Global Business Management Review, 2019
11 (1) 54-76, 2019
http://oyagsb.uum.edu.my/GBMR

Fairness Perceptions and Voluntary Tax Compliance in Nigeria: The Moderating Role of Trust

Abba Ya'u[1], Natrah Saad[2]

[1] PHD Student Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia, Sintok, Malaysia. abbayau1@gmail.com,

[2] Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia, Sintok, Malaysia. natrah@uum.edu.my

Received: 13 November 2019 Revised: 16 December 2019 Accepted: 21 November 2019
Published 31 December 2019

Abstract

Fairness perception in Nigeria has been a subject of concern. Further, the study examined the moderating role of trust in explaining voluntary tax compliance in Nigeria. For that purpose, a cross-sectional study was conducted. 249 questionnaires were collected from the 450 questionnaires issued to the owners of micro-enterprises in Jigawa State Nigeria. The data was analyzed using SPSS and PLS to answer the research questions. The Partial Least Square (PLS) path modeling was used in examining the relationship between fairness perceptions and voluntary tax compliance, trust and voluntary tax compliance and the moderating role of trust between fairness perception and voluntary tax compliance. Moreover, the results reveal that fairness perceptions have a positive and significant relationship on voluntary tax compliance and trust in authority has significant and positive relationships with voluntary tax compliance. Additionally, trust moderates the relationship between fairness perceptions and voluntary tax compliance. The study has the potential highlight to the Nigerian government on the way to improve voluntary tax compliance among citizens. The study also contributes to the paucity of accounting literature on taxation in Nigeria and also contribute to the existing body of accounting literature as a whole.

Keywords:

Voluntary, tax, compliance, fairness perception, trust.

1.0 INTRODUCTION

Taxes are important for the economic development of both developing and developed countries. The government generates revenue through taxes to provide the needed social amenities to its citizens for economic and social development. However, despite the numerous importance of taxes for the economic growth of developed and developing countries, Nigeria as one of the developing countries faces challenges of tax non-compliance. The issue of tax compliance in Nigeria had become a public outcry (Ayuba, Saad & Ariffin, 2018). One of the most commonly global measures of tax compliance by country is tax contribution to Gross Domestic Product (GDP) which is declining over time in Nigeria. For instance, tax as a contribution to GDP declined from 7% in 2014 (Okonjo-Iweala, 2014) to 3.4% in 2017 (CIA World Factbook, 2019).

This situation can be seen as insufficient to build a strong economy. A comparison with other African countries also indicates various countries' low tax compliance. Evidence from CIA World Factbook, 2019 reveals that African countries like Ghana, South Africa, Angola, and Uganda are performing better than Nigeria in terms of tax as a percentage of GDP see appendix B. Nigerian tax as a percentage of GDP was only 3.4% in 2017, which is far below that of Angola (29.3%), Ghana (20.3%), South Africa (26.6%) and Uganda (14.5%) (CIA World Factbook, 2019). This indicates the need for an investigation of the factors mitigating against low tax compliance in Jigawa State Nigeria. While the above statistics are for tax generally, specific compliance with personal income tax is also low in Nigeria. Statistics over of decade indicated that the personal income tax as a percentage of total revenue was less than 2% for the decade from 1999 to 2008 (Alabede, Ariffin, & Idris, 2012).

Several factors have been determined to influence tax compliance in Nigeria such as ethnicity diversity, noncompliance opportunity, governance quality, perceived tax service quality, tax system structures, moral reasoning, tax knowledge, attitudes, risk preference, personal financial condition and demographic variables (Alabede, et al., 2011). However, to the researcher's knowledge, three studies have examined the influence of tax fairness perception on tax compliance in Nigeria (Mustapha, 2010; Gberegbe, Idornigie & Davies 2015; Mohammad & Dabor, 2016). The first study was conducted before the amendment of the Nigerian personal income tax act in 2011. Such an amendment was opined to be fairer as middle-class taxes were reduced and a small tax increase was placed to the rich to demonstrate

equity in the tax system (Oyedele, 2012). The second and third study investigates only one dimensions out of ten popular dimensions, for example, Gberegbe et al., (2015) examined only exchange with the government which is one out of the ten dimensions of fairness perceptions. On the other hand, Muhammad and Dabor (2016) examined only the tax rate which is also one of the dimensions of fairness perceptions. However, the following dimensions have not been examined by those studies such as general fairness, vertical fairness, horizontal fairness, personal fairness, retributive fairness, and administrative fairness, hence the need to investigate whether the amended tax law can lead to change in the perception of fairness and eventually tax compliance.

The purpose of the amendment is to improve fairness of the personal income tax among taxpayers, the reasons is that Personal Income Tax is also a weapon, which could be used to reduce inequality in society, encourage manufacturing industries, by the use of tax incentives, and discourage undesirable industries (Akintoye, 2013; Asabor, 2012; Oduh, 2012; Ariwodola, 2000; Angahar, 2012; Okpe, 1998).

Another issue in Nigeria is that of corruption, which can affect negatively the trust citizens have in the tax system (Dike, 2005). The fact is that Nigeria ranked among the most corrupt countries across the world standing at 139th in 2012 and 144th in 2013 in Transparency International's Corruption Perceptions Index though it remained stable at 136th in 2014 and 2015. In many aspects, corruption is related to trust, and trust, in turn, is related to fairness perceptions. When a citizen believes that the government or authorities are trustworthy in handling their resources judiciously, they will pay taxes (Alemika, 2004).

Voluntary and enforced compliance, as well as tax avoidance and evasion, are described as resulting from the interaction between taxpayers' trust in authorities and authorities' power to monitor taxpayers. When trust in the authorities is high, taxpayers will pay their taxes voluntarily. In contrast, when trust in the authorities is low, taxpayers are assumed to be motivated to withhold their contributions. When trust is low, but the authorities' power to effectively audit and sanction wrong behavior is strong, taxpayers' compliance is enforced (Kirchler & Wahl, 2010).

Corruptions can affect fairness perception from the perspective of distributive justice fairness, this is because distributive justice fairness assert provisions of exchange with authority which means the authority is expected to provide provisions of good and service virtually equivalent

or even more than the contribution made by the taxpayers(Gilligan & Richardson; 2005; Gerbing, 1988). However, where the government failed to deliver what the taxpayers are expected from it, then taxpayers can perceive the tax system as unfair thereby deliberately deciding not to comply with the tax rules.

Hence, a need exists to investigate the role that trust plays in influencing the fairness perception concerning voluntary tax compliance in Nigeria (IT, 2016). Additionally, Faizal et al (2017) reiterated that there is a need to create trustworthiness between taxpayers and tax authorities because the establishment of truth between the two parties will invariably increase compliance. This need has led this research to investigate the moderating effect of trust in the relationship between fairness perception and voluntary tax compliance in Jigawa State Nigeria**.**

Organization of the study: The first part of this paper discussed on the general background of the study, the part also highlights the alarming problem that leads to the investigation. Section two will provide literature related to the variable under investigation, hypothesis development and theoretical framework. The third part of this paper discussed the methodology used in conducting the study which comprises the research design, population of the study, sample size and method of data collections. Section four of this paper discussed the results and findings of the study. Section five is the discussion section; section six is the conclusion part of the study, while section seven is the recommendation of the study and lastly section eight is the suggestion for future Study.

2.0 LITERATURE REVIEW

Previous literature on the variables under investigation was discussed in this section. The theory, hypotheses development as well as research framework was also being presented in the section.

2.1 Equity Theory

Equity theory was found to be suitable for this research because of its relevance in addressing the perception of fairness. Equity theory explains whether the allocation and distribution of resources are fair to relational parties, for example, taxpayers and tax authorities. Equity is measured by looking at the costs of the benefits/rewards for an individual. The history of equity theory dates to the work of Adams (1976) a behavioral psychologist. Adams argued that employees strive to maintain equity between their contributions and the benefits they receive

in return against the contribution and benefits of others (Adams, 1976). The emphasis here is that people respect fair treatment, which, in turn, influences their motivation to obey any law. Based on this relationship, the conclusion can be made that, where taxpayers perceive fair treatment from the relevant tax authority, they will voluntarily comply with tax regulations and government revenue will increase as a result of the voluntary compliance. Additionally, as argued by Adams equity means justice, while trust has a relationship with justice (Faizal, et al., 2017). Faizal et al further states that there is a positive and significant correlation between justice (equity) and trust. Therefore, equity theory will offer more insight into the relationship between fairness perception, trust, and voluntary compliance.

2.2 Voluntary Tax Compliance

Kirchler (2007) defined voluntary compliance as a phenomenon that results to trust and cooperation between taxpayers and the tax authority and it is the willingness and desire by the taxpayer to comply on his or her own with the relevant regulations and directives of the tax authority. Voluntary tax compliance encourages taxpayers to comply with the tax laws voluntarily without compulsion by the tax authority. Based on this, taxpayers are expected to calculate their tax liability, report their income and file a tax return (Quadri, 2010). Thus, social psychologists pointed two main factors which they argued to be the backburn of voluntary tax compliance, these factors are distributive justice and procedural justice Van Dijke, Gobena and Verboon (2019) which are all dimensions of fairness perception.

2.3 Fairness Perception

Tax fairness plays a significant role in tax reporting behavior (Kirchler & Scabmann, 2008). Where a tax system perceived to be inequitable and unfair, this system usually leads taxpayers to evade tax payments and, in turn, making the tax system less relevant (Rechardson, 2005). According to Gberegbe et al., (2015), Adam Smith, a political philosopher who laid the foundations of classical free-market economics, recognized the importance of tax fairness. Smith, who penned an inquiry into the nature and causes of the wealth of the nation's (1760) believed that fairness meant that a taxpayer needed to contribute to the development of their state based on their ability to pay or ultimately based on exchange of benefits they derived from government projects and development. Thus, fairness has been considered an attribute of a good tax system for centuries (Tan & Chin-Fatt, 2000).

Several empirical studies have produced evidence concerning fairness perception and voluntary tax compliance. Mukasa (2011) conducted a study in Uganda that examined the relationship between perceived fairness and tax compliance in small and medium-sized enterprises. The results showed a significance and positive relationship between tax compliance and fairness perception and suggested that improvement of taxpayers' knowledge and perceptions of fairness about taxes would lead to improved compliance. Richardson (2006) examined the impact of tax fairness dimensions on tax compliance behavior in Hong Kong. The result reveals that "with the intervening demographic variables, fairness, income tax burden and exchange with government significantly affect tax compliance with varying effects. In other words, fairness has a significant influence on encouraging voluntary tax compliance" (p. 29). Siahaan (2005) found the direct effect of tax fairness on taxpayer compliance behavior is positive and significant, also found the indirect effect of tax fairness on taxpayer compliance behavior is positive and significant and finally found the indirect effect of tax fairness on taxpayer compliance behavior through commitment is positive and significant.

Based on the above empirical findings the following hypothesis was drown

H1. There is a positive relationship between fairness perception and voluntary tax compliance

2.4 Trust in Authority

Trust is defined as a special quality of relations for example connected partners ascribe one another positive aspect and inner motivation to retain the relationship (Eberl, 2003). Trust simply refers to the belief that someone is safe and reliable or someone is honest and good and will not harm you. Trust can be seen as a legal arrangement whereby a person or organization exercise influence or control money and properties for another individual or organization (*Cambridge Dictionary*, 2016). Trust in authority relates to the general perception by a social group or individual that the tax authorities are working beneficially and benevolently for the common good (Kirchler, Hoelzl, & Wahl, 2008).

Several scholars have studied the relationship between trust and voluntary tax compliance. Murphy's (2004) study of 2,292 Australian taxpayers. The study shows a positive relationship between trust in government and tax compliance. Additionally, Richardson (2008), in a comparison of 47 countries, found that trust is positively related to tax compliance. In a series of experiments using students in Austria, Wahl, et al., (2010) found that trust in government is positively related to voluntary compliance. Several studies found trust and fairness perception

to positively associated with voluntary tax compliance (Kirchler et al., 2008; Murphy, 2005; Torgler, 2003; Tyler, 2001).

Based on the above different findings the following hypothesis was posited

H2. There is a positive relationship between trust in authority and voluntary tax compliance

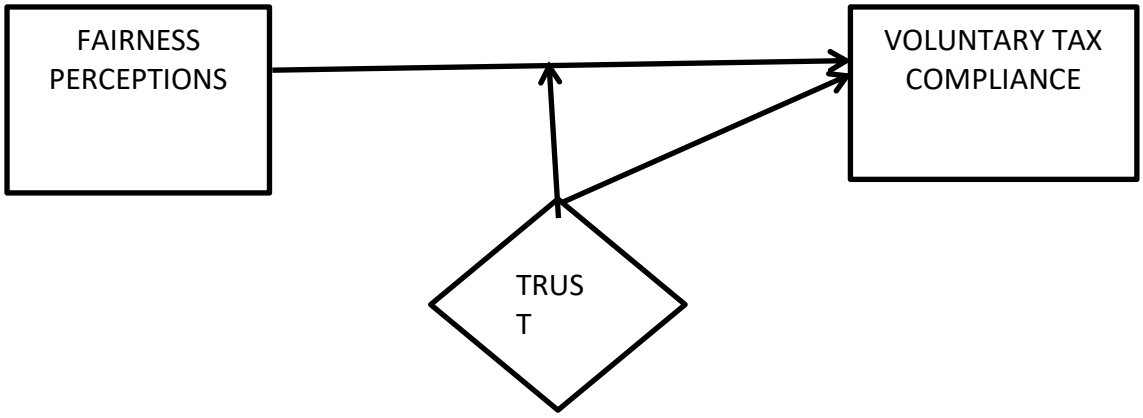
Mustapha (2010) found that only two of the five dimensions he studied (special provision and exchange with the government) were significant concerning a perception of tax fairness in Nigeria. Contrarily, Muhammad and Dabor (2016) found a negative relationship between tax rate and compliance behavior of salaried taxpayers in Nigeria. The mixed findings in previous literature have led to a call for further investigation. On their part, Baron and Kenny (1986), argued that, when mixed results are found, a moderating variable should be integrated into the model to stimulate the relationship. This study proposes that trust in authorities can moderate the relationship between fairness perception and voluntary tax compliance in Nigeria.

Based on the above findings the following hypothesis was formed.

H3. Trust moderate the relationship between fairness perception and voluntary tax compliance

Based on the above hypothesis the study proposes the following framework.

Figure 2.1 *Research Framework*



From the fig. 2.1 as the research framework above, the dependent variable is voluntary tax compliance, while the independent variables include fairness perception and trust, at the same vain trust serve as moderating variable between fairness perception and voluntary tax compliance.

3.0 METHODOLOGY

This section describes the methodology used in conducting this study. It presents the list of elements comprising the population of the study, the sample size and the sampling technique used by this research to take a portion of the population as a fair representation of the entire population. The section also explains the method used in sourcing data and the statistical method of data analysis.

3.1 Research Design

Considering the nature of this study, a quantitative method of data collection was used to examining the impact of tax fairness perception on voluntary tax compliance in Jigawa State Nigeria. Moreover, when a need exists to examine interrelationships between variables, and, where theories and hypotheses are tested, the most suitable and logical methods to use are those of quantitative design. The variables under consideration can be measured using predetermine instruments, closed-ended questions so that data and numbers could be analyzed using statistical procedures (Creswell, 2009; Trochim & Donnelly, 2008).

3.2 Population

The population of this study comprises micro-enterprises in Jigawa State Nigeria. There are about 850,000 micro-enterprises in Jigawa State from which the sample of this study was drawn (SMEDAN, 2013).

3.3 Sample Size

The sample size of this study was 382, which was drawn from the population of 850,000 the size was determined by following the guidelines of Kreijcie and Morgan (1970, p. 2). To get more responses and account for potential non-responses the sample size was increased to 450.

3.4 Method of Data Collection

Questionnaires were administered directly to the target group, which included owners/ managers of selected small and micro businesses through the help of research assistants. This process yielded a response rate of 249 responses (55.33%) of the 450 questionnaires distributed.

4.0 RESULTS

This section presents the overall results and findings of the study. Two different analyses were conducted in achieving the research objectives. Preliminary analysis was conducted using SPSS for normality test and the multicollinearity test. The second analysis was conducted using Partial Least Square (PLS), which was used to achieve the first, second and third objectives of this study.

4.1 Normality Test

Normality is a relevant assumption of multivariate analysis (Tabachnick & Fidell, 2007). An initial assumption on PLS has been that PLS can generate accurate statistical estimates even in a highly non-normal data set (Cassel, et al., 1999; Wetzels, Odekerken-Schroder & Van Oppen, 2009). In recent times, the initial assumptions concerning PLS have been gradually relaxed, however, debate among scholars has led to the conclusion that bootstrapped standard error can be inflated by extremely skewed and kurtotic data (Chernick, 2011; Hair, et al., 2013). Invariably, this may affect the statistical estimation of the path-coefficients (Ringle, Sarastedt, & Straub, 2012).

Thus, the recommendation has been made that researchers who use PLS should conduct normality tests (Hair, Sarstedt, Ringle, & Mena, 2012). Hair et al. (2013) said that normality tests using the Kolmogorov-Smirnov test and the Shapiro-Wilk test provide limited guidance on whether data is normally distributed. The recommendation on the normality of data rests with skewness and kurtosis is that they should be within the thresholds of ±2 for the skewness and ±7 for the kurtosis (Hair et al., 2010, Tabachnick & Fidel, 2007)

Therefore, in line with the current trend in using PLS path modeling, normality tests were conducted using skewness and kurtosis to improve the statistical accuracy of path coefficients estimations. The results of skewness and kurtosis for the normality test are contained in Appendix B, and the skewness and kurtosis of all the observed variables were less than 2 and less than 7 respectively. Thus, the data satisfied the normality assumptions as presently required in PLS path modeling.

4.2 Multicollinearity Test

Multicollinearity refers to how two or more exogenous variables have a high level of correlation (Tabachnick & Fidell, 2007). The essence of this particular test is to identify

whether the latent variables are saying the same thing in a given research model. Using PLS tolerance and Variance Inflation Factor (VIF) happens to be the most two common methods being used in determining the normality of latent variables in a given model (Hair et al., 2013). VIF is defined as the reciprocal of tolerance while tolerance is defined as the variance of one exogenous variable not explained by other exogenous variables in a given model (Hair et al 2013). A tolerance value of .20 or below and a VIF of 5 and above signifies problems of multicollinearity. Table 4.1 shows the results of multicollinearity using tolerance and VIF values.

Table 4.1: Multicollinearity Test using Tolerance and VIF

Collinearity Statistics		
Exogenous Variables	Tolerance	VIF
Fairness Perception	.993	1.007
Trust	.993	1.007

Based on the above table 4.1, the tolerance and VIF values show no multicollinearity among the independent variables. Both the tolerance values are more than the minimum threshold of .20, and the VIF values are less than the threshold of 5 as Hair et al. (2013) suggested.

4.3 Descriptive Analysis of the Latent Variable

This section described the descriptive statistics of latent variables, which include voluntary tax compliance, fairness perception, and trust. The measurement of all the variables was based on a 5-point Likert-type scale with potential responses ranging from 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 agree = and 5 = strongly agree. The minimum and maximum scores, means, and standard deviations were computed using the Statistical Package for Social Science (SPSS) version 23 and are presented in Table 4.2.

Table 4.2: Descriptive Statistics for the Latent Variables (N 243)

Items Code	Minimum	Maximum	Mean	S D
VTC1	1	5	2.89	1.228
VTC2	1	5	2.95	1.247
VTC3	1	5	2.91	1.228
VTC4	1	5	2.98	1.223
VTC5	1	5	2.95	1.237
VTC6	1	5	2.96	1.222
TRUST1	1	5	3.44	0.966

TRUST2	1	5	3.39	0.918
TRUST3	1	5	3.45	0.963
GF1	1	5	2.77	1.257
GF2	1	5	3.21	1.168
GF3	1	5	3.01	1.223
EF1	1	5	2.98	1.323
EF2	1	5	2.79	1.249
EF3	1	5	3.22	1.157
HF1	1	5	3.03	1.211
HF2	1	5	2.98	1.327
HF3	1	5	3.21	1.178
VF1	1	5	2.73	1.188
VF2	1	5	2.89	1.298
VF3	1	5	3.21	1.169
PF1	1	5	3.04	1.205
PF2	1	5	2.95	1.309
PF3	1	5	2.76	1.213
AF1	1	5	2.94	1.273
AF2	1	5	2.74	1.205

Table 4.2 shows that the view of the respondents relating to voluntary tax compliance in Jigawa State Nigeria had mean scores ranging from 2.89 to 2.98 and standard deviations ranging from 1.222 to 1.247. This shows that the respondents had a moderate level of agreement with voluntary tax compliance by Jigawa State citizens. Because the standard deviation was not far away from the mean, the dispersion is said to be moderate; thus, the stability of the respondents is not questionable. The descriptive statistics of trust had mean scores ranging from 3.39 to 3.45 and standard deviations ranging from .918 to .966. These indicate respondents' agreement that trust in authority can influence voluntary tax compliance in Nigeria.

Table 4.2 above shows that the mean score of fairness perceptions ranged from 2.73 to 3.22 and standard deviations ranged from 1.157 to 1.323. This indicated the moderate agreement of respondents on the fairness perception of the tax system in Nigeria. Because the standard deviation is not far away from the mean, the dispersion is said to be moderate; thus, the stability of the respondents is not questionable.

4.4 Assessment of Significance of Path Coefficients

The significance of path coefficients was evaluated via t-statistics and p-values obtained from the structural model of PLS using a 5000-bootstrapped sample (Hair et al., 2011; Precher &

Hayes, 2004, 2008). Figure 1 and Table 4.10 below present the statistical estimates of path coefficients of the structural model. For figure 1 refer to appendix C.

Figure 1 above indicates T statistics of 12.297 and 2.592 of the latent constructs of the model which is the most criteria for identifying the significant relationship between variables statistically. The higher the T statistics value the more significance the relationship is table 1 show significance relations of the direct effect.

Table 4.3.: Structural Model Result Direct Effect

Hypothesis Relationship		Beta	T-Statistic	P-Value	Finding
H1	Fairness Perception -> Voluntary tax Compliance	0.585	12.297	0.000	Supported
H2	Trust -> Voluntary Tax Compliance	0.141	2.592	0.010	Supported

Going by the hypothesis development the first hypothesis predicted that there would be a positive relationship between fairness perception and voluntary tax compliance; the findings show a significant relationship as seen in Figure 2.1 and Table 4.3 above. The relationship had a parameter of β 0.585, which postulates that an increase in fairness perception by 1 will lead to the increase of voluntary tax compliance by 0.585 all things being equal. The t-value is 12.297, which indicates that the relationship is of statistical significance. This means that sufficient evidence exists to support the established relationship between fairness perception and voluntary tax compliance; the P-value is 0.000. Based on that, this study concluded that hypothesis 1 is supported.

The second hypothesis postulated a positive relationship between trust and voluntary tax compliance. The findings show a positive relationship with β 0.141, which also signifies that an increase in trust by 1 will result in an increase of voluntary tax compliance by .141. The t-statistic is 2.592, which indicates that the relationship is statistical significance, and the P-value

is 0.010, which also indicates that sufficient evidence exists to support the second hypothesis see appendix A.

4.5 Testing the Moderating Effect

To test the moderating effect in PLS path modeling four main approaches are normally used to test the interactions (Henseler & Chin, 2010). This includes: 1) the production indicator approach (Chin, Marcolin, & Newsted, 2003), 2) the two-stage approach (Chin et al., 2003), and 3) the hybrid approach (Wold, 1983) and 4) orthogonal approach (Little, Bovaird, & Widaman, 2006). Where the moderator is formative, the two-stage approach is more appropriate (Chin et al., 2003; Henseler & Fassott, 2010). Based on Chin et al. (2003), Henseler and Chin (2010), and Henseler and Fassott (2010), this current study used the two-stage method in testing the moderating effect. The result of the moderating effect is presented in Figure 2 (see appendix D) and Table 4.5 below.

Table 4.5: Structural Model Evaluation Indirect Effect

Hypothesis	Relationship	Beta	T-statistic	P-Value	Finding
H3	Fairness Perception* Trust -> Voluntary Tax Compliance	0.123	2.346	0.019	Supported

The study hypothesized that trust can moderate the relationship between fairness perception and voluntary tax compliance, the results presented in Figure 2 and Table 4.3 revealed the interaction effect (t-statistic = 2.346 and the p-value of 0.019) was significant using the two-tailed method at the 5% level of significance. Therefore, the result supports the hypothesis.

5.0 DISCUSSION

The first hypothesis was formulated to examine the direct relationship, if any, between fairness perceptions and voluntary tax compliance among taxpayers in Nigeria specifically Jigawa state. The second hypotheses postulate that there is a relationship between trust in authority and voluntary tax compliance. Finally, the third hypothesis was concerned with the moderating role

of trust in the relationship between fairness perceptions and voluntary tax compliance among taxpayers in Jigawa State Nigeria.

The first hypothesis of this study which posited that relationship would exist between fairness perception and voluntary tax compliance was supported. Equity theory, which advocates fair treatment among taxpayers, fits the model and the data well, this is because equity theory advocates fair treatment and justice between connected parties, therefore the result of this hypothesis supports the theory. Specifically, the hypothesis postulated that fairness perception can influence voluntary tax compliance. This hypothesis was supported, and this finding is consistence with Mukasa (2011) who found a significance and positive relationship between tax compliance and fairness perceptions. Additionally, Roberts (1994) found that fairness perception increased tax compliance. Moreover, Gilligan and Richardson (2005) found a positive relationship between fairness perception and tax compliance. More recently, Faizal et al (2017) found a positive and significant relationship between fairness perception and tax compliance. This study contributes to the extant literature in taxations by examined empirically the relationship between fairness perception and voluntary tax compliance.

The second hypothesis on the relationship between trust in authority and voluntary tax compliance was also supported. The hypothesis stated that a relationship would exist between trust in authority and voluntary tax compliance. The support of this relationship provides proof of the equity theory, which advocates fair treatment between, for example, tax authorities and taxpayers. The findings of this study support equity theory which postulates that once there are justice and trust between parties' people will comply. The findings are consistence with the work of Kirchler et al. (2010), which found that trust increased voluntary tax compliance. Additionally, Kastlunger et al., (2013) found that trust in authority significantly influences the voluntary compliance of taxpayers. Moreover, Jimenez and Iyer (2016) found a positive relationship between trust in government and tax compliance. More so, Faizal et al (2017) found a positive and significant relationship between trust and tax compliance in Malaysia. This study contributes to the tax literature by providing additional direction of two constructs from a different context.

The third hypothesis, which postulates that trust can moderate the relationship between fairness perception and voluntary tax compliance, was also supported. As revealed by the extant literature, inconsistence findings concerning the relationship, a moderating variable can be introduced to examine the relationship. Based on the available literature reviewed trust in

authority was choosing to moderate the relationship between fairness perception and voluntary tax compliance. The findings of a study that supported this notion is that of Kirchler et al. (2007) who found that trust is a proactive action that creates a more favorable posture on voluntary tax compliance. The finding of this study provides a new direction in the tax compliance study. The study concludes that trust can moderate the relationship between fairness perception and voluntary tax compliance.

6.0 CONCLUSIONS

Voluntary taxes have a great impact on the economic growth of any country. Where citizens perceived fair treatment from their government/tax authority the result is voluntary payment of taxes. The idea behind this combination is for the Jigawa State government to understand how important fair treatment is in generating massive amounts of revenue, which could be used to improve the wellbeing of the citizens through the effective utilization of the revenue generated. Based on the results obtained from this study the fairness perception has a strong relationship with voluntary tax compliance in the Nigerian context. Subsequently, Jigawa State citizens also believed that, based on the trust they have in the present government, they can voluntarily and willingly pay their taxes without any coercion.

7.0 RECOMMENDATIONS

Based on the results and conclusions the following recommendations are made.

First, the government of Jigawa State Nigeria should create strong policies that will require a frequent review of the state tax policies to improve the fairness from tax administrators thereby increasing confidence of taxpayers, which can result in increased voluntary payment of taxes.

Second, the Jigawa State government should provide a simple platform, which is convenient for taxpayers concerning tax payment. Many taxpayers who are willing to voluntarily comply complain of the difficulty in paying those taxes. Thus, the government should provide a convenient way of paying relevant taxes by creating an enabling environment to increase voluntary compliance.

Third, although Nigerian citizens trust the present government to some level, it is also advisable that the Jigawa State government should improve the provision of social amenities to rural areas. This will encourage taxpayers in those areas to trust the government more and voluntarily pay their taxes in return.

8.0 SUGGESTION FOR FUTURE RESEARCH

This study was the first empirical study that examined the relationship between fairness perception and voluntary tax compliance and how trust in authority moderates the relationship between fairness perception and voluntary tax compliance not only in Nigeria but across Africa. Therefore, a need exists for other researchers to conduct similar studies in other context using the same model to see if the results could be the same or different. Other studies can add other variables such as corruption perception, personal interest, tax rate, educational level, social influence, culture, norms, and attitudes to see whether such variables can influence or increase voluntary tax compliance in their context.

REFERENCES

Akintoye, I. R. (2013). *The effect of tax Compliance on Economic Growth and Development in Nigeria*. Retrieved from http://www.bjournal.co.uk/payers/BJASS-11-2/BJASS 11-02

Alabede, J. O., Ariffin, Z. B. Z., & Idris, K. M. (2012). Noncompliance Opportunities and Tax Compliance Behavior in Nigeria: The Moderating Effect of Taxpayers' Financial Condition and Risk Preference. *Journal of Modern Accounting and Auditing*, *8*(4), 445.

Alabede, J. O., Ariffin, Z. Z., & Idris, K. M. (2011). Individual taxpayers' attitude and compliance behaviour in Nigeria: The moderating role of financial condition and risk preference. *Journal of Accounting and Taxation*, *3*(3), 91.

Alemika, E. (2004). Corruption, governance performance and political trust in Nigeria

Angahar, A. P., & Sani, I. A. (2012). Personal Income tax Administration in Nigeria: Challenges and Prospects for increased revenue generation. *Journal of Economic Research, 1*(1–11).

Ariwodola, J. A. (2000). *Personal Taxation in Nigeria* (4th ed.). Lagos: JAA Nigeria Ltd.

Asabor, M. (2012). Personal Income Tax Amendment Act and its effects on Tax payers.

Ayuba, A., Saad, N., & Ariffin, Z. Z. (2018). Testing the Assumptions of Slippery Slope Framework on Tax Compliance: Evidence from Nigerian SMEs. DLSU Business & Economics Review, 27(2), 166-178.

Central Intelligence Agency (Ed.). (2015). *The World Factbook 2014-15*. Government Printing Office.

Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information systems research*, *14*(2), 189-217.

Creswell, J. W. (2009). Editorial: Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, *3*(2), 95-108.

Dike, V. E. (2005). Corruption in Nigeria: A new paradigm for effective control. *Africa economic analysis*, *24*(08), 1-22.

Faizal, S. M., Palil, M. R., Maelah, R., & Ramli, R. (2017). Perception on justice, trust and tax compliance behavior in Malaysia. Kasetsart Journal of Social Sciences, 38(3), 226-232.

Folger, R., Konovsky, M. K., (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. Academy of Management Journal, 32, 115-130.

Gberegbe, F. B., Gabriel, A., & Nkanbia-, L. O. (2015). Perception of Tax Fairness and Personal Income Tax Compliance in Ken Saro-Wiwa Polytechnic , Bori, *6*(6), 1–11. https://doi.org/10.9790/5933-06610111

Gerbing, M.D. 1988, '*An empirical study of taxpayer perceptions of fairness*', Unpublished PhD Thesis, University of Texas.

Gilligan, G., & Richardson, G. (2005). Perceptions of tax fairness and tax compliance in Australia and Hong Kong-a preliminary study. *Journal of financial crime*, *12*(4), 331-343.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice, 19*(2), 139-152.

Henseler, J., & Chin, W. W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling*, *17*(1), 82-109

Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In *Handbook of partial least squares* (pp. 713-735). Springer Berlin Heidelberg.

James S, Alley C (2002). Tax compliance, self-assessment and tax administration. Journal of Finance and Management in Public Services. 2002;2(2):27–42

Jimenez, P., & Iyer, G. S. (2016). Tax compliance in a social setting: The influence of social norms, trust in government, and perceived fairness on taxpayer compliance. Advances in accounting, 34, 17-26.

Kastlunger, B., Lozza, E., Kirchler, E., & Schabmann, A. (2013). Powerful authorities and trusting citizens: The Slippery Slope Framework and tax compliance in Italy. *Journal of Economic Psychology*, *34*, 36-45.

Kirchler, E., Hoelzl, E., Wahl, I., (2008). Enforced versus voluntary tax compliance: The "slippery slope" framework. Journal of Economic Psychology, 29(2), 210-225.

Kirchler, E. (2007). *The economic psychology of tax behaviour*. Cambridge University Press.

Kirchler, Erich, and Ingrid Wahl. (2010.) "Tax Compliance Inventory TAX-I: Designing an Inventory for Surveys of Tax Compliance," *Journal of Economic Psychology* 31: 331–46.

Kogler, C., Mittone, L., & Kirchler, E. (2016). Delayed feedback on tax audits affects compliance and fairness perceptions. Journal of Economic Behavior & Organization, 124, 81-87.

Korsgaard, M. A., Schweiger, D. M., Sapienza, H. J., (1995). The role of procedural justice in building commitment, attachment, and trust in strategic decision-making teams. Academy of Management Journal, 38, 60-84.

Krejcie, R. V., & Morgan, D. W. (1970). Table for determining sample size from a given population. *Educational and Psychological Measurement*, *30*(3), 607-610

Little, T. D., Bovaird, J. A., & Widaman, K. F. (2006). On the merits of orthogonalizing powered and product terms: Implications for modeling interactions among latent variables. *Structural Equation Modeling*, *13*(4), 497-519.

McBarnet D. When compliance is not the solution but the problem: From changes in law to changes in attitude. Australian National University, Center for Tax System Integrity; Canberra: 2001.

Mohammed, F., & Dabor, A. O. (2016). Fairness Perception and Compliance Behaviour of Salaried Taxpayers in Nigeria. *Kuwait Chapter of the Arabian Journal of Business and Management Review*, *5*(5), 1

Mukasa, J. (2011). Tax Knowledge, Perceived Tax Fairness and Tax Compliance in Uganda (Doctoral dissertation, Makerere University).

Mustapha, B. (2010). The Impact of Tax Fairness and Demographic Factors on Tax Compliance in Nigeria (Doctoral dissertation, Universiti Utara Malaysia).

Murphy, K., (2005). Regulating more effectively: The relationship between procedural justice, legitimacy, and tax non-compliance. Journal of Law and Society, 32, 562-589.

Oduh, M. (2012). Revenue Implication of Nigeria Tax System, Lagos. *Journal of Economic and Sustainable Development, 3*(8).

Okonjo-Iweala. (2014). Okonjo-Iweala's responses to the 50 questions on Nigeria's economy posed by the House of Representatives' committee on finance. Retrieved from http://saarareporters.com/2014/01/15/okonjo-iwealas-responses-50-questions nigeria%E2%80%99s- economy-posed-house-representatives%E2%80%99

Okpe, I. I. (1998). *Personal Income tax in Nigeria*. Enugu: New Generation Books.

Oyedele, T. (2012). The Personal Income Tax (Amendment) Act 2011 : Implementation and Matters Arising ! The President , Vice President , Governors and Deputy Governors could technically become bankrupt as their personal income tax liabilities will most likely exceed the ca, 5–7.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers, 36*(4), 717-731.

Roberts, M. L. (1994). An experimental approach to changing taxpayers' attitudes towards fairness and compliance via television. *The Journal of the American Taxation Association*, *16*(1), 67.

SMEDAN (2013) National, Statistics, O. F., Survey, C., & Findings, S. (2013). SMEDAN and National Bureau of Statistics Collaborative Survey : Selected Findings.

Sudarma, I., & Darmayasa, I. N. (2017). Does Voluntary Tax Compliance Increase After Granting Tax Amnesty?.

Trochim, W. M., & Donnelly, J. P. (2008). Qualitative and unobtrusive measures. *The research methods knowledge base*, 151-167.

Torgler, B., (2003). Tax morale, rule-governed behaviour and trust. Constitutional Political Economy, 14, 119-140.

Tyler, T. R., (2001). Public trust and confidence in legal authorities: What do majority and minority group members want from the law and legal institutions? Behavioral Sciences and the Law, 19, 215-235.

World Factbook (2019). Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html

Van Dijke, M., Gobena, L., & Verboon, P. (2019). Make me want to pay. A three-way

interaction between procedural justice, distributive justice, and power on voluntary tax compliance. Frontiers in psychology, 10, 1632.

Wold, S., Martens, H., & Wold, H. (1983). The multivariate calibration problem in chemistry solved by the PLS method. *Matrix pencils*, 286-293.

Appendix A

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Fairness Perceptions -> Voluntary Tax Compliance	0.575	0.578	0.047	12.297	0.000
Trust -> Voluntary Tax Compliance	0.146	0.146	0.056	2.592	0.010

Appendix B Skewness and Kurtosis

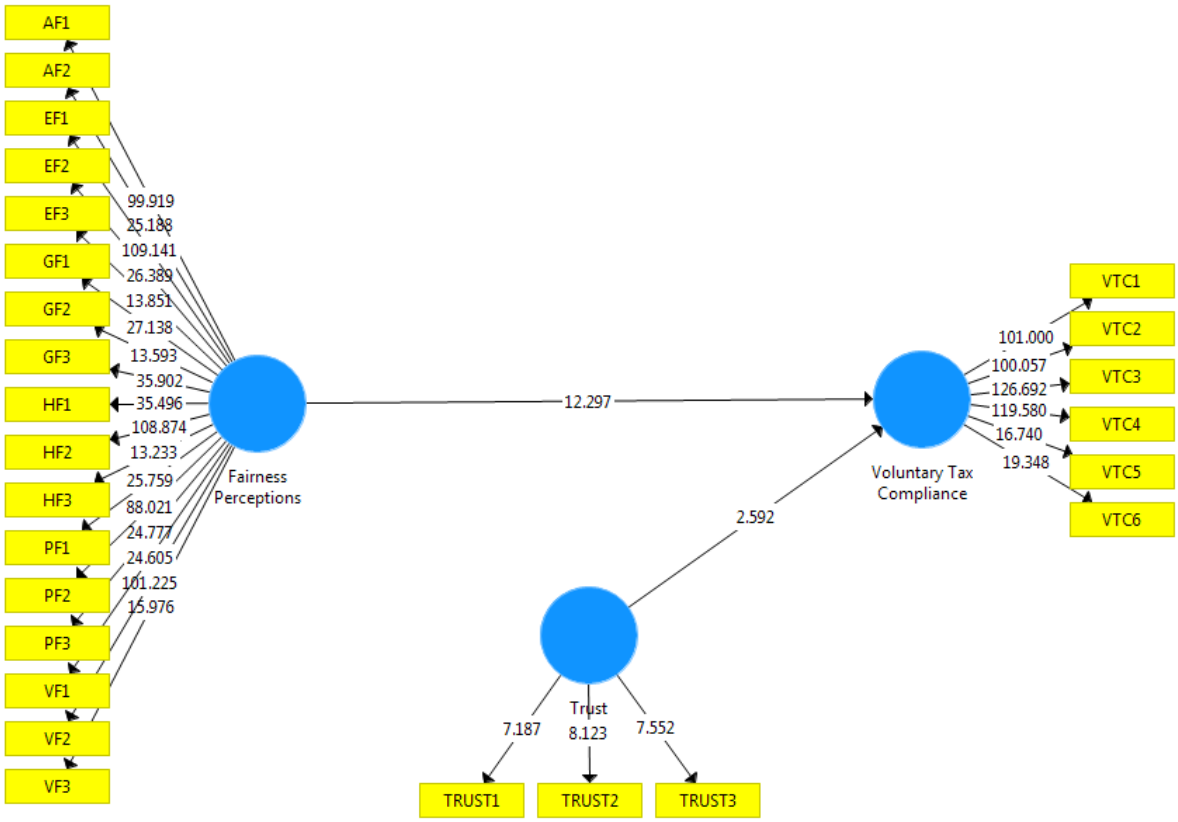
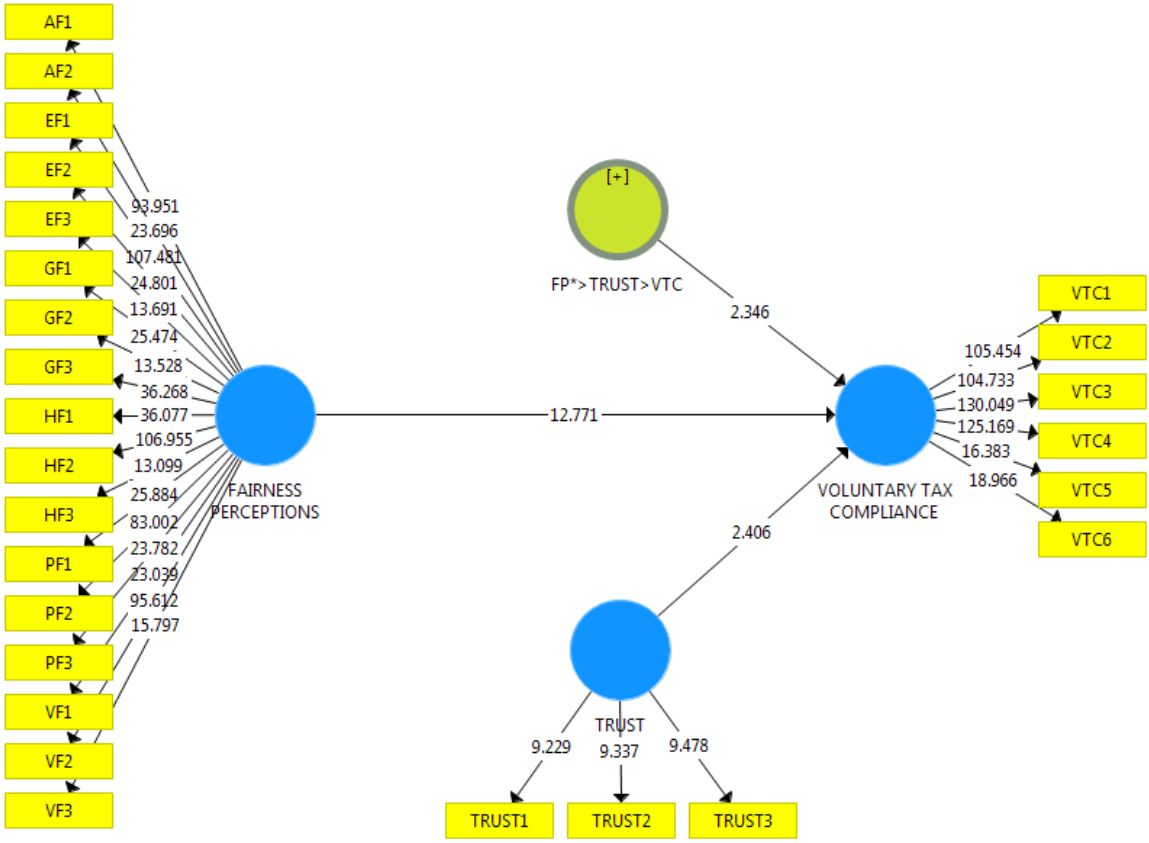
Statistics

	FAIRNESSMEAN	TRUSTMEAN	VTCMEAN
N Valid	243	243	243
Missing	0	0	0
Skewness	-.062	.008	.167
Std. Error of Skewness	.156	.156	.156
Kurtosis	-1.214	-.635	-1.100
Std. Error of Kurtosis	.311	.311	.311

Appendix C: Comparison of Tax as a Percentage of GDP between Nigeria and Other Selected African Countries

Country	Tax as a percentage of GDP
Angola	29.3%
Ghana	20.3%
Nigeria	3.4%
South Africa	26.6%
Uganda	14.5%

Appendix D Figure1. Structural model direct effect.



Appendix E Figure 2. Structural model indirect effect.