VAT Compliance Intention among SMEs in Developing Countries to implement sustainable development goals: The Carrot and Stick Approach

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Abstract
Sustainable Development Goals (SDGs) generally seek to end poverty, fight inequality and injustice as well as tackle climate change in 2030. Hence without funds the aim cannot be achieved. Value Added Tax (VAT) was introduced to increase the revenue base of the government and make funds available for the developmental purposes as well as financing the cost of implementing the sustainable development goals, as that will improve the growth and development of a country. Despite its importance, the compliance rate in developing countries as compared to developed countries is low. Thus, this paper investigates the relationship between fairness in the tax system, detection probability and penalty magnitude with VAT compliance intention among Small and Medium Enterprises (SMEs) in developing countries. Data was gathered through the administration of 500 questionnaires which 373 questionnaires were retrieved, thereby representing the sample size for the study. The respondents are SMEs in Nigeria. 13 indicator items were measured on 5-point Likert Scale from 1 (strongly disagree) to 5 (strongly agree). Statistical Package for the Social Sciences (SPSS) 23 was employed as the primary statistical analysis tool for the study. The result indicates there is positive relationship between fairness in the tax system, detection probability and penalty magnitude with VAT compliance intention in developing countries. This study recommends a blend of carrot and stick approach in tackling VAT compliance intention among SMEs, as that will encourage the SMEs to remit the VAT collections and also assist the policy makers to map-out policies that would ensure an effective management of VAT revenue and compliance among SMEs in developing countries. Furthermore, empirical studies should also be conducted in other developing countries to test the consistency of the results.

Keywords: Carrot and stick, Fairness in the Tax System, Detection Probability, Penalty Magnitude, VAT Compliance Intention.

Introduction

Studies have shown that Nigeria failed to attain the Millennium Development Goals (MDGs) just like other developing countries throughout the 15 years of implementation (2000-2015) (Durokifa & Moshood, 2016; Okon & Ukwayi, 2012; Oleribe & Taylor-Robinson, 2016). As a result of that, stakeholders are currently harping on the need for government to intensify efforts towards attaining the Sustainable Development Goals (SDGs) which replaced the MDGs (Odogwu, 2018). Sustainable Development Goals (SGDs) generally seek to end poverty, fight inequality and injustice as well as tackle climate change in 2030. According to the United Nations (UN) report as highlighted by The Premium Times (2018), economic recession due to price fluctuation in the international market has been identified as one of the challenges for implementation of the SDGs in Nigeria. However, mobilization of adequate funds through domestic sources is suggested as the area that Nigeria needs support to implement the SDGs. The cost for implementing the SDGs in Nigeria according to UN support plan is $80.65 billion, $82.83 billion, $85.07 billion and $87.37 billion in 2019, 2020, 2021 and 2022 respectively (Odogwu, 2018; The Premium Times, 2018). Hence there is need to seek for other sources of revenue which this study suggests on the carrot and stick approach to influence VAT compliance intention among SMEs in developing countries an evidence from Nigeria.

VAT was introduced in order to increase the revenue base of the government and also provide funds that will be needed for the growth and development and also provision of basic amenities among others (Agha & Haughton, 1996). However, it has become increasingly complicated with each country having the freedom to determine the VAT rate. For example in Africa, Nigeria operates a VAT rate of 7.5%, South Africa operates a 14% VAT rate, while Senegal operates at 18% (Wilson, 2020). In Asia, the case is not as different as Africa with each country determining the VAT rate. For example, Malaysia operates a GST (Goods and Services Tax) of 6% and Vietman operates a VAT rate of 10% (KPMGTax, 2016; PwC Vietman, 2016). In addition are goods and services that are subject to tax but are operated on 0% and are often referred to as 'zero-rated' goods and services, while other goods are exempted for the purpose of VAT. Examples of such goods and services exempted include; medical and pharmaceutical products, educational materials as well as services rendered by medical staff and community banks (Igweonyia, 2011).

Despite the difference in the VAT rate as seen by countries and also the goods that are exempted as well as the zero-rated, the importance of VAT cannot be underestimated. VAT is one of the surest ways to raising revenue for the government (Barbone, Bird, & Vazquenz-Caro, 2012) and is crowned as one of the major tax revenue in developing countries (Keen, 2008). VAT is also contributing a greater percentage to the growth and development of both developed and developing countries through increasing the revenue base of these countries and providing funds that are used in providing basic amenities to the citizens (Bettendorf & Cnossen, 2014). As posited by Liu and Lockwood (2015), the revenue base of the government can only be increased if the Small and Medium Enterprises (SMEs) are willing to comply. In their study they defined VAT compliance as a process of collecting and remitting VAT collections to the tax authority.

As opined by Webley and Ashby (2010), VAT compliance in general has received a little attention as compared to income tax compliance. The little attention is attributed to the assumption that VAT cannot be evaded as other forms of tax, but in reality, it remains evaded especially among the developing countries (Okoyeuzu, 2013). In Nigeria as a developing country, VAT revenue loss in 2015 was as high as 38% as compared to collections in 2014 (Eragbhe & Omoye, 2014). Estimates of VAT non-compliance in some developing countries are so scarce, but VAT gaps have been estimated to about 55% in Indonesia and

Mozambique as against 13% in United Kingdom (Cottarelli & IMF, 2011). Their study highlighted, corruption, weak rule of law and political instability as the factors attributed to the VAT gap. In the same, the VAT compliance rate in Nigeria as a developing country, is as low as 10% (Tijjani, 2016).

However, from the studies conducted in developing countries on VAT non-compliance of SMEs, the use of deterrent measures (detections and penalties) got the better percentage (Anyaduba, Eragbhe, & Modugu, 2014; Anyaduba, Eragbhe, & Prince, 2012; Okoye, Pius, Akenbor, Cletus & Obara, 2012). In addition to the amount of deterrent measures put in place by the government to curb non-compliance behaviour, little effect is recorded in discouraging VAT non-compliance (Modugu & Anyaduba, 2014). Therefore, this study suggests the mixture of the "carrot and stick" approach to reward with the "carrot" those SMEs that are compliant and also punish with "stick" those SMEs that find it "thrilling to beat the VAT system". In addition to the suggestion of Swistak (2016) on applying both the reward and punishment strategies as none can work effectively in isolation as they complement each other.

Literature Review

2.1 The Concept of the Carrot Approach

As stated by Cowell (2002), the use of the carrot can come inform of positive incentives to taxpayers, which will motivate them to maintain the status quo of complying. The study further opined that carrot can also be used to encourage "innocent tax evaders" to move to the compliant ship. In another study conducted by Umar, Derashid and Ibrahim (2017), provision of public goods through fairness in the tax system can be seen as a carrot approach influencing tax compliance. The study further stated that when the citizens feel the benefit of paying tax, that is, when there is value for tax, it will encourage the taxpayers to comply. Also factors like tax service quality in terms of the tax office creating an enabling environment for the taxpayer and provision of basic amenities citizens can also be grouped as a carrot approach.

Furthermore, Mendoza and Wielhouwer (2015) opined that compliance should be rewarded through a lower audit probability and also a decrease in punishment and sanctions. They further posit that reducing audit probability and deterrent measures can only be applicable when there is trust. And the trust can be developed through the introduction of the carrot approach. From the views of the researchers, one can be tempted to conclude that the government and tax officials have some great roles in dishing out the carrot to the SMEs, because the resultant effect the carrot approach will attain if the government roles are achieved to the latter. Among the roles expected by the government to better the lives of its citizens include; balancing the revenue collections with good governance, equity and fairness in the tax system (OECD, 2013). The study also highlighted accountability of revenue collections, public service delivery and transparency in dealings with revenue collections will go a long way to encourage the SME to comply. Thus, are seen as "carrot" factors to encourage and enhance compliance among the SMEs.

In the same vein, Kogler, Nichita, Pantya, Belianin and Kirchler (2012) stated that the government can make use of carrot approach in form of good tax policies that will be beneficial to its citizens. In addition, carrot approach such as public governance quality, tax service quality, provision of basic amenities, transparency and accountability are seen to positively influence compliance among the SMEs (Alabede, Ariffin, & Idris, 2011; Muehlbacher, Kirchler, & Schwarzenberger, 2011; Webley & Ashby, 2010). Despite the findings from prior literatures on the significant influence of carrot approach to VAT compliance behaviour, there is need to apply a touch of the stick so as to take care of those SMEs that find it "thrilling to beat the VAT system". In addition, the carrot cannot work effectively in the absence of the stick (Swistak, 2016). Thus, the stick approach is discussed in the next heading of this study.

2.2 The Concept of the Stick Approach

According to Mendoza and Wielhouwer (2015), to improve compliance intention among the SMEs, the carrot should be replaced with the stick. That is, the prevailing situation should determine either to apply the carrot or the stick. In another study conducted by Umar et al. (2017), audit and sanction were suggested as a "stick" approach to take care of evaders. In addition, Cowell (2002), suggests thorough audit exercise as a form of stick approach. Which the study opined that a thorough audit can trigger past records of evasion and that can lead to the application of a "very big stick" to serve as a deterrent measure.

Furthermore, Alabede, Idris and Ariffin (2011) stated that penalty largely depends on the probability of detection and audit. That is, the tax authorities make use of the stick by penalizing evaders through audit and detection which in turn lure the SMEs to comply for fear of getting caught and sanctioned. In the same vein, enforced penalty has been an effective deterrent measure to ensure VAT compliance (Gangl, Torgler, Kirchler, & Hofmann, 2014; Ndumia, 2015). According to Adams and Webley (2001), sanction has been identified as one of the stick factors that positively influence VAT compliance. Other "stick" factors influencing VAT compliance behaviour among SMEs as mentioned by prior studies are; enforced penalty, audit probability, detection, fines, fees, imprisonment among others (Gangl et al., 2014; Nyamwanza, Mavhiki, Mapetere, & Nyamwanza, 2014; Wenzel, 2004). In addition, deterrent measures (stick factors) were found to play significant roles in motivating the SME through correcting improper behaviour to ensure compliance (Poppelwell, Kelly, & Wang, 2012). However, Swistak (2016) argues that none of the measures (carrot or stick) can work effectively in isolation. So, for a positive outcome, the carrot and stick must be applied as complimenting each other. Therefore, this study considered a blend of the carrot and stick approach in the next heading.

2.3 Combining the Carrot and Stick Approach in VAT Compliance

The famous and motivational phrase "carrot and stick" is the merger of both the positive and negative reinforcement (Frank, Seeberger, & O'Reilly, 2004). That is, the positive reinforcement is by dangling the carrot in front of the donkey to persuade it and using the stick to strike and make the donkey move. In addition to the assertion by Swistak (2016) on blending the carrot with the stick approach, this study applied the concept issues relating to VAT compliance intention among the SMEs in developing countries. This principle of using both the carrot and stick approach will encourage and sustain the compliance behaviour of the SMEs, thus, this study considered fairness in the tax system as a dimension under the carrot approach, while detection probability and penalty magnitude as dimension under the stick approach. The framework for this study is presented in Figure 1.

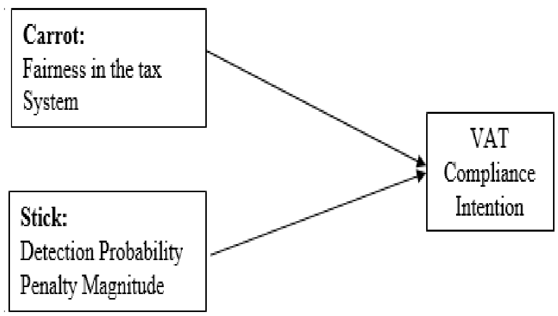

Figure 1: Research Framework

As seen in Figure 1, the dimension under the carrot approach is the, fairness in the tax system. Devos (2014) defines fairness as a state of being free from injustice and biasness. In addition, Torgler, Schaffner and Macintyre (2007) opined that, fairness is enhanced when SMEs participate in the decisions to be taken on the proper use of the funds derived from VAT. Thus, influences compliance intention among the SMEs. According to Abdul-Razak and Adafula (2013), when the SMEs perceived fairness in the tax system, it will encourage VAT compliance intention among them. In addition fairness in the tax system has been established to influence VAT compliance intention in developing countries (Eragbhe & Omoye, 2014). However, Farrar and Thorne (2013) argued that, when there is fairness in the tax system, the tax authority or government need not to introduce the stick approach as the "carrot" served in form of fairness will take care of the compliant SMEs and also encourage the non-compliant SMEs to comply.

Furthermore, the dimensions under the stick approach are; detection probability and penalty magnitude. Detection probability and penalty magnitude have been applied in several studies in VAT and tax compliance. Though, prior studies in developing countries have shown inconsistencies in their findings. While some studies found a positive relationship with VAT compliance (Biabani & Ramezani, 2011; Modugu & Anyaduba, 2014), other studies find a negative relationship with VAT compliance especially when the government agencies are seen not to be fair in dishing out the punishments as required (Swistak, 2016).

The laxity of some SMEs has made detection probability and penalty magnitude to be the only option to implement compliance behaviour. detection probability and penalty magnitude in compliance is the process of increasing power of the authorities to ensure enforced compliance (Kirchler, Hoelzl, & Wahl, 2008). Also, Nyamwanza, Mavhiki, Mapetere and Nyamwanza (2014) in their studies revealed that detection probability and penalty magnitude is found to be the most effective variable in enforcing compliance. In addition, other studies conducted on enforce compliance, found that penalty has played a great role to deter, motivate and correct improper behaviour of SMEs (Poppelwell et al., 2012; Wenzel, 2001). Furthermore, Kirchler (2007) states that compliance is enforced through application of tax penalties on taxpayers that are not willing to pay or remit the VAT collections as the case may be.

In addition, detection probability and penalty magnitude have been found to be the most effective tools in Zimbabwe. As most SMEs evade remitting VAT collections by bribing the tax collection officers through keeping two set of records and sometimes relocating to new sites without notifying the tax officials (Nyamwanza et al., 2014). However, Swistak (2016) posits that detection probability and penalty magnitude have the potential to work effective if used as an auxiliary means of delivery and implementing a sound compliance strategy. However, the introduction of stiff detection probability and penalty magnitude may not be seen as increasing compliance, because the tax laws in most developing countries are not fully implemented, hence, tax evaders see it as "business as usual" (Anyaduba et al., 2012). Therefore, with the views of other studies on the carrot and stick approach to compliance, this study defines the carrot and stick approach to VAT compliance as the combination of both rewards and punishments for the complaints and non-complaints respectively. The application of the carrot (fairness in the tax system) and the stick (detection probability and penalty magnitude) will go a long way to ensure VAT compliance intention among SMEs in developing countries (Swistak, 2016).

Based on the literature reviewed, the following hypotheses were developed for this study:

H_1: There is a positive relationship between fairness in the tax system and VAT compliance intention among SMEs.
H_2: There is a positive relationship between detection probability and VAT compliance intention.
H_3: There is a positive relationship between penalty magnitude and VAT compliance intention among SMEs.

Research Methodology

This study adopted a survey research design. The research design was preferred for the study since it allows the researcher to collect a large amount of data from a sizeable population in a highly economical way. According to Saunders, Lewis and Thornhill (2009) this research strategy allows collection of data through questionnaires administered to a sample. Data collected by this design can be used to suggest possible reasons for particular relationships between variables and produce models for these relationships. The target population of this study was SMEs operating in Nigeria and are registered for VAT purposes and the sample size was drawn from Kano state, north-west Nigeria. Kano state was chosen because about 60% of the SMEs in the north-west, Nigeria are situated in Kano state. A total of 500 questionnaires were administered using cluster sampling technique, based on geographical location of the SMEs in the industrial areas of Kano state, north-west Nigeria, and a total of 373 questionnaires were retrieved, representing 75% response rate. In the same vein, data was gathered by the use of self-administered questionnaires. The questionnaire was divided into four parts: perceptions on VAT compliance, VAT compliance intention, demographic information, comments and suggestion.

The demographic information on the respondents as presented in Table 1 indicates that about 61.4% of the respondents were male leaving 38.6% as female and the marital status of the respondents were 26.8% singles and 71.3% are married. Also, the age grouping of majority of the respondents falls above 30 years (61.1%). On the position in the business, 55% of the respondents are the owners of the business, while 14.2% and 25.2% are accountants/finance officers and admin/clerical staff respectively. Equally, approximately 86.6% of the respondents do not make use of tax agents. See Table 1 for a comprehensive detail of demographic information.

Table 1.
Demographic Information of the Respondents

Category	Frequency (n=373)	Percentage (Total=100)
Gender		
Male	229	61.4
Female	144	38.6
Marital Status		
Single	100	26.8
Married	266	71.3
Others	7	1.9
Age		
Below 15 years	0	0
15 years – 30	145	38.9
years	228	61.1
Above 30 years		
Position in the		
Business	205	55.0
Owner/manager	53	14.2
Accountant/finan	94	25.2
ce officer	21	5.6
Admin/clerical		
officer		
Others		
How long		
Business	10	2.7
Established	156	41.8
Less than 1 year	117	31.4
1 year – 5 years	90	24.1
6 years – 10 years		
Above 10 years		
Nature of		
Business	60	16.1
Educational	83	22.3
services	129	34.6
Wholesale/retail	69	18.5
Manufacturing	8	8.6
Accommodation		
and food		
Others		
Tax Agent		
Yes	50	13.4
No	323	86.6

3.2 Operational Definition and Measurement

3.2.1 VAT Compliance Intention

Intention is the basis of the theory of planned behaviour (Benk, Cakmak, & Budak, 2011). Ajzen (2011) described intention as the factor indicating the degree of individual efforts in order to perform a certain behavior. In the same vein, Benk et al. (2011) posit that, intention is explained by attitudes towards behavior, individual norms and perceived behavioural control. The study measured the intention of the VAT agent with four items using a hypothetical VAT scenario as adapted from Han, Hsu, and Sheu (2010).

3.2.2 Fairness in the Tax System

Fairness in the tax system is a process whereby SMEs are treated fairly and giving equal treatment with other SMEs, so as to build a mutual relationship between the tax authorities and the SMEs. The perception of SMEs on fairness in the tax system was measured by three items using five-point Likert scale ranging from '1' "strongly disagree" to '5' "strongly agree" as adapted from Efebera et al. (2004).

3.2.3 Detection Probability

The probability of detection is the process which the authorities initiate an inspection on an enterprise to detect flaws or inappropriate behaviour. The study measured the perception of the SMEs on the likelihood of detection by the authorities and whether or not the probability of detection is high, using three items on a five-point Likert scale ranging from '1' "strongly disagree" to '5' "strongly agree" as adapted from Efebera et al. (2004).

3.2.4 Penalty Magnitude

Penalty in compliance is the process of increasing power of the authorities to ensure enforced compliance (Kirchler et al., 2008). This study measured penalty magnitude on the SMEs on whether the penalty by the authority is high or not, whether other SMEs that are not remitting the VAT collections are sanctioned by the authorities. These and others are measured using three items on a five-point Likert scale ranging from '1' "strongly disagree" to '5' "strongly agree" as adapted from Efebera et al. (2004).

Results and Discussion

4.1 Reliability Analysis

The reliability analysis is conducted to test the internal consistency of the measurement items, and there are several methods for testing the reliability of measures but this study used Cronbach's alpha because it is widely used and recommended for social science research (Hair, Black, Babin, & Anderson, 2010; Sekaran & Bougie, 2010). As stated by Hair et al. (2010) a Cronbach's alpha coefficient of at least .70 is considered sufficient and acceptable. The results of the Cronbach's alpha for this study is shown in Table 2.

Table 2.

Reliability Test

Variable	Items	Alpha
Fairness in the Tax System	3	.709
Detection Probability	3	.738
Penalty Magnitude	3	.716
VAT Compliance Intention	4	.830

Therefore, Table 2 shows that the calculated value of alpha is between 0.709 and 0.830, which tells that the instruments used to measure the constructs for the study has fulfilled the reliability test (Hair et al., 2010).

4.2 Descriptive Statistics

4.2.1 VAT Compliance Intention (VCI)

A VAT scenario was used and the options to measure the VAT compliance intention of SMEs are VCI1, VCI2, VCI3 and VCI4. The result reveals that the mean scores range from 3.46 to 3.54 and standard deviation from 1.273 to 1.345. The results of this analysis indicate that the majority of the respondents feel Audu should declare the additional VAT collections to FIRS (VCI1). However, close to the same percentage also feel that Audu should keep the additional VAT collections until the FIRS comes for audit (VCI3). These descriptive statistics suggest that compliance intention among the SMEs in Nigeria is relatively indecisive. Hence, this study suggested ways to improve the VAT compliance intention among SMEs in Nigeria. The descriptive statistics on VAT compliance intention is presented in Table 3.

Table 3.

Descriptive Statistics on VAT Compliance Intention (n=373)

Code	Statement	Min	Max	Mean	Std. Dev.
VCI	**VAT Compliance Intention**	**1**	**5**	**3.51**	**1.076**
VCI1	Audu should declare the ₦100,000 to FIRS because the amount is large	1	5	3.54	1.345
VCI2	Despite the ₦100,000 is small, Audu should still declare the amount to FIRS	1	5	3.46	1.339

VCI3	Audu should keep the ₦100,000 as part of his profit	1	5	3.53	1.273
VCI4	Audu should make effort to declare the total of ₦400,000 at once	1	5	3.51	1.329

4.2.2 Fairness in the Tax System (FTS)

The views of the respondents on the fairness of the tax system were measured using FTS1, FTS2 and FTS3. Specifically, the results reveal that most SMEs are of the opinion that the cost of compliance, multiple taxation and complexity of the tax system affect their compliance intention. The mean scores range from 3.57 to 3.71 and standard deviation from 1.121 to 1.180. The results of this analysis indicate that the majority of the SMEs believe that the government is not fair to SMEs in Nigeria. Hence, the SMEs are likely to comply if they perceived the tax system is fair through reducing the cost of doing business, multiple-taxation and cost of compliance. These descriptive statistics suggest that fairness in the tax system influences VAT compliance intention. The descriptive statistics on fairness in the tax system is presented in Table 4.

Table 4.
Descriptive Statistics on Fairness in the Tax System (n=373)

Code	Statement
FTS	**Fairness in the Tax System**
FTS1	The cost of compliance is high as compare bigger businesses, hence, affects my compliance intention
FTS2	The amount of VAT I remit and the servic get from the government is not okay
FTS3	The cost of compliance, multiple taxation and complexity of the tax system affect my compliance intention.

4.2.3 Detection Probability (DP)

The relationship between detection probability and VAT compliance was measured using DP1, DP2 and DP3 and the results revealed that most SMEs are of the opinion that the probability of detection is high. Hence, the SMEs are likely to comply if the chances of getting caught for non-remittance are high. Overall, the mean score range from 3.24 to 3.41 and standard deviation from 1.240 to 1.335, which suggests the probability of detection has a role in VAT compliance intention of SMEs in Nigeria. The descriptive statistics on detection probability is presented in Table 5.

Table 5.
Descriptive Statistics on Detection Probability (n=373)

Code	Statement	Min	Max	Mean	Std. Dev.
DP	**Detection Probability**	**1**	**5**	**3.32**	**0.997**
DP1	The probability of detection is very high	1	5	3.41	1.240
DP2	The FIRS will mind if I did not remit the VAT collections	1	5	3.24	1.335
DP3	I cannot cheat because the authorities will detect the cheating	1	5	3.31	1.307

Penalty Magnitude (PM)

The views of the SMEs on penalty magnitude were measured using PM1, PM2 and PM3. Specifically, the mean scores range from 3.09 to 3.27 and standard deviation from 1.253 to 1.278. The results of this analysis indicate that the majority of the SMEs believe that the penalty for non-compliance is very low. These descriptive statistics suggest that the penalty impose by the government does not necessarily discourage non-compliance to encourage compliance among SMEs in Nigeria. The descriptive statistics on penalty magnitude is presented in Table 6.

Table 6.
Descriptive Statistics on Penalty Magnitude (n=373)

Code	Statement	Min	Max	Mean	Std. Dev.
PM	**Penalty Magnitude**	**1**	**5**	**3.19**	**0.994**
PM1	SMEs can still cheat even with the presence of penalty	1	5	3.09	1.253
PM2	The penalty of non-compliance is very low. That is, business as usual	1	5	3.27	1.272
PM3	Other SMEs that are not complying are not being sanctioned by the government	1	5	3.20	1.278

Multiple Regression Analysis

To test the hypotheses on the direct relationship between the independent variables (Fairness in the tax system; Detection Probability; Penalty Magnitude) and the dependent variable (VAT compliance intention), multiple regression analysis was used following process recommended by Hair et al. (2010). The results of the analysis are presented in Table 7 and 8.

Table 7.
Summary of the Regression Model

R	R Square	Adjusted R Square	Std. Error of the Estimate
.965[a]	.931	.917	.884

a. Predictors: FTS, DP, PM
b. Dependent Variable: VAT Compliance Intention (VCI)

The result as measured by R^2 indicates the effect of the independent variables over the dependent variable. This explains that the extent to which the independent variables affect the dependent variable is about 0.931 or 93.1% as seen in Table 7.

Table 8.
Coefficients of the Regression

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
FTS	.341	.050	.333	6.854	.000
DP	.121	.048	.129	2.533	.012
PM	.137	.061	.129	2.257	.025

Going by the results of the p values as shown in Table 8, it shows a positive relationship between the independent variables (Fairness in the tax system; Detection Probability and Penalty Magnitude) and the dependent variable (VAT compliance Intention). Hence, the hypotheses formulated for the study (H1 – H3) should be accepted.

Conclusion

This study suggests the application of both the carrot and stick approach to encourage VAT compliance in developing countries. The government and the tax authorities have great roles to ensure the SMEs remit the VAT collections with ease so as to boost the revenue generation in developing countries. The methods that will work effectively as posited by prior literature and also this study are; fairness in the tax system for the carrot approach and a touch of the stick in form of detection probability and penalty magnitude for those SMEs in developing countries that find it "thrilling to beat the VAT system".

Combining the carrot with the stick will ensure a lasting solution as faced by developing countries on VAT losses and will also assists the developing countries in policy formulation on strategies to improve VAT compliance for an increase in the revenue generation of these countries particularly in this time of unstable revenue from oil. In the long run, funds will be available to implement the SDGs in developing countries. Furthermore, empirical studies should also be conducted in other developing countries to test the consistency of the results.

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