings below 0.5 are deleted from analysis*

After deleting the items which don't meet the criteria a rerun test was done and the items that remained indicated better loading and average variance extracted (AVE) for the constructs improved. This indicated good results to satisfy the condition for convergent validity as indicated by Fornell and Larcker (1981), Table 3.7 shows the results

| Table 3.7: REFLECTIVE CONSTRUCTS, INDICATORS AND LOADINGS (REVISED) | | | |
|--|---------------------|---------------------|-----------------|
| Construct and Items | PLS Loadings | T-Statistics | p values |
| EXCHANGE FAIRNESS | AVE=0.661 | | |
| EF2 | 0.5445 | 2.2447 | 0.027 |
| EF3 | 0.5286 | 2.0898 | 0.0392 |
| STATUTORY COMPLEXITY | AVE=0.723 | | |
| SC3 | 0.6497 | 3.1999 | 0.0018 |
| SC4 | 0.7736 | 3.5736 | 0.0005 |
| SC5 | 0.7216 | 3.2048 | 0.0018 |
| ADMINISTRATIVE COMPLEXITY | AVE=0.717 | | |
| AC1 | 0.7756 | 3.0285 | 0.0031 |
| AC2 | 0.7608 | 3.0414 | 0.003 |
| AC3 | 0.5135 | 2.528 | 0.013 |
| PERCIVED CONTROL | AVE=0.526 | | |
| PBC1 | 0.7464 | 4.7993 | 0 |
| PBC2 | 0.6554 | 3.9549 | 0.0001 |
| PBC3 | 0.776 | 2.7588 | 0.0069 |

Significance level 0.05

Gefen & Straub (2005) asserts that discriminant validity requires that a strong correlation exist between an indicator and its constructs and a weak correlation with other constructs. For this study two approaches were used to measure discriminant validity: cross loading and ratio of the square root of the AVE of each construct to the correlations of all other constructs. As shown in table 3.8 below, each construct had a square root of AVE bigger than its correlations with other constructs. It was concluded that all the scales measure theoretically different constructs and hence discriminant validity exist.

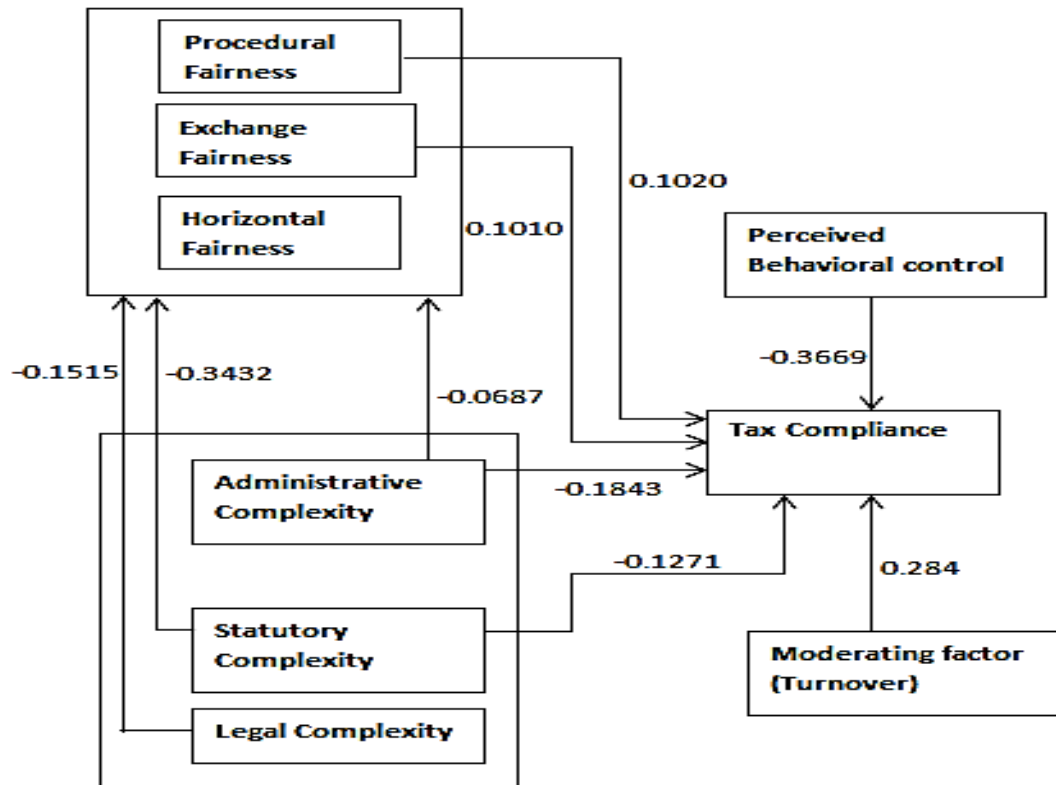
| Table 3.8: CORRELATION OF LATENT CONSTRUCTS AND THE SQUARE ROOT OF AVE | | | | | | | |
|---|----------------------|--------------------------|----------------------------|----------------------|--------------------------|----------------------------|--------------------------|
| | Admin Complex | Exchange Fairness | Horizontal Fairness | Legal Complex | Perceived Control | Procedural Fairness | Statutory Complex |
| Admin Complex | *0.6169 | | | | | | |
| Exchange Fairness | 0.1643 | 0.6741 | | | | | |
| Horizontal Fairness | -0.2736 | -0.2017 | 0.5371 | | | | |
| Legal Complex | 0.2703 | 0.0461 | -0.1755 | 0.5148 | | | |
| Perceived Control | -0.3364 | -0.0927 | 0.2227 | -0.2457 | 0.7241 | | |
| Procedural Fairness | 0.3412 | 0.2631 | -0.0657 | 0.5116 | -0.1967 | 0.4094 | |
| Statutory Complex | 0.4705 | 0.397 | -0.1954 | 0.3746 | -0.2235 | 0.5724 | 0.6867 |

4.DISCUSSION OF KEY RESULTS

From the analysis of the data the model below was derived indicating the results of the analysis and the level of effects of each variable on tax compliance behaviour. The R² value of 0.6650 for the compliance behaviour indicated that exchange fairness, procedural fairness, administrative complexity and perceived control accounted for 66.5 percent of the variance of the construct. The path coefficients of the variables under study were also provided, horizontal

fairness had no direct effect on compliance but is affected by legal complexity which also does not impact directly on compliance behaviour. Statutory complexity though not directly affecting compliance has a direct effect on exchange fairness which affects compliance.

Figure 1: The Path Coefficients



Notes:

Only the paths for latent variables are displayed in the model: $R^2=0.6650$

| | R Square | R Square Adjusted |
|-----------------------|----------|-------------------|
| TAX COMPLIANCE | 0.665 | 0.6475 |

Of the direct effects of fairness perceptions on compliance behaviour, exchange fairness will affect compliance by 0.1010 while the effect of procedural fairness 0.1020 and horizontal fairness has no direct effect on compliance. All these were positive effects as expected from empirical research. The complexity perceptions showed that legal complexity had no ascertainable relationships with tax compliance behaviour. However, administrative complexity had a negative effect of -0.1843 on tax compliance which meets the expectation of the construct. Statutory complexity had -0.1271 effect. This negativity justifies the expectation of the construct. Moreover, the results also showed that there exist effects of complexity on perceived fairness with all the three dimensions of complexity; administrative, statutory and legal complexity indicating that a change in any will lead to an inverse change in fairness perception. Perceived behavioural control affects tax compliance negatively, as the higher the control a tax payer perceives to have over a tax situation the lower the compliance, in case of a change in the level of control behaviour; compliance will be impacted negatively by 0.3669

as revealed by the model and the construct. Out of the four moderating factors examined, only size as measured by turnover had a direct effect on tax compliance behaviour.

4.1 Discussion of hypothesis

The purpose of this study was to examine the effect of tax complexity on compliance behaviour and the moderating effect of complexity on fairness. The study also examined the effect the presence of Perceived Behavioural Control (PBC) has on tax compliance behaviour. Since this study examined a sample of business tax payers the effect of four moderating factors (age, size, tax liability and business sector) was also examined.

Hypothesis 1 expected that perceived behavioural control would negatively affect tax compliance behaviour. Findings from this study reveal a total effect of negative 0.3669, t-value of 3.2597 and significance value of 0.0012 ($p < 0.05$) and thus these results support this hypothesis. The higher the control the taxpayers perceive to be exercising over the tax systems the lower the level of compliance with the tax requirements. Studies using a sample of individual tax payers such as (Smart, 2012 and Langham et al., 2012) did not find this variable to be significant. Salaried individuals usually pay taxes at source and the taxes are usually deducted by the employer and a net income paid. Businesses encounter situations where their income cannot be verified from third parties and therefore have the opportunity to be less compliant. In a country like Kenya where not all businesses have computerized processes and where a significant amount of income is on a cash basis, it was not surprising to find that this construct was highly significant in explaining tax compliance behaviour of large and medium tax payers.

Hypothesis 2 predicts that fairness perceptions will positively influence compliance behaviour. Specifically, the hypothesis suggests that the fairer taxpayers perceive the tax system, the more likely they will comply with their tax obligations. However, the findings provide no support for this hypothesis. Vertical fairness did not apply as all the companies sampled pay the same corporation tax rate of 30%. Surprisingly horizontal fairness registered no significant effect. This could point to the fact that whether a system is perceived fair or not, taxpayers have no choice but to comply. However, exchange fairness and procedural fairness affecting tax compliance by 0.1010 and 0.1020 respectively with a positive relationship as expected. However fairness is affected by the complexity of the tax system.

Hypothesis 4 predicted a negative effect of tax complexity perceptions on tax fairness perceptions. When tested indeed, the results indicated a negative effect which is significant. The three dimensions of complexity affect tax fairness negatively, (Legal complexity, -0.1515; Administrative complexity, -0.0687; and statutory complexity, -0.3432). The results can be explained to mean that the level of complexity of the tax system is perceived by the taxpayers as unfair. The numerous legislations on tax compliance may not be easily understandable by the tax payers and hence seen as a reflection of the unfairness of the systems. The more elaborate the tax system's laws, the likely that it will not be understood and perceived as not able to take care of several issues that might breach its fairness. The results support this hypothesis. The tests conducted did not reveal any relationship between tax complexity perceptions and perceived behavioural control as was predicted by this hypothesis. Thus hypothesis 5 was not supported by the findings in this study.

Hypothesis 3 predicted that tax complexity perceptions have negative effects on tax compliance behaviour. There was an expectation that the higher the level of complexity in the tax system

the lower the degree of tax compliance for the tax payers. The results from the study revealed that, administrative complexity, with Average Variance Extracted of 0.717 and a negative correlation, would affect tax compliance negatively. Possibly this can be taken to mean that factors like the tax regulations consistency, relevance and relatedness are vital in determining level of compliance rather than just the frequencies at which the regulations change. Other factors such as administrative costs involved in compliance and the procedure/means of compliance (whether manual or online) are important to determining compliance levels. However, the legal and statutory complexity did not have any significant effect. This could be explained by the fact that most of the companies sampled used the services of a tax consultants to file their returns and therefore complying with the statutory and legal requirement of the income tax would not be problematic.

Hypothesis 8 expected a relationship between the moderating factors and tax compliance behaviour. The results showed total loading of 0.3745. The turnover of a company annually loading was the most significant while the rest of the variables were insignificantly. Evidently a relationship exists between the corporate characteristics and tax compliance. This findings are similar to those in (Rice, 1992 and Black, 2000). This results point to the fact that large companies have more established accounting systems and are thus expected to be more compliant. In Kenya, the revenue authority has a large and medium sized tax payer's office dedicated to ensure the compliance of this businesses and to deal with any compliance challenges that they may face more quickly.

5. CONCLUSION, LIMITATIONS AND FUTURE RESEARCH

The study provides evidence that taxpayers of the study population perceive fairness of the tax system in two different dimensions of exchange and procedural fairness. These dimensions according to the results of the study seem to be exhibiting a positive relationship with tax compliance. Taxpayers will increase their compliance with the tax regulations if their perception of the tax system's fairness improves. However the most important finding is the fact that tax fairness is negatively impacted by complexity especially the procedural complexity. Tax authorities in Kenya have to reduce the volume of tax laws and reduce the number of procedures required to comply. The study also contributes to literature in that it finds that perceived control is a very significant factor in explaining tax compliance behaviour and the full theory of planned behaviour can be tested. In terms of policy, the tax authority has to reduce instances where the taxpayer has the opportunity to receive income which cannot be verified and therefore technology will pay an important role in cross linking various taxpayers. For example, between producers and suppliers. The most important demographic variable was size, which points to the fact the tax authority in Kenya should deduct the same zeal dealing with small tax payers as with large taxpayers.

One of the limitations of the study lies on the fact that the convergent validity analysis on some of the constructs indicated lower item loadings than the recommended minimum threshold of 0.7 for some items, thanks to the suggestions of Chin (1988) that some of the lower loadings items may still be accepted for further analysis if they are considered to be of significance. Further research should continue to expand the population size and the number of constructs in the model. In addition, a survey on fairness and complexity perceptions among tax professionals would also be an interesting area for research.

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