Where Lies the Compliance? A Value Chain Analysis of Tax Morale and Compliance among Self-Employed Taxpayers in a Developing Economy

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Abstract
The study examined the effect of tax morale on compliance among the self-employed taxpayers, using tax compliance value chain (TCVC) analysis. It adopted the survey research design on taxpayers from selected states in South-West, Nigeria. Stratified purposeful sampling technique was used to select the respondents, using a validated questionnaire for data collection. The study found that tax morale had a significant effect on compliance, even at each point on the tax compliance value chain. The study recommended fairness, accountability, transparency and service oriented performance.

Keywords: Self-employed, Tax compliance, Tax compliance value chain, Tax morale, developing economy

JEL Classification Codes: H24

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1 INTRODUCTION
The importance of a well-functioning tax system is considered a necessity for sustainable capacity building, social welfare and economic management for a symbiosis relationship between government and citizens (Chude & Chude, 2015 and Eiya, Ilaboya & Okoye, 2016). Meanwhile, pieces of evidence show that globally citizens are reluctant to pay taxes. Despite the several measures taking by relevant stakeholders to induce tax compliance, researchers still find non-compliance posing serious threats to government revenue generation and management of the economy (Beale & Wyatt, 2017; Fakile, Adegbie & Faboyede, 2014; World Bank/PwC, 2017). Early efforts by the classical theorists to examine tax compliance identified the deterrence factors as drivers of tax evasion. However, solid pieces of evidence globally established that actual compliance level far exceeds predictions of the classical theory (Alm, McClelland & Schulze, 1992; Torgler, 2003). Attentions then started to be drawn towards incorporating behavioural issues. Significant discovery from this new perspective is the concept of tax morale, the intrinsic motivation to pay tax. Meanwhile, how taxpayers’ beliefs and attitudes are formed and how the two constructs ultimately influence compliance decision still remain puzzles (Ali, Fjeldstad & Sjursen, 2013). Furthermore, scholars argued that the incorporation of moral and social dynamics to tax compliance model is still a generally underdeveloped research area (Torgler & Schnieder, 2009). Relating to taxpayer groups, Mohdali, Benk, Budak, Isa and Yussof (2018) established that self-employed taxpayers are less compliant than employed taxpayers. Meanwhile, they form the highest proportion of taxpayers in developing economies (World Bank/PwC, 2017). Ameyaw, Oppong, Abreuquah, and Ashalley (2016) and Udoh (2015) however observed neglect of this taxpayer group by researches.

To fill the identified knowledge gaps, this study examined tax morale and compliance, not only as a behavioural issue but also as a process with specific identifiable stages at which compliance values are created in a chain of actions.

The study contributed conceptually in the areas of using the procedural definition of tax compliance to introduce the concept of Tax Compliance Value Chain (TCVC) into the study of tax compliance. The study also contributes to knowledge in the area of methodology by developing four models which can be adopted or adapted by future research on tax morale and compliance. It also provides empirical evidence on self-employed taxpayers and that of developing economy and therefore giving opportunity useful for complimentary and comparative analysis. More so, it contributed to the validation of the Theory of Planned Behaviour in providing evidence establishing that subjective norms, attitudes and perceived fairness of tax system by self-employed taxpayers foretell
their tax morale which consequently dictates their compliance.

The main objective of this study is to examine tax morale and compliance among self-employed taxpayers in Nigeria with a view to assessing the effect of the former on the later using TCVC analysis.

2. LITERATURE REVIEW

Conceptual Review

Tax Compliance and Tax Compliance Value Chain

Tax compliance, in this paper, refers to a situation whereby taxpayer made due registration with relevant tax authority, timely filed his tax return, disclosed all his income sources, reported all income from each income source, claimed all and only entitled reliefs and allowances, correctly computed his tax liability and timely paid his tax due to appropriate authorities.

Tax Compliance Value Chain sees tax compliance as the summation of values created in a process involving distinct points at which such value is created. These distinct points at which values are created are referred to as the Tax Compliance Value Chain (TCVC) nodal points. They are identified as stages of; filing returns, disclosing income, computation of tax liability and payment of tax due.

Returns filing point: Returns filing is a statutory obligation of every taxpayer. It is a sort of information gathering, which involves preparation and submission of statement of a taxpayer’s income and expenses regarding his income sources and other relevant tax information for a year of assessment to the tax authority. This can be done by the taxpayer himself or by his agent. According to provisions of Sections 41 (1) of Personal Income Tax Act (PITA) (1990 as amended), every taxable person in Nigeria must file a tax return, with or without notice, to the relevant tax authority within 90 days from the commencement of each year of assessment. Failure to file this return amounts to non-compliance, which attracts fines. It may thus be predicted that tax morale dimensions could induce compliance with these legal provisions at this point.

The hypothesis one is therefore postulated in the null form that; Tax morale dimensions do not have a significant effect on compliance at the point of filing returns by self-employed taxpayers in Nigeria.

Income reporting point: This refers to the disclosure of relevant information in respects of taxpayers’ income for a year of assessment. According to Section 41 of PITA 1990 (as amended), each individual taxpayer should report information about himself to the relevant tax authority within the stipulated time period. Similarly, these provisions of the law must be completely followed for compliance to be ensured. Meanwhile, the extent to which they are complied with may be induced by tax morale.

Hypothesis two is therefore formulated as; tax morale dimensions do not have a significant effect on compliance at the point of income reporting by self-employed taxpayers in Nigeria.

Computation of tax liability point: This involves the assessment of taxes, which requires the determination of the amount payable by a taxpayer for the year of assessment. This is totally provided for by the relevant tax statutes. According to Section 44 of PITA 1990, an assessment may be made by either the taxpayer himself
or his agent (self-assessment) and if not, by the tax authority. It should be noted that each of these computation processes has time limits provided by relevant enabling laws. However, the enabling Act specifically allowed some specific deductions to be made from the income of an individual. Due compliance with these legal provisions amounts to compliance. The extent of abiding with them, therefore, needs to be examined to measure tax compliance. The third hypothesis is thus stated as: tax morale dimensions do not have a significant effect on compliance at the point of computing tax liability by self-employed taxpayers in Nigeria.

Tax payment point: This involves collection, recovery and repayment of taxes and related fines and penalties. Once an assessment becomes final and conclusive, i.e. when no further dispute on it can be entertained, the full amount must be paid within the appropriate time. However, if there is default, the tax authority has the right to take all steps as stipulated by relevant laws to recover the amount of such due taxes with fines and penalties as stipulated by relevant laws. Taxpayers’ adherence to these legal provisions amounts to tax compliance. It may thus be predicted that tax morale could induce compliance at this point. Hypothesis four is thus stated as: tax morale dimensions do not have a significant effect on compliance at the point of payment of tax due by self-employed taxpayers in Nigeria.

Tax Morale
According to Ramona-Anco and Larissa-Margareta (2013), Gunter Schmolders coined the word tax morale in 1960 as “the attitude of a group or the whole population of taxpayers regarding the question of accomplishment or neglect of their tax duties”. According to the authors, it is hinged on citizens’ tax mentality and their consciousness to be citizens, which is the base of their inner approval of tax duties and acknowledgement of the state’s sovereignty. It is the willingness of individuals to pay taxes, belief in contributing to common purse and moral obligation to pay taxes. According to Palil, MdAkir, and Wan Ahmad (2013), tax morale measures the attitude of taxpayers, unlike tax evasion that measures their behaviour.

Tax morale is defined in this study as an internalised obligation which intrinsically motivates citizens to exhibit a favourable attitude towards paying taxes.

Empirical Review
Tax Compliance
Studies have observed tax compliance to be apparent from the first day of taxation and would continue to be an area of interest so long tax exists (Ramona-Anco & Larissa-Magreta, 2013). Williams and Krasniqi (2017) also posited that, as long as governments continue to collect taxes, citizens will continue to strive to hide their income and wealth from the government’s searchlight.

It was opined by Philips (2011) that the theoretical study of Allingham and Sandmo (1972) originated extensive investigation on tax compliance factors. Tax compliance research from earlier time was dominated by the economic perspective claiming that taxpayers are rational as they try to evade taxes whenever the costs of sanctions, when caught, is lower than the gains of evasion. As rational actors, and without concerns for ethics and moral, they choose the option that promises greatest net gains. Subsequent studies came to establish deficiency of this view arguing that tax compliance
depends upon several other factors beyond deterrence factors (Alm & Torgler, 2011; Bello & Danjumma, 2014). These studies argued that deterrence model predicts too high tax evasion and too low tax compliance (Alm, McClelland & Schulze, 1992). In the same way, some taxpayers were found to be mainly inclined not to evade, so do not search for ways to cheat (Alm & Torgler, 2011).

Despite the relevancy of the deterrence theory in tax compliance studies, Loo, Evans and McKerchar (2010) hypothesized that its use could be considered suitable in addressing intentional non-compliance but are not likely to be suitable in addressing unintentional non-compliance and over-compliance. Studies are now expanding their focus to incorporate behavioural (psychological and social) issues like norms, attitude and perceptions into the tax compliance researches. Studies are now focusing attentions on reasons “why people pay taxes”, rather than “why they evade taxes”. The major contribution of this new behavioural approach is the discovery of tax morale; the intrinsic motivation to pay taxes, as a key factor dictating tax compliance.

**Studies on Tax Morale**

The assessment of individual taxpayers’ level of tax compliance by Vythelingum, Soondram and Jugurnath (2016) identified key factors that influence tax morale and resultantly tax compliance to include social norms, the fairness of tax system as well as governance quality/trusts in government. This is also supported by Hofmann, Hoelzl and Kirchler (2008).

**Sentiment, norms and values**

Subjective models are individuals’ beliefs of referents’ approval of their specific behaviour (Bobek, Robin & John 2007 in Devos, 2014). These referents include family members, colleagues, friends, peers and play groups, that individuals compare themselves with or refer to. Subjective norms, therefore, serve as social pressures on the taxpayer to either comply or evade tax. Studies have proved that there is theoretical evidence suggesting the influence of social factors on tax compliance like the perception of others’ honesty like peers, family members and friends (Ajzen, 1991; Chuaand Leung, 2009). Torgler (2004) evaluated the effects of internal and external social norms on tax compliance behaviour and tax morale in Costa Rica and Switzerland. The study found each of the social norms to exert a significant effect on both tax morale and tax compliance.


Vythelingum et al. (2016) found a positive association between “tax morale” and each of fairness, trust (in government, tax authority and legal system), social norms, and fiscal exchange equity. The study, however, could not find a significant
relationship between tax morale and any of moral sentiment, civic duties, taxpayers’ preference, the complexity of the tax system and respect by the tax authority.

**Attitudes of taxpayers**
Attitudes are positive and negative evaluation about an object, concept or living thing (Ahmed & Kedir, 2015). Fischer, Waltick, and Mark (1992) argued that when developing tax compliance model, culture manifests through social norms and ethical values and the duo would then influence the attitudes and perception of taxpayers toward compliance. This attitude is believed to encourage or induce a person to act in a certain way. Attitudes along with subjective norms and perceived behavioural control predict the behavioural intention of individuals, which in turn predicts their behaviours (Ajzen & Fishbein, 1980; Ajzen, 1991; Chau and Leung, 2009). Specifically, Chau and Leung (2009) suggested that their intentions directly predict taxpayers’ behaviour and that these intentions are determined by individuals’ attitudes towards behaviour (personal factor) and the perception of subjective norms (social factors).

**Fairness of the tax system**
Following the opinion expressed by Jackson and Milliron (1986), Barbutamisu (2011) explained that tax fairness involves two dimensions; one concerning the benefits received while the other relates to equity on the burden taxpayers bear compared to what other taxpayers bear. Tax Fairness/Equity is also considered in respect to the direction of consideration. It is also considered at the vertical or horizontal direction. According to Barbutamisu (2011), consideration of fairness under social psychology suggests three different forms of fairness/equity. These are distributive, which involves the exchange of resources (benefits and costs); retributive justice, which concerns individual’s perception of the appropriateness or otherwise of correctives measures against non-compliance; and procedural justice, referring to the procedure of administration, especially tax audit or sanction procedures (Kirchler, Hoelzl, & Wahl, 2008).

Babrbutamisu (2011) concluded that despite the fact that research has not produced consistent results on the influence of tax fairness/justice/equity on willingness to comply with tax payment, perception of tax fairness/justice can induce willingness to comply with tax payment. He, however, noted that although justice research has not always yielded consistent shreds of evidence for the impact of justice perceptions” on tax compliance, perceived justice might increase voluntary compliance.

**Governance quality and trust in government**
According to Kaufmann and Kraay (2016, p. 1), “Governance consists of the traditions and institutions by which authority in a country is exercised”. It comprises of (1) the procedure by which governments are “selected, monitored and replaced”; (2) its capacity to effectively formulate and implement sound policies; and (3) the respect of citizens and the government for the institutions governing social and economic interactions among the two. Perceptions of the citizens about the governance quality in a country have a certain degree of influence on their tax morale based on the principle of reciprocity (Torgler, Schaffner, & Macintyre, 2010; Tjondro, 2018). It comprises of (1) procedure governments are “selected, monitored and replaced”; (2) “capacity to
effectively formulate and implement sound policies”; and (3) the respect for institutions governing social and economic interactions among the two. The “Worldwide Governance Indicators” (WGI) is a research dataset that summarised views of a large number of individuals, enterprise and expert survey respondents in both developed and developing countries provided on each country’s governance quality. The project put up aggregate pointer of six extensive governance dimensions as: “Voice and Accountability”, “Political Stability and Absence of Violence/Terrorism”, “Government Effectiveness”, “Regulatory Quality”, “Rule of Law” and “Control of Corruption”. They are derived from over 30 basic data sources to reporting the perceptions of survey respondents and “expert assessments” globally on governance. These are considered relevant to this study and are explained as follows.

Tax morale, according to Torgler (2005), is positively induced by direct democracy. Controlling for factors like religiosity, trust in authority, tax awareness, perceived tax burden, tax administration, tax system, corruption and willingness to obey laws, further study in Torgler, et al. (2008) still established found a significant relationship. Chan, Supriyadi and Torgler (2018) had an empirical examination of the relationship between trust and tax morale at both individual and country levels. A combination of the World Values Survey and European Values Study dataset were used covering 400,000 observations over 108 countries. The overall results point out that although vertical trust is essential, horizontal trust (generalised trust) is not related to tax morale. They also argued that generalized trust uncertainty, against vertical trust uncertainty, is negatively associated with tax morale. On a general note, the study found evidence to conclude that generalized trust differs under diverse vertical and governance conditions. Still, they were unable to establish any mediating influence of governance quality on the influence of generalised trust on tax morale. The authors however, suggested that inter-country differences exist which demand for further exploration.

**Effects of Tax Morale on Tax Compliance**

Several studies established a strong positive relationship between tax morale and compliance and an inverse relationship with tax evasion or shadow economy (Ramona-Anca & Larissa-Margareta, 2013). Alm and Torgler (2006) examined individual taxpayers in the USA and 15 European countries to establish a strong negative relationship between tax morale and the level of the shadow economy. Alm and McClellan (2012) however shifted the focus of their study to firms using Business Environment and Enterprise Performance Surveys (BEEPS) and World Enterprise Survey (WES) on 8,500 firms from 34 countries over 8 year period. The result gave a similar correlation to what holds for individual taxpayers, showing that taxpayers with high tax morale evade less. Ali et al. (2013) examined factors that dictate tax compliance behaviour in Tanzania, Kenya, South Africa and Uganda using Afrobarometer survey data on attitude and perception of individual taxpayers. With the aid of binary logit regression, the Study found that an improved perception of the challenges in evading taxes would improve the probability of tax compliance in Kenya and South Africa. It also found that individual taxpayer’s satisfaction with variance in findings across countries.

Empirical evidence to support the efficacy of the fiscal exchange theory is found in
Moore (2004), Alm et al. (1992), Fjeldstad and Semboja (2004). Despite the existence of theoretical propositions, empirical evidence to support behavioural theories like fiscal exchange theory is still considered ambiguous (D’Arcy, 2011). Torgler and Schneider (2007) also used the World Value Survey and European Value Survey examine the attitude of Austrian citizens to established that tax morale could be a crucial factor to explain people’s honesty in tax payment. The extent to which the existence of tax morale can resolve the puzzle of tax compliance was empirically investigated further by Torgler, Schaffner and Macintyre (2007). The result found that tax morale had a strong impact on the level of the shadow economy.

Fakile (2011) examined tax morale among in developing economy and found that significant predictors of tax morale are social norms and attitude of taxpayers. The study was however found to be limited to addressing social norms alone, thereby ignoring other predictors of tax morale like values and ethics of the taxpayer, personal norms, sentiments, culture, fairness of tax system, governance quality and group identification factors. Another limitation of Fakile (2011) is that more than 80% of the sample selected comprised of employee group of taxpayers.

3. METHODOLOGY
Research Design, Population and Sampling
The study adopted the survey research design with a population of 9,381,736 taxpayers (National Bureau of Statistics, 2013). A sample size of 500 was determined using Yamane (1967) formula(400) plus 25% mark-up (100). Purposive sampling technique was used to select the respondents. A validated questionnaire was used to collect data. The reliability test of the items in the instrument, using Cronbach alpha, gave coefficients ranging from 0.75 to 0.89. The questionnaire administered gave 81.8% response rate. The data were analysed using descriptive and inferential statistics.

Tax morale dimensions measured by subjective norms, taxpayers’ attitudes, tax system’s fairness and governance quality/trust are conceptualised to be influencing tax compliance. These dimensions influence taxpayers’ perception, which would manifest on tax morale and consequently on tax compliance.

Theoretical Framework and Model Formulation
This study hinges on the Theory of Planned Behaviour (TPB) propounded by Ajzen (1991). According to Armitage and Conner (2001), TPB is one of the most commonly used behavioural theories adopted to investigate pro-environmental behaviour. The theory suggests that the best way to understand behaviour is by enquiring from an individual if he intends to act in a certain way. The theory postulates that subjective norms, attitudes and perceived behavioural control foretell behavioural intention, which in turn dictates the behaviour. Attitudes are opinions of the individual actor about the behaviour; subjective norms are opinions of other actors about it, and the perceived behavioural control refers to self-efficacy of the individual actor towards it.

The following models were developed to test each of the hypotheses using ANOVA, on condition that null hypothesis is accepted if $p < 0.05$, otherwise the alternative hypothesis is accepted.
Model 1 for $H_{01}$: \[ \text{RET} = \beta_0 + \beta_1 \text{SNV} + \beta_2 \text{FTS} + \beta_3 \text{GOT} + \beta_4 \text{ATD} + \epsilon_i \]
Model 2 for $H_{02}$: \[ \text{REP} = \beta_0 + \beta_1 \text{SNV} + \beta_2 \text{FTS} + \beta_3 \text{GOT} + \beta_4 \text{ATD} + \epsilon_i \]
Model 3 for $H_{03}$: \[ \text{COM} = \beta_0 + \beta_1 \text{SNV} + \beta_2 \text{FTS} + \beta_3 \text{GOT} + \beta_4 \text{ATD} + \epsilon_i \]
Model 4 for $H_{04}$: \[ \text{PYT} = \beta_0 + \beta_1 \text{SNV} + \beta_2 \text{FTS} + \beta_3 \text{GOT} + \beta_4 \text{ATD} + \epsilon_i \]

Where:
TC = Tax Compliance; RET = Compliance at Proper Filling of Tax Returns; REP = Compliance at Reporting All Income Sources and Amount; COM = Compliance at Correct Computation of Tax Liability; PYT = Compliance at Proper Payment of Tax Liability; SNV = Sentiment, Norms and Values; FTS = Fairness; ATD = Attitude; GOT = Governance & Trust; $\beta$ = slope of the line; and $\epsilon_i$ = Error term.

A-priori Expectation: $0 < \beta_i < 1$

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS
The results of the regression of the models testing the hypotheses are presented in Table 1 containing the Adjusted $R^2$ and the corresponding beta ($\beta$) contribution for each hypothesis when each of the tax morale factors is regressed against compliance.

4.1 TCVC Analysis of the Effect of Tax Morale

Table 1: Summary of $\text{Adj. } R^2$ and P-values at each TCVC Points

<table>
<thead>
<tr>
<th>Value Chain Points</th>
<th>Tax Morale</th>
<th>Sentiment</th>
<th>Fairness</th>
<th>Governance</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\text{Adj. } R^2$</td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>$H_{01}$: Returns Filing</td>
<td>0.066*</td>
<td>0.287*</td>
<td>0.233*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H_{02}$: Reporting of Income</td>
<td>0.098*</td>
<td>0.352*</td>
<td>0.154*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H_{03}$: Computation of Tax</td>
<td>0.169*</td>
<td>0.225*</td>
<td>0.358*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H_{04}$: Payment of Tax</td>
<td>0.180*</td>
<td>0.234*</td>
<td>0.293*</td>
<td>0.274*</td>
<td></td>
</tr>
<tr>
<td>Tax Compliance Generally</td>
<td>0.199*</td>
<td>0.204*</td>
<td>0.196*</td>
<td>0.224*</td>
<td></td>
</tr>
</tbody>
</table>

Note: * = Significant at 5%

Source: Extract from SPSS Outputs (2019)

Compliance at the point of returns filing
Results of the analysis along the value chain points at the first point ($\text{Adjusted } R^2 = 0.066$, $F(4, 339) = 6.990; p = 0.000$) show that tax morale dimensions have combined effect of 0.066 on filling of returns. This implies that a unit improvement in the tax morale factors would induce self-employed taxpayers’ compliance in filing returns by 0.066.

Results of further analysis of individual contributions of each tax morale factor suggest that only fairness of tax system ($\beta = 0.287$, $t(335) = 2.208; p = 0.028$) and attitude of taxpayers ($\beta = 0.233$, $t(335) = 3.067; p = 0.002$) made significant contribution to changes in compliance of self-employed taxpayers at point of filling returns. The implication is that fairness of tax system contributed 28.7% to the variation in compliance of self-employed taxpayers in filing tax returns, while improvement in the attitude of self-employed taxpayers would induce filing of tax returns by 23.3%.
Agbetunde, Akinrinola & Adekoya. Where lies the Compliance?…

Decision: Since the $p < 0.05$, the study, on the whole, did not accept the null hypothesis, rather accepted the alternative hypothesis to establish that tax morale dimensions have a significant effect on compliance at the filing of tax returns by self-employed taxpayers in Nigeria and that attitude of taxpayers and fairness of tax system significantly contributed to the effect.

This suggests that the existence of attitude of taxpayers and fairness of tax system are critical factors to monitor by stakeholders in tax compliance. The implication is that taxpayers’ attitude, as well as fairness of tax system, should be given priority attention by stakeholders when pursuing compliance of self-employed taxpayers in the aspect of filing returns before attention could be given to either governance/trust in government or sentiment, norms and values.

These results are supported by previous studies like Ameyaw et al. (2016) in developing economy and Torgler (2003, 2011a, 2011b, 2016) in the developed economy that found attitude and fairness as part of the factors that influence tax compliance generally.

Compliance at point of income disclosure
The results at the second point on the TCVC ($\text{Adjusted } R^2 = 0.098$, $F(4, 335) = 10.165; p = 0.000$) shows that tax morale dimensions collectively had a positive effect of 0.098 on compliance at the point of reporting income by self-employed taxpayers in Nigeria. The implication is that a unit improvement in these tax morale factors would enhance compliance of self-employed taxpayers in disclosing their income by 9.8%.

Analysis of the individual contributions of tax morale factors at income disclosure point also showed taxpayers’ attitude and fairness of the tax system has significant contribution to the effect on tax compliance. The results give $\beta = 0.352$, $t(335) = 3.555; p = 0.000$ for fairness of tax system and $\beta = 0.153$, $t(335) = 2.664; p = 0.008$ for attitude of taxpayers. The implication is that a unit improvement in the fairness of the tax system would induce compliance at disclosing income by 35.2% and improvement in taxpayers’ attitude would give 0.8% inducement.

Decision: Since $p < 0.05$, the paper did not accept the null hypothesis, rather accepted the alternate hypothesis to conclude that tax morale dimensions have a significant effect on income disclosure by self-employed taxpayers in Nigeria. Further analysis suggests that taxpayers’ attitude and fairness of the tax system as proxies of tax morale made significant contributions to compliance at income disclosure of self-employed taxpayers in Nigeria.

Compliance at point of computation of tax liability
The results at the point of computation of tax liability ($\text{Adjusted } R^2 = 0.169$, $F(4, 332) = 18.047; p$-value $= 0.000$) shows that tax morale dimensions had 0.169 effect on computation of tax liability by self-employed taxpayers in South-West, Nigeria. This suggests that a unit improvement in these factors would improve tax compliance of self-employed in computing their tax liability in Nigeria by 16.9%.

The analysis of the individual contributions of the factors revealed that sentiments, norms and values, as well as taxpayers attitude, gave a significant contribution to the effect. The results give $\beta = 0.225$, $t(332) = 2.512; p = 0.012$ for sentiment, norms and value and $\beta = 0.358$, $t(332) = 5.531; p = 0.000$ for attitude of taxpayers, but fairness
and governance did not give significant contribution. These imply that a unit improvement in sentiments and norms among self-employed taxpayers would induce compliance at tax computation by 22.5% and induce by 35.8% if the improvement is in taxpayers’ attitude. Findings of Roccas (2005), Walkers (2003) Holderost (2006) and Safran and Hamid (2018) agree with this as they all argued that social factors and norms have effects on tax compliance. These suggest that stakeholders would need to ensure policies and strategy that would enhance sentiments and norms, as well as attitudes of taxpayers, should be pursued to achieve sustainable compliance at computing tax liability by self-employed taxpayers in Nigeria.

Decision: On the whole, since the p < 0.05 the paper did not accept the null hypothesis, rather accepted the alternative hypothesis to establish that tax morale dimensions had a significant effect on compliance at computation of tax liability by self-employed taxpayers in Nigeria and that sentiment and norms, as well as attitude of taxpayers, significantly contributed to compliance at computation of tax liability by self-employed taxpayers.

Compliance at point of payment of tax due
At the point of payment of tax due, tax morale dimensions were found to collectively have a significant effect on the payment of tax liability by self-employed taxpayers in South-West, Nigeria (Adjusted $R^2 = 0.180$, $F(4, 339) = 19.607; p = 0.000$). These suggest that a unit improvement in these factors would induce tax compliance of self-employed taxpayers in Nigeria by 18%.

Analysis of individual contributions of the tax morale factors at this nodal point of TCVC revealed that three of the factors; attitude, fairness and sentiments, norms and values gave significant contributions. The results are $\beta = 0.234$, $t(335) = 2.567; p = 0.011$ for sentiment, norms and value, $\beta = 0.293$, $t(335) = 2.578; p = 0.010$ for fairness of tax system and $\beta = 0.274$, $t(335) = 4.129; p = 0.000$ for attitude of taxpayers, while governance did not give significant contribution. The implication is that a unit improvement in sentiment and norms would induce compliance of self-employed taxpayers at the payment of tax due by 23.4% if the fairness of tax system is improved the inducement would be 29.3%, and 27.4% if taxpayers’ attitude is improved.

Decision: On the whole, since the p < 0.05 the study did not accept the null hypothesis, rather accepted the alternative hypothesis to establish that tax morale dimensions have a significant effect on compliance at payment tax due by self-employed taxpayers in Nigeria and that sentiment, norms, attitude of taxpayers and fairness of tax system contributed significantly to the effect.

Effect of tax morale dimensions on total compliance
On a general note, the results of the regression analysis (Adjusted $R^2 = 0.199$, $F(4, 363) = 21.897, P = 0.000$) show that tax morale had a significant effect on tax compliance of self-employed taxpayers. The results individual contributions are $\beta = 0.204$, $t(363) = 2.949; p = 0.003$ for sentiment, norms and value, $\beta = 0.196$, $t(363) = 2.279; p = 0.023$ for fairness and $\beta = 0.224$, $t(363) = 4.463; p = 0.000$ for attitude of taxpayers, while governance and trust does not give significant contribution.
These values suggest that tax morale sub-variables collectively affected tax compliance significantly by 0.199 i.e. exerting 19.9% positive effect on tax compliance. This indicates that if tax morale is induced, the resultant effect would be an increase in tax compliance by 19.9%. These findings are supported by previous studies like Ameyawet al. (2016) in developing economy and Torgler (2003, 2016) in the developed economy. A deeper assessment of the individual contribution of each sub-variable shows that three of them had significant positive influence; excluding governance and trust that failed to give significant influence.

Since p < 0.05, the null hypothesis is not accepted, but the alternate hypothesis is accepted. We, therefore, conclude that tax morale exerts a significant effect on tax compliance of self-employed taxpayers in Nigeria. Considering the relative individual contributions of each tax morale proxies, coefficients of attitude, sentiment and norms and fairness of tax system were each less than 5%. The paper thus concludes that each of attitude, sentiment and norms and fairness of tax system, but not governance and quality, significantly contributed to compliance by self-employed taxpayers in Nigeria.

These findings are supported by earlier studies like Holzinger and Biddle (2016), Mckercharet al (2013), Mohdali and Pope (2012), Oats and Onu (2015) and Torgler (2006, 2017) establishing that sentiments and norms determines tax morale and induces tax compliance. Similarly, studies peculiar to Nigeria like Fakile (2011) also support the findings.

The findings that governance and trust do not give a significant contribution to changes in tax compliance is supported by findings from Chan, Supriyadi, and Torgler (2018) that used World Value Survey and European Value Survey datasets from over 100 countries. Chan et al. (2018) specifically found that horizontal trust did not have a significant relationship with tax morale/compliance. Moreso, when generalized trust was moderated with governance quality, the study could not get any relationship with tax morale/compliance. Conversely, positions of Tjondro (2018), Torgler (2003, 2007, 2011), Torgler and Murphy (2004), TorglerSchaffner and Machintyre (2010) are not in agreement with this finding which argued that governance quality significantly influenced tax compliance.

5. CONCLUSION AND RECOMMENDATIONS

The study examined the effect of tax morale on compliance among the self-employed taxpayers, using tax compliance value chain analysis. It adopted the survey research design on individual taxpayers from selected states in South-West, Nigeria. Using stratified purposeful sampling technique to select the respondents with the aid of a validated questionnaire, the study found that tax morale had a significant positive effect on compliance, even at each point on the tax compliance value chain. The study concluded that tax morale drove tax compliance among self-employed taxpayers in Nigeria at each nodal point on the TCVC and that attitude of taxpayers contributed significantly to the effect at all the points on the TCVC. However, perception of governance quality by self-employed taxpayers did not give a significant contribution at any of the point nor on tax compliance generally.
Arising from the findings, the study recommends that: Government should ensure accountability, transparency, collaboration between the government and the academics, be committed to law enforcement, ensure strong social cohesion among citizens. Similarly, tax authorities should pursue service-oriented performance, taxpayers’ enlightenment/education, improvement of institutional welfare. To the academics, it is recommended that “Taxation and Revenue Administration” be introduced into curricula of universities and colleges to create better tax awareness among citizens from schools, no matter the field of study. Each of these recommended strategies and polices should be implemented, monitored and measured at each nodal points on the TCVC.

The paper also suggests further research in the areas of expanding the scope of the study to other areas by replication in different aspects, especially comparative analysis with other developing countries. The newly introduced concept of “Tax Compliance Value Chain” should be adopted to incorporate both self-employed and employed taxpayers as well as corporate taxpayers.

This study, however, observed some limitations. One limitation of the study is in the restriction of the focus on only the self-employed taxpayers. There is, therefore, need for caution in the generalisation to all individual taxpayers. Attitude and perception of this type of taxpayers might differ significantly from that of employees or even corporate taxpayers. More so, findings from the study may only be applicable in jurisdictions with characteristics similar to that of people in South-West, Nigeria.

REFERENCES


Agbetunde, Akinrinola & Adekoya. *Where lies the Compliance?…*


Agbetunde, Akinrinola & Adekoya. *Where lies the Compliance?*...


