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Tax Compliance Behaviour and Tax System Fairness of Corporate Taxpayers in Kenya

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Abstract
The existing tax fairness literature suggests that there are four dimensions of tax fairness: horizontal equity, vertical equity, exchange equity, and procedural fairness. Although research suggests that compliance usually increases with tax fairness, this study sought to uncover the individual impact of each dimension of tax fairness on the compliance behaviour of medium and large corporate taxpayers in Kenya. Employing a structural equation modelling technique, we find that reliable measures of tax fairness are established under the procedural fairness dimension. We also find that the different dimensions of tax compliance are influenced differently by the control variables. As such, policies to enhance compliance in Kenya would require a multi-faceted approach that critically takes on board what has traditionally been considered as tax fairness measures-since some measures in fact worsen compliance levels, contrary to expectations.
Keywords: Tax compliance behaviour, tax fairness, Income Tax, Corporate Taxpayers, Kenya
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1. Introduction

Tax compliance is an important government policy for Kenya as it is the single largest source of government 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 and Sawyer, 2001). 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 the behavioural determinants of tax compliance, rather than rely on traditional models, in order to better understand and address noncompliance in the current tax environment. 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 exchange, procedural, horizontal and vertical in order to offer alternative ways of reducing noncompliance. The contribution of the study is in particularly examining the role of tax fairness on compliance behaviour among the key taxpayers in Kenya i.e. the medium and large corporate taxpayers.

2.2. Literature Review

Procedural justice theory and distributive justice theory are used to explain the reasoning behind tax payers' perception on fairness of the tax system and the effect on tax compliance.

2.1 Procedural Justice Theory (PJT) and Distributive Justice Theory (DJT)

Thibaut and Walker (1975) and Leventhal (1980) were the early pioneers of the development of Procedural Justice Theory (PJT) in tax research. Thibaut and Walker (1975) developed PJT from their pioneering work on disputes resolution procedures. The findings from their study demonstrate that an individual's evaluation of the fairness of the tax authority decision-making processes and procedures will influence their acceptance of the outcome from any dispute resolution. This hypothesis has been strongly supported by a number of subsequent studies on the resolution of legal disputes (Tyler 1988). The findings suggest that a disputant who is given control of the disputes resolution process, or process control, will be more likely to consider the verdict to be fair, even when the outcome is not favourable. Process control refers to control over the opportunity to be able to present evidence to support an individual's arguments in respect of the dispute. The finding by Thibaut and Walker (1975) is important for this research as it will assist in evaluating the fairness of the dispute mechanisms put in place by KRA.

Distributive Justice Theory(DJT) postulates that individuals judge equity not only not only in terms of assessing the benefits they receive from their tax dollars (exchange fairness), but also by comparing themselves with others (Lamm and Schwinger, 1980). In other words, individuals compare their benefits-received-to-contributions-ratio with that of others in their reference group, and if individuals find a disparity, they find their

dealings inequitable (Walster et al., 1978). DJT predicts that distribution outcomes should be equal among those with similar contributions. Although these studies apply to individuals, it has been shown that their findings can be applicable to corporate tax payers (Rice,1992; Slemrod, 1997).

2.2 Empirical studies on Fairness

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. 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; higher income earners should pay tax at higher rates than low-income earners. Second, horizontal fairness is achieved when taxpayers of the same economic positions should pay the same amount of tax. These two dimensions of fairness are derived from Distributive Justice Theory. From the definition one can assert that vertical fairness is a very subjective concept because the rich would deem it unfair to pay tax at higher rates 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, since 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); 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 free health care, free primary education, security etc. with limited resources from taxation. So it is likely that "exchange fairness'' as understood in Kenya is very different to that in a developed economy. I expect the business tax payers to be bothered with whether the government has provided sufficient infrastructure and security given its limited resources.

Slemrod (2007) notes that tax fairness literature tends to show a positive association between fairness and tax compliance. 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. 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),) 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 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),) Wenzel (2002b), Murphy (2003), and Murphy (2004). Thus from the above literature one can hypothesize that tax fairness (as measured by the four constructs are positively correlated with tax compliance.
Sapiei, Kasipillai and Eze (2014) studied large corporate tax payers in Malaysia and found a significant relationship between perceived fairness in the tax rate structure and the under-reporting of income, as well as between the perception of fairness of the tax system and the over-claiming of expenses. Perceptions on fairness of the corporate tax system was measured in relation to three dimensions, which comprise respondents' perception on company officers' moral obligations, fairness under the self- assessment environment, and amount of taxes paid over the years.

2.3 Tax compliance models

Theoretical models that explain tax compliance behaviour can be divided into two groups, non-economic and economic models. The non-economic tax compliance models on the one hand identify several non-economic

factors as important determinants of tax compliance, which include measures of tax fairness, complexity, subjective norms and attitudes of taxpayers (Orviska and Hudson, 2002). On the other hand, the economic models identify several factors that affect tax compliance behaviour, including opportunity to evade, deterrence, and detection rates (see for instance: Slemrod, 2007). The implication of these models is that when there are low audit probabilities and low penalties, the tendency for evasion will be higher, while if there is a high tendency for detection and penalties are severe, fewer people will evade taxes (Fjeldstad, Schulz-Herzenberg & Sjursen, 2012). However, the economic models have been criticized for predicting general substantial noncompliance beyond what is obtainable in reality (Slemrod, 2007). This study adopts a model which combines the economic and noneconomic variables in one model. The study has several independent variables including attitudes, subjective norms, Perceived Behavioural Controls (TPB), fairness and complexity (PJT and DJT), and compliance costs.

Most previous studies on compliance have focused more on the individual rather than the corporate taxpayer. Nonetheless, several tax compliance studies (Rice, 1992; Joulfaian, 2000) have acknowledged that prior tax compliance studies on individuals provide a formal framework for the analysis of corporate tax compliance decisions. The few studies which have been conducted on corporate tax payers have concluded that non-human factors applicable to corporate taxpayers need to be considered. Factors such as business profile, industry and economic elements (OECD, 2004) may have an influence on corporate compliance. Rice (1992) showed that firm size and tax compliance are not positively related but that the higher the amount of a firm's turnover, the greater the reporting gap. Hanlon, Mills and Slemrod (2007) notes that firm size is positively correlated with non-compliance. However, combined with other information, corporate tax non-compliance is U shaped, suggesting that medium-sized companies have the lowest rate of non-compliance. Blackwell (2000) argues that larger and older firms with less complicated tax situations are more compliant than firms that are smaller, younger and have more complicated tax situations.

This study examines four demographic factors which include: size (turnover), tax liability, ownership structure and length of time the company has been in business. In this study i hypothesize that there is a relationship between corporate characteristics (firm size, age, sector and legal structure) and the compliance of corporate taxpayers; that there is there is a positive relationship between business size and the compliance of corporate taxpayers; that there is relationship between business sectors and the compliance of corporate taxpayers; that there is positive relationship between business age and compliance of corporate taxpayers, and that there is a negative relationship between business tax liability and the compliance of corporate taxpayers.

3. Methodology

The population for this study included two categories of tax payers; large sized tax payers and medium sized tax payers as classified by the Kenya Revenue Authority (KRA), the tax collection agency in Kenya. Large sized companies are defined by KRA as tax payers with an annual turnover of USD7.5million and above. As of 1st May 2017, 1,315 companies were registered as large tax payers. Medium sized companies (MTOs) as defined by KRA as those companies with an annual turnover of between USD. 3million and USD.7.5million per annum. In this study a stratified sample of 100 companies is used. The choice of 100 firms is motivated by the choice of the modelling and analysis strategy that the study intends to use, i.e. the structural equations modelling that performs best with at least 100 cross sections (Farrington, 2009). In this regard, and based on the proportions of the firms in the total population, the study obtained responses from 50 large-sized firms and 50 medium-sized firms. A semi structured questionnaire is then used to collect data. The validity and reliability of the questionnaire was established using the Cronbach coefficient (alpha). According to Hair et al. (2006), alpha examines how homogenous and reflective a tool is in relation to the underlying constructs. A Cronbach coefficient alpha (CA) of 0.70 or above is considered a reliable while one of 0.80 is considered even better. Likewise, when the Cronbach coefficient alpha is between 0.60 and 0.70, it is only acceptable only if other indicators are good. The results for this study are discussed in Table 4.6

After data had been collected, the quantitative data was analysed using Structural Equation Model (SEM) program which has been cited in literature as appropriate for testing relationships among multiple independent and dependent constructs (Gefen, Straub, & Boudreau, 2000). The Structural Equation Model (SEM) is a multivariate approach that allows researchers to concurrently examine both measurement and structural components of a model by testing the relationships among multiple independent and dependent constructs. According to Haenlein and Kaplan (2004), SEM identifies the measurement model and underlying variables by "converting theoretical and derived concepts into unobservable (latent) variables, and empirical concepts into indicators, which are linked by a set of hypothesis." This technique encompasses confirmatory factor analysis, path analysis and multiple regression components thus making it the dominant multivariate technique in modern research (Cooper and Schindler, 2008). The variables in SEM are measured (observed / manifest) variables or indicators and factors (latent variables/ constructs). The basic idea is that a latent variable or factor is an underlying cause of multiple observed behaviours. Factors are weighted linear combinations that are created by the researcher and represent underlying constructs that have been discovered.

The factorial validity of each factor is assessed by constructing a measurement model. To this end, it is necessary to determine which indicators (i.e. survey questions) should be used to measure each factor (dimension). The minimum number of indicators needed for a factor is three (Ding et al. 1995), with four to six being ideal (Yang et al. 2010). Prior reliability analysis on the procedural fairness constructs was completed found 9 indicators, out of 11 measured, which are sufficient for analyses. For compliance, I have three indicators (excluding tax overpayment indicator). There are 12 factors which need to be measured: 9 procedural tax fairness and three for compliance. I therefore conducted a procedural fairness to analyse the propriety of the tax fairness measures, then do further SEM analysis to include compliance.

4. Discussion of results

4.1 Descriptive Statistics

4.1.1 Firm Activity (sector)

The sample is made up of firms spread out in 16 diverse sectors of the economy. This gives an indication of the extent to which analysis can be used to make generalizations about the economy. Out of the 100 firms, 21 firms are from the finance and insurance services sector, while rental and real estate and professional services account for 20%. The rest of the sectors are provided below (Table. 4.1)

Table 4.1: Descriptive statistics of firm activity (sector)

Sector	Freq.	Percent
Electricity, gas, water supply, waste services	10	10%
Construction	3	3%
Wholesale trade	1	1%
Transport , postal and warehousing	8	8%
Information, media and telecommunications	7	7%
Finance, insurance services	21	21%
Rental, hiring and real estate services	8	8%
Professional, scientific and technical services	11	11%
Administrative and support services	3	3%
Agriculture, forestry and fishing	6	6%
Mining	6	6%
Manufacturing	4	4%
Retail trade (includes shops)	3	3%
Accommodation and food services	7	7%
Education and training	1	1%
Health care and social assistance	1	1%
Art and recreation services	0	0%
Public administration and safety	0	0%
	100	**100**

4.1.2 Legal structure of firms

The legal structure of a firm can have a bearing on how the firm behaves in terms of compliance with statutory requirements, including those on tax. Out of the 100 firms sampled, 73 firms were private companies, while 11 were publicly listed companies and the rest of the firms are presented in Table 4.2.

Table 4.2 : Descriptive statistics of Legal Structure of firms

Legal Structure	Number	Percent
Sole proprietorship	0	0%
Private company	73	73%
Public company	11	11%
Un-incorporated association	1	1%
Partnership	1	1%
Trust	2	2%
Incorporated association	4	4%
Parastatal	5	5%
State Corporation	1	1%
Savings and Credit Cooperative Organisations	1	1%
Charter	1	1%
Total	100	100

4.1.3 Firm Age

The length of time that a firm has been in existence is assumed to have an impact on how it reacts and behaves towards statutory /legal requirements, including the tax laws. While experience can help a firm regularize its activities and comply with tax laws, it can also at the time imply that a firm can invest in professional services for tax advice and thus minimize tax liabilities. As such, it is important to control for firm age in the analysis of tax compliance behaviour among business tax payers. From the sample, all the firms sampled have been in existence for between 1 and 60 years. All the ages of the sampled firms are well distributed in terms of length of time.

4.1.4 Firm Size (based on Firm Turnover)

Firm size matters in decision making and compliance with statutory requirements. It is generally assumed that the bigger the firm (in terms of turnover), the higher its tax liability; and tax compliance behaviour will therefore vary with size. The sample contains 36 firms with turnover between USD3-5.5 million, 5 firms with turnover of between USD5.51-7.5 million, 9 firms with turnover of between USD 7.51-10million, and 50 firms with turnover of over USD10million. As such, there are 50 large firms and 50 medium size firms in the sample (Table 4.3).

Table 4.3: Firm Turnover statistics

Turnover (USD millions)	Code	Freq.	Cum.
Between USD.3 -5.50m	1	36	36
Between USD.5.51 -7.50m	2	5	41
Between USD.7.51-10m	3	9	50
Over USD.10m	4	50	100
Total		100	

4.1.5 Firm Income Tax Liability

Income tax payment is a cost to firms and thus efforts to minimize costs would be directed to reducing the tax liability. It is therefore important to control for the amount of the tax liability in a study of compliance behaviour. This variable is closely linked to the firm turnover measure and as such is a variable that helps to confirm the reliability of the information collected. It is evident from the sample that the tax liability of 52 percent of the firms sampled was below USD0.55 million (15 of which reported nil or no tax liability during the year) while the rest had their tax liabilities of more than USD0.55 million. It is worth noting while turnovers of 50 firms was over USD 10 million, only 27 of them reported tax liability of more than USD 1million (Table 4.4).

Table 4.4 Firm Tax Liability

Income Tax Liability (Ksh millions)	code	Freq.	Cum.
Nil (no tax liability)	1	15	15
Less than USD. 0.3 million	2	25	40
Between USD.0.301.1m -0.55 m	3	12	52
Between USD. 0.55.1-0. 75m	4	15	67
Between USD. 0.751-1m	5	6	73
Over USD.1m	6	27	100
Total		100	

4.2 Measures of Compliance

As stated previously, there are four measures of tax compliance used in this study. First is the measure that captures the submission of tax return requirements, which reflects a firm's observance with tax laws in terms of accurate computation of tax liability, of filling all the required tax returns at the proper time – with returns accurately reporting the tax liability in accordance with the rules, regulations and tax authority's decisions applicable at the time at which the returns are filed. The second is the measure of compliance that is captured directly by actual tax payment of the correct amount of tax. Third is a measure of compliance based on the likelihood that an organization would understate its income in the event of financial pressure. Fourth, is a measure of the frequency of over-payment of the tax liability- a measure of over compliance with tax requirements from the perspective of tax payment.

4.3 Measures of Tax System Fairness

Tax system fairness as earlier outlined is measured in three different forms applicable for income tax payers: procedural, horizontal, and exchange fairness. The descriptive statistics to responses on each of the three measures is provided below in Table 4.5. The table shows distribution of frequencies (number of responses) that capture measures of perceptions of firms on tax system fairness. The measurement of tax system exchange fairness is captured by three measures (Fairness 1 to Fairness 3) generated from responses to the questionnaire. 54% (out of

which 34% strongly disagree) of the respondents disagree with the assertion that their firms get a fair share of benefits received from the government based on the amount of money paid as income taxes. However, 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.

Table 4.5: Frequency distribution of measures of fairness (Exchange, procedural, horizontal & vertical)

		Strongly disagree				Strongly agree			
	Code	1	2	3	4	5	6	7	Total
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	9	7	11	32	20	17	4	100
	Fairness_10	18	13	11	25	24	5	4	100
	Fairness_11	27	13	11	22	14	5	8	100
	Fairness_12	6	4	8	12	17	19	34	100
	Fairness_13	7	2	5	13	7	33	33	100
	Fairness_14	24	16	14	25	9	7	5	100
Horizontal Fairness	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

Vertical fairness is excluded since in Kenya all corporate taxpayers are subjected to the same fixed tax rate irrespective of their income levels.

The measurement of tax system fairness from the perspective of procedural fairness is represented by 11 measures (Fairness 4-14). From the results in Table 4.5, a majority of respondents strongly agree with the notion that there is no procedural fairness of the tax system in Kenya, especially in terms of powers given to the tax office, and the tax office's interest is to make the tax office's job easier than bother about the taxpayers' interest. The firms also argue strongly that the tax office does not consult widely about how to improve conditions for taxpayers, but instead focuses on its own interest. However, the extent to which the system is procedurally fair in terms of tax office's decisions when in dispute, rules and approaches to treat taxpayers equally, basis of decision making, objective evaluation of taxpayers' information, decisions by income tax local committees- fairness vary from one sample firm to another and opinions/ perceptions are well distributed in the Likert scale.

In terms of horizontal fairness- i.e. the extent to which a firm pays a similar amount of income tax with other companies (whether in the same industry of 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 amount of income tax compared with other firms earning a similar amount of income. However, 27% of the firms are more neutral on this but leaning towards 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. The rest of the firms have diverse opinions on this latter assertion. In addition, I tested the firms' perceptions on how fair their share of income tax is in terms of the tax rate applied and the tax proportion to profit margin. Responses were generated from Fairness 17 question. From the responses generated, it is clear there seems to be no clear stance by any majority group on the extent to which the tax share paid was fair to the taxpayers. The proportion of those that strongly agree is the same those that strongly disagree with the statement that the amounts of income taxes paid were fair.

4.4 Data reliability test

Prior to estimation of a structural equation model for tax fairness and compliance, it was important to first determine the reliability of the measures of tax fairness in the three dimensions and for compliance. In this regard, I calculated the Cronbach alphas for each fairness dimension and for compliance. For behavioral research, a minimum acceptable Cronbach alpha is 0.6 (Kerlinger & Lee 2000). I maximized the Cronbach alphas by deleting several indicators where appropriate. The results are tabulated in Table 4.6. All measures, except those of procedural fairness have Cronbach alphas less than 0.65; the recommended minimum for reliable measures.

Table 4.6: Cronbach Alphas for Final Measures of Reliability of Constructs (Cronbach alphas)

Construct	Indicators	Cronbach alpha	Verdict
Exchange Fairness	Fairness 2 & 3	0.615	Constructs are average measures of tax fairness
Procedural Fairness	Fairness 4,5,6,7,8,9,10,11,&14	0.7973	Constructs are reliable measures of fairness
Horizontal fairness	Fairness 15,16 &17	0.3231	Constructs are not reliable measures of fairness
Compliance	Compliance (filing returns, tax payment, & likelihood of	0.5923	Mediocre measures of compliance

Based on the analyses of Cronbach alphas, we proceed to measure the sampling adequacy of the analysis using the Kaiser-Meyer-Olkin measure for the exchange and procedural fairness constructs. KMO takes values between 0 and 1, with small values meaning that overall the variables have too little in common to warrant a factor analysis.

Table 4.7: Measures of sampling adequacy of analysis

	Kaiser-Meyer_Olkin (KMO)	Bartlett's test of Spherity	Verdict
Exchange Fairness	0.5000	$\chi2$ (1) = 21.48 p-value = 0.0001	Not ok to proceed with factor analysis (KMO value too low)
Procedural Fairness	0.7168	$\chi2$ (36) = 309.528 p-value = 0.0001	Proceed with factor analysis
Compliance	0.5832	$\chi2$ (3) = 32.43 p-value = 0.0001	Proceed with factor analysis

The Kaiser-Meyer-Olkin measure for procedural fairness verified the sampling adequacy for the analysis, with a KMO measure of 0.7168, which is 'good' according to Field (2009). In addition, a Bartlett's test of sphericity was conducted which compares the correlation matrix with a matrix of zero correlations (technically called the identity matrix, which consists of all zeros except the 1's along the diagonal). From this test a small p-value indicates that it is highly unlikely for one to have obtained the observed correlation matrix from a population with zero correlation. In this study $\chi2$ (36) = 309.528, p-value = 0.0001, which indicates that correlations between items were sufficiently large for principal components analysis. The KMO measure for exchange fairness point to sampling inadequacy for analysis of exchange fairness. I therefore proceed to conduct a valid factor analyses for procedural fairness and compliance.

Once it was determined that the measurement models for procedural tax fairness and compliance display good fits, I proceeded to test the validity of a possible causal structure by building and analyzing a structural model. The structural model specifies the relationships among the latent constructs of procedural fairness and compliance. The SEM analysis does not prove causation, but tests the strength of the association between procedural tax fairness measures and tax compliance. In this study the structural model has one dependent factor, i.e. tax compliance, and six independent factors; the indicators of procedural fairness. Table 4. 8 shows the regression coefficients along with statistical significance of the regression paths for each procedural tax fairness measures in influencing tax compliance. The results are generated by structural equation modelling regression.

Table 4. 8: SEM Regression Results of Tax Compliance on Procedural Fairness Measures

	Compliance (Filling all Returns)	Compliance (Paying Tax Payment)	Compliance (Likelihood of understating income)
Independent variables (Measures of procedural fairness):	Coef. (std errors)	Coef. (std errors)	Coef. (std errors)
fairness 4	0.0102 (0.0151)	0.0403** -0.0176	-0.1112 -0.0843
fairness 5	0.0245* (0.145)	-0.0151 -0.0304	0.1461* -0.0786
fairness 6	-0.0630*** (0.0179)	-0.0496 -0.0439	-0.09 -0.0972
fairness 7	0.0488*** (0.0170)	0.0204 -0.0408	-0.1502 -0.0951
fairness 8	-0.0163 (0.0147)	0.0498** -0.0209	-0.0451 -0.082
fairness 10	0.0181* (0.0102)	-0.0438* -0.0242	0.0872 -0.0677
Firm Age	-0.0027* -0.0015	-0.0002 -0.0015	0.0327*** -0.0082
Total Turnover (Firm size)	-0.0612*** (0.0222)	0.2065*** -0.0404	0.0496 (0.1241)
Income Tax Liability	0.0311*** -0.012	-0.0172 -0.0149	-0.0336 -0.0837
Constant	1.2133*** -0.1009	4.1537*** -0.241	5.3208*** (0.5925)

4.5 Discussion of findings

The tax fairness measures that significantly influence tax compliance behaviour among corporate taxpayers in Kenya include measures 5, 6, 7 and 10. Out of these measures, it is only fairness measure number 6 which states that the tax office's decisions are mainly based on facts and not opinions that negatively influence on tax compliance. This means that when firms perceive that the rules and approaches applied by the tax office treat them equally, there is a tendency for them to relax on submitting tax returns. This reflects perhaps existence of some moral hazard issue in that firms may think since all taxpayers are treated equally; even those that do not fully comply would still not be subjected to harsh penalties. It must be noted that the responses on compliance measure on returns were all spread between fully complying and partially complying and no response on zero-compliance. This result is also present when firms perceive that in a dispute the tax office would evaluate their information objectively and fairly and when tax office considers firm circumstances when taking decisions. This may imply when the tax office yields too much ground in seeking full compliance on returns and allow firms to make explanations on why they don't fully submit returns, there is a tendency for firms to fail to fully submit returns. However, as firms perceive that the tax office's decisions are mainly based on facts and not opinions, they seem to increase their compliance with the requirements to file returns. This is directly related to adherence to laid-down procedures and tax office tendency to allow explanations on failure to file returns. As such, firms would be obligated to make full submissions on time.

When we account for the age of the firm, as age increases, firms tend to have more dedicated units that handle tax matters and as such would enhance their compliance. This explains the negative relationship between firm age and tax compliance as measured by extent of filing tax returns. The same explanation would also apply for the case of increasing firm size which relates negatively (implying increased size increases firm's tendency to fully comply) with tax compliance. But as income tax liability increases firms would have a tendency to reduce their likelihood to fully file tax returns. This is consistent to expectations from theory since tax payment is a cost to the firm and all firms seek to minimize costs.

In terms of the impact of tax fairness on tax compliance- as measured by the number of times tax payments were made, tax fairness measures 4,8 and 10 were found to be significant. Based on tax measure 4 which captures the notion that as firms increase their perceptions that tax office's decisions are fair, they are likely to increase their compliance to tax payments. This is also the case when firms perceive that in circumstances when there is a dispute the resolution mechanisms in place are fair. However, when firms perceive that the tax office considers circumstances of each office in its decisions- there is a tendency for them to reduce tax compliance. This is perhaps

because firms can easily invest in reducing tax burden by exploring tax avoidance schemes when they know they tax office is flexible to consider their circumstances.

As for the control variables, firm age and firm income tax liability re not significant determinants of compliance. However, firm total turnover is significant. As firm turnover increases, there is a tendency for the firm to fully comply with tax payments. This is because as the firm size (measured by turnover) increases its contribution to total tax revenue is significant and the revenue authority would be keen in the tax payments that the firm remits. As such, noncompliance is easily detected and where variations may occur, the tax office would be keen to scrutinize.

We also sought to establish the influence of the procedural tax fairness measures on the likelihood of a firm understating its income when under financial stress. Among all the tax fairness measures, we found that only tax fairness measure number 5 (which captures perceptions of firms on whether the rules and approaches applied by tax office treat all taxpayers equally). We indicate that as firms perceive this statement to be true, there is a tendency for them to increase their likelihood of understating income. This is perhaps because of the likelihood that when all firms are treated equally, some can afford to understate their incomes without facing a real risk of penalties should they be discovered. In other words, when all firms are treated equally, moral hazard sets in and thus leading firms to attempt understating of income to minimize tax liability.

5. Conclusion

The tax authority could consider reviewing the tax system to ensure that the aspects of tax fairness that discourage compliance are addressed. For instance, the findings show that if the tax office rules and approaches applied in decision making treat taxpayers equally- they are likely to reduce tax compliance in terms of returns submitted as well as understatement of their income because of the potential moral hazard that such could cause. As such, there should be a differentiated approach to deal with firms so that moral hazard is minimized when firms know that if they fail to comply, they face the law. In addition, if there is extremely high level of objectivity and fairness in evaluation of individual firm circumstances, this may also encourage non- compliance especially on submission of returns and tax payments. A deviation from rules to adopt an objective understanding of individual firm circumstances can encourage non- compliance since firms can invest in providing explanations for non - compliance. As such, an optimal balance between adherences to tax rules can work to encourage compliance since firms would not be tempted to understate income and /or fail to submit returns in anticipation of an occasion to explain their individual circumstances.

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