

Reengineering the Relationship between Tax Knowledge and Voluntary Tax Compliance in Nigeria: The Moderating Role of Tax Service Quality

Lawan Yahaya^{a,b}, Siti Zaidah Turmin^b, Jalila Johari^b,
Mohammad Noor Hisham Osman^b

^aDepartment of Accounting and Finance, Faculty of Management Sciences, Abubakar Tafawa Balewa University Bauchi, ATBU, Bauchi, Nigeria, ^bDepartment of Accounting and Finance, School of Business and Economics, Universiti Putra Malaysia, 43400 UPM Serdang Selangor

To Link this Article: <http://dx.doi.org/10.6007/IJAREMS/v12-i1/15855>

DOI:10.6007/IJAREMS/v12-i1/15855

Published Online: 13 March 2023

Abstract

The purpose of this study is to examine the moderating role of tax service quality on the relationships between tax knowledge and voluntary tax compliance in Nigeria. The study used partial least squares structural equation modeling (SEM SmartPLS 3.3) to analyze the direct and moderating effect based on 296 self-employed taxpayers in Nigeria. The result indicates a negative and insignificant direct effect between tax knowledge and voluntary tax compliance. The finding further reveals that tax service quality has a positive and significant effect with voluntary tax compliance. Whereas tax service quality significantly moderates the relationship between tax knowledge and voluntary tax compliance. The results show that a mixed combination of tax knowledge and tax service quality can lead to improved tax compliance. Our results contribute to the previous studies that have largely examined the direct relationship between tax knowledge and tax compliance by signifying that tax service quality moderate the relationship between tax knowledge and voluntary tax compliance. The study recommends frequent awareness and educating the taxpayers on the relevance of tax knowledge and providing quality of tax service to improve voluntary tax compliance.

Keywords: Tax Knowledge, Tax Service Quality, Voluntary Tax Compliance, Self-Employed Taxpayer.

Introduction

In a contemporary economy, taxes constitute an important source of generating revenue to some economies and are being used for essential services by governments (Aladejebi, 2018; Ebimobowei & Nkwazema, 2014; Yankelovich et al., 1984). Taxes collected from taxpayers contribute to the nation's Gross Domestic Product (GDP) (Chindengwike & Kira, 2022; Khalid et al., 2021). This assertion is not restricted to the developing economies only but also to the developed economies too. In Nigeria, tax revenue contributes immensely to the Gross

Domestic Product thereby stands as second best aside oil revenue (Dennis & Emmanuel, 2014; Yahaya, Turmin Johari & Osman, 2022). Even though, Government had shifted its attention to tax revenue from oil revenue because of sudden declining of oil revenue due to Covid-19 and the war in Ukraine (Otusanya & Lauwo, 2019). Tax revenue has become so important to government in rejuvenating more revenue to government coffers as of recent (Adeoye & Adeyeye, 2018; Karyanti & Nafiah, 2022). Government have made several attempts to boost the tax compliance means among the taxpayers in Nigeria in the past. Among the several effort is the introduction of the voluntary tax compliance known as the self-assessment system (SAS) in Nigeria in the year 2012 (FIRS, 2012; Yahaya et al., 2013). SAS is a system under tax laws that allows taxpayers to willingly computer their tax liabilities within a stipulated period and make the payment to tax authority (Palil, 2010; Yahaya et al., 2013). Since, SAS is a responsibility on taxpayers to calculate their own tax liabilities, then it is important for them to have cardinal knowledge of the tax laws. SAS also requires taxpayers to have tax knowledge and fully abreast to the tax laws especially with regards to their civic right (Fatt, 2009; Okello, 2014; Yahaya, 2015). Previous studies have stressed the difficulties experienced by taxpayers when complying under SAS especially in developing economy like Nigeria (Yahaya et al., 2018). Nigeria as a developing economy also faces with problems of taxpayers' non-compliance (Oyededeji, 2021). Suleiman (2018) noted that taxpayers in Nigeria lack the technical knowledge to compute their tax liabilities. Nigeria with the largest population in Africa and the largest black race in the world should be a source of concern over the tax non-compliance. The present population of Nigeria is over 200 million and estimated to be 399 million by the year 2050 (IMF, 2015). In this population of over 200million people, it has a workforce of 62.24 million as at 2021 (Oyedede, 2019). While, world bank data record shows that 79.8% of the workforce are self-employed amounting to 49.7million self-employed businesses (BBC, 2019). Although, there was an increment recently of self-employed businesses amounting to 59million businesses just before the hit of COVID-19 pandemic. However, in 2021 the country recorded businesses failure of 20.23% because the lockdown as a result of COVID outbreak which make businesses distressed (Oyededeji, 2021). Despite, the distressed businesses some still survived with this pandemic and are coping with the situation (Thecable, 2021). The corporate affairs commission (CAC) reported that about 40million businesses were not registered with the commission (Oyededeji, 2021). While the government in its effort to encourage business registration it had declared free registration for 250,000 businesses in 2020 and 100,000 businesses in 2021 (FIRS, 2021; Oyededeji, 2021). The government want to make sure that all businesses are being registered with CAC and FIRS. The FIRS reported that out of the registered businesses, less than 30% are within the tax net while 70% of the registered businesses failed to file in tax returns (Adeyemi & Adeduro, 2020; FIRS, 2021). This is a serious concern for any government to have a solution in its effort to generate more revenue. Even though, the government says in 2021 there was increased number of taxpayers but the tax revenue still remain low and below expectation (Oyededeji, 2021). These raised issues might be lack of knowledge among the taxpayers and their ability to understands the importance of tax compliance. It is also possible that the type of quality tax services rendered by the tax authority might be an influence on their tax compliance. These motivate to the study to examine the moderating role of tax service quality between tax knowledge and voluntary tax compliance among the self-employed taxpayers in Nigeria.

Literature Review

The discussion under literature review would be categorized under three (3) sub headings namely: tax compliance, tax knowledge and tax service quality. also, to be discuss in this section is the theory used, hypotheses development and conceptual frame work of the study, below are the explanation

Voluntary Tax Compliance

Voluntary tax compliance is defined as a means whereby taxpayers willingly adhere to the precise computation and reporting of tax liability in an accurate and truthful manner by making the exact payment on or before the due date (Kirchler & Wahl, 2010; Kogler et al., 2015; Slemrod, 1998). Rusli et al (2021) determine the factors that influences voluntary tax compliance in Indonesia. The study uses the purposive sampling techniques to test the data. The result indicated that voluntary tax compliance is affected by tax authority and taxpayers. Batrancea et al (2019) studied trust and powers of tax authorities as determinants among 44 countries from different 5 continents of the world. The sample is 14,509 students selected from 44 countries among with 87.5% are students of economics and business administration. The range of their age is between 18 to 25 years amounting to 92.5% of the total students that participated. Female participants are the majority with a percentage of 52.5% as against their male counterpart. The result of the study shows that the power and trust in tax authority significantly enhance tax compliance based on the slippery slope framework. On the other hand, taxpayers' non-compliance behaviour has negative influence tax revenue and decreases tax compliance among taxpayers (Evans & Nam, 2019). Therefore, government need to ensure that tax compliance is being monitor to enhance tax compliance so as to increase revenue generation.

Tax Knowledge

Tax knowledge can be defined as the ability for taxpayers to understands the tax laws and be able to calculate their tax liability accurately and truthfully (Jackson & Milliron, 1986). Under voluntary tax compliance, it is necessary for the taxpayers to acquire tax knowledge for them to be able to comply with the tax laws. Tax knowledge had found to be a key factor under voluntary compliance and it also enhances revenue generation in most countries (In Tishar, 2019; Saad, 2014). Jusoh et al (2021) examine the effect of tax knowledge on tax compliance among Malaysian taxpayers. The study uses 152 sample across Malaysia. The result shows that tax knowledge have significant effect on voluntary tax compliance. The study suggests a tax policy improvement to increases taxpayer literacy level. In another study, Twum et al (2020) determine the tax knowledge on tax compliance in Ghana west Africa. The study deployed the use of questionnaire sample of 130 owners of small businesses. The analysis was done with the aid of SEM to arrive at the impact or relationship between these variables. The finding indicated that tax knowledge has significant influence on tax compliance. The research recommends that government to use tax education to improve tax compliance among the taxpayers. Hence, Salawati et al (2021) found a negative and insignificant between tax knowledge and tax compliance among taxpayers. The study was conducted in Malaysia to examine the influence of tax knowledge on tax compliance. The sample of 419 respondent were used in the study. The suggestion given by the study was that tax authority should focus more on the penalties for tax evaders. Based on the inconsistency of the result in the discussed of previous researches, the study therefore hypothesized that:

H1: There is positive and significant effect between tax knowledge and voluntary tax compliance

Tax Service Quality

Service quality is defined as the level of excellence expected by taxpayers to meet their expected desire in service delivery (Parasuraman et al., 1988). Taxpayers' expectation is to the tax authority to provide them with excellence service delivery for them comply effectively. Therefore, tax authorities have responsibility of providing quality services to taxpayer compliance behaviour (Susuawu et al., 2020). Joni and Handryno (2021) examine the effect of tax service quality on tax compliance among taxpayers on paying land and building in Indonesia. The study adopted the Slovin formula for sampling method and the multiple regression model was used for the analysis. The finding shows that tax service quality has positive and significant impact on the tax compliance. It continues by suggesting that tax authority should provide good service delivery to increase tax compliance. In addition, Seralurin et al (2021) determine the influence of tax service quality on taxpayers' compliance behaviour in Jayapura city Indonesia. The sample size of 99 taxpayers which were used as the study's respondents. Data were analyzed using the SmartPLS 3.0 to determine the outcomes. The outcome shows a significant influence between tax service quality and tax compliance. However, Sugiyarti et al (2021) noted a negative and significant effect between tax service quality and tax compliance among taxpayers in Cirebon Satu Pratama office Indonesia. The study was a qualitative in nature whereby it suggests that public trust is worth improving the tax compliance. Based on the inconsistencies of the results of previous researches, the study therefore hypothesized that:

H2: There is a positive and significant effect between tax service quality and voluntary tax compliance

H3: There is a positive and significant moderating role of tax service quality between the tax knowledge and voluntary tax compliance

Theoretical Framework

The theory used is the situation awareness theory (SA), Situation awareness theory is defined as the knowledge of system in a new environment for a particular period which prediction of the system as perceived in the future (Endsley, 1988). The theory is relevant in this context as to establish relationships with the variables under voluntary tax compliance being a new system in the context of the study. The theory explained about knowledge of a system and understanding it in a dynamic nature that would keep individual abreast on the system such voluntary compliance. In explaining the impact of tax knowledge on voluntary tax compliance based on situation awareness theory by Endsley (2018); Yahaya (2014) noted that taxpayers with adequate tax knowledge have more tax awareness thereby decision to voluntarily comply with tax is high. This is the fact that under voluntary compliance, the responsibilities of computation of tax liability is left on the hands of the taxpayers. The taxpayers can only do the calculation if they have adequate knowledge on tax. Previous studies had found that inadequate tax knowledge may affect tax compliance (Amayi & Machogu, 2013; Choong & Khin, 2011; Fatt, 2009; Mukasa, 2011; Saad, 2014). While Mas'ud (2013) noted that a reasonable tax knowledge may influence tax compliance. The new system of SAS requires taxpayers to be knowledgeable enough to comply with tax effectively as specified by the SA theory. When the taxpayers have adequate tax knowledge, it would make the adoption be successful. The adapted SA model is depicted in figure 1. below

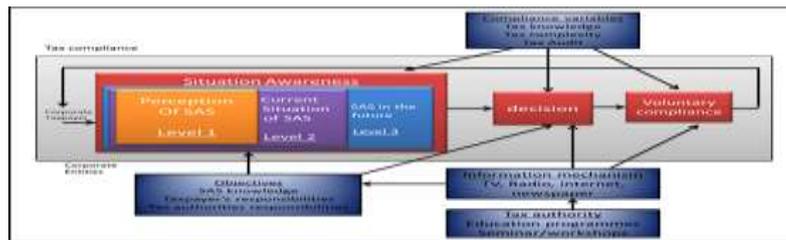


Figure 1. Situation awareness model
Source: Adapted from (Endsley, 1988).

Conceptual Framework

The conceptual framework shows the relationships between variable used in the study. As for this study, the variables are tax knowledge, tax service quality and voluntary tax compliance. The study examines the moderating role of tax service quality between tax knowledge and tax compliance. The figure below presents the relationship between the moderating role of tax service quality, tax knowledge and voluntary tax compliance.

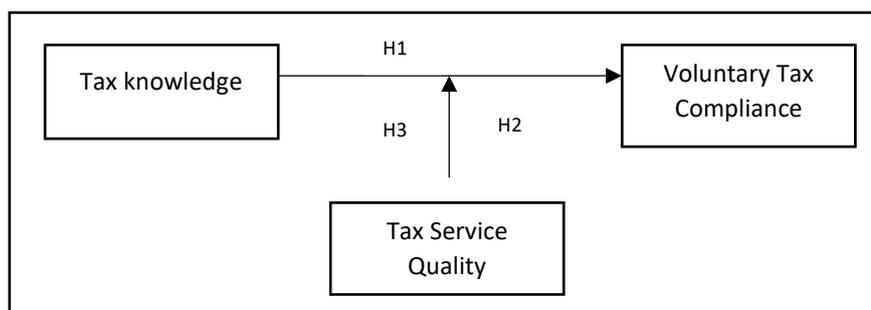


Figure. 2. Conceptual framework

Methodology

The study’s main target population were the self-employed taxpayers in Nigeria; hence, the selected sample were the registered taxpayers with tax identification number (TIN). Having a large population of registered taxpayers, 384 sample was used based on the recommended sample by (Krejcie & Morgan, 1970). A systematic random sampling method was used to collect the data and aided by a well-structured questionnaire. The study was able to recovered 296 distributed questionnaires out of 384 and it is above the recommended threshold of 30% (Frohlich, 2002). The research instrument used in the study is a survey questionnaire as stated earlier. The questionnaire was structure to the determine the relationships between variables used in the study. The questionnaire uses the seven (7) point Likert scale and being adapted from past researches with the scale of 1 to be strongly disagree and 7 to be strongly agree.

Result and Discussion

The discussion of results begins with the presentation of description analysis where discussion on the demographic profile was presented. The discussion of the measurement model and structural model respectively using the SmartPLS were followed.

Demographic Profile

The demographic characteristic of the respondents as depicted in table 1 shows that most of the gender of self-employed taxpayers were male amounting to 69.9% of the total

respondent, while 30.1% represent the female taxpayers. The age group of the self-employed taxpayers indicates that most of the taxpayers were between the age of 31 to 40 years representing 40.9%. The least age group as indicated in the table were between the age above 51 years representing 2%. The academic qualification of the taxpayers shows that most of the respondent were degree holders representing 46.6%. while the least education background of the respondents was those with master/PhD representing 8.8% of the total respondents as presented in table 1.

Table 1
Demographic Profile

Profile	Frequency	Percentage
Gender		
Male	207	69.9
Female	89	30.1
Total	296	100.0
Age		
Less than 30 years	98	33.1
31 to 40 years	121	40.9
41 to 50 years	71	24.0
Above 51 years	6	2.0
Total	296	100.0
Academic Qualification		
School certificate	33	11.1
Diploma	99	33.4
Degree	138	46.6
Master/PhD	26	8.8
Total	296	100.0

Measurement Model

The measurement model is a section in structural equation modelling that establishes the factor loadings of constructs. The factor loadings of a construct should not be less than 0.6 as the recommended value (Gefen & Straub, 2005; Hair et al., 2020). In this measurement, the study excludes and remove any construct that is less than 0.6 which is below the threshold. In addition, the study did not include any construct that less than 0.70 for the composite reliability (Purwanto & Sudargini, 2021). In line with this, all the latent variable under this study has the required threshold. The other measures under the measurement model is the convergent validity which measured by average variance extracted (AVE). the Average variance extracted cut-off value is 0.50 and above (Hair et al., 2020). In the table below, it shows that all the variables have met the recommended value as indicated by experts.

Table 2
Reliability and Validity

Variables	Factor loading	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Tax knowledge		0.882	0.887	0.910	0.628
TAK1	0.768				
TAK2	0.84				
TAK3	0.787				
TAK4	0.761				
TAK6	0.798				
TAK7	0.797				
Tax Service Quality		0.884	0.886	0.911	0.632
TSQ1	0.763				
TSQ2	0.843				
TSQ3	0.82				
TSQ4	0.746				
TSQ6	0.81				
TSQ7	0.784				
Underreporting income		0.828	0.834	0.886	0.661
UR1	0.839				
UR2	0.855				
UR4	0.750				
UR5	0.804				
Over deduction expenses		0.724	0.731	0.879	0.783
OD3	0.899				
OD5	0.871				
Voluntary tax Compliance		0.838	0.881	0.811	0.555
UR1	0.812				
UR2	0.813				
UR4	0.687				
UR5	0.728				
OD3	0.749				
OD5	0.667				

Model Output

This output model shows loading of the constructs based on the recommended threshold. The constructs that are below the required threshold have been removed. The constructs are tax knowledge, tax service quality and voluntary tax compliance as presented in the figure below

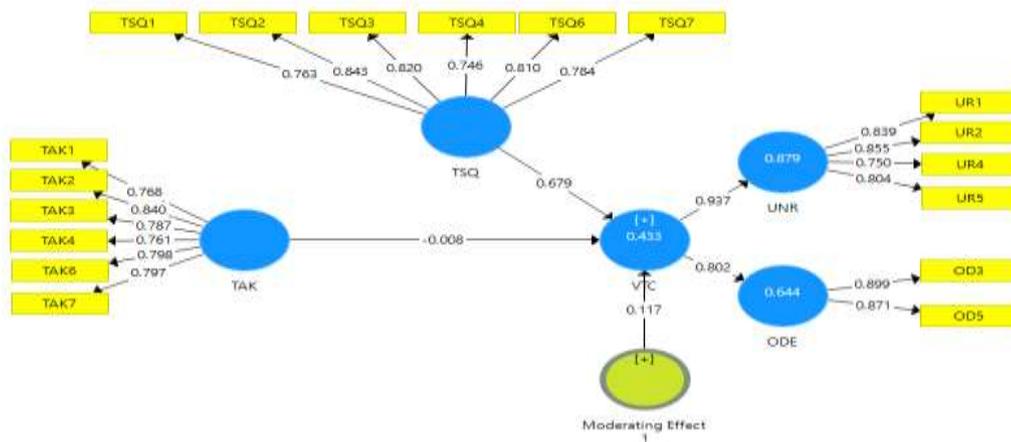


Figure 3. Outer Loadings of Variables

Discriminant Validity

The analysis below is for the discriminant validity and the Heterotrait Monotrait (HTMT) is the component that was used to access the ratio produce using the discriminant validity. In other to check the discriminant validity as recommended is the ratio is less or equivalent to 0.90 (Hair et al., 2020; Purwanto & Sudargini, 2021). for the discriminant validity for this study is in table 3.

Table 3

Discriminant Validity using HTMT

	E	OD	TAK	TSQ	UN	VTC
ODE	0.85	0.4	0.7			
TAK	0.85	0.4	0.7			
TSQ	0.01	0.6	0.8	0.7		
UNR	0.44	0.5	0.4	0.5	0.8	
VTC	0.02	0.8	0.5	0.6	0.9	0.7

Structural Model

The structural model is set to evaluate the path coefficient. It determines both strength and weakness of the relationships between independents and dependent variables. To achieve the relationship, bootstrapping method in SmartPLS was used (Purwanto & Sudargini, 2021).

Coefficient of Determination (R²)

The coefficient of determinant R² examine the level of variance in dependent variable is being explained by the combined strength of independent variable (Bhalla et al., 2022; Purwanto & Sudargini, 2021). Hair et al (2012) stress that R square values of more than 0.35 is considered as adequate. Based on Hair et al (2012), recommendation the R square for the

study is reported adequate. As presented in Table 4, R^2 of the Voluntary tax compliance was 0.433 which amount to 43 % variance explained. This R square value is an important contribution to the study. The R^2 is presented in the table below:

Table 4
Coefficients of Determination (R^2)

Variable	Variance Explained (R^2) R^2 Value	Size
Voluntary Tax Compliance	0.433	adequate

Hypotheses Testing

The hypothesis testing is been determined through bootstrapping whereby path coefficient between variables of the model is used. H1: There is a positive and significant effect between tax knowledge and voluntary tax compliance. The results indicated a negative and insignificant effect between tax knowledge and voluntary tax compliance (β -0.008, t 0.104, $p < 0.917$). Hence, H1 was rejected. The second hypothesis H2: There is a positive and significant effect between tax service quality and voluntary tax compliance. The finding indicates that tax service quality has a positive and significant effect on voluntary tax compliance (β 0.679, t 10.301, $p < 0.000$). Hence, H2 was accepted. The third and final hypothesis, H3: There is a positive and significant moderating role of tax service quality between the tax knowledge and voluntary tax compliance. The results found that there is a positive and significant moderating role of tax service quality between the tax knowledge and voluntary tax compliance (β 0.117, t 2.409, $p < 0.016$). Therefore, H3 was also accepted. The findings are presented in Table 5.

Table 5
Hypotheses Testing

	Path Coefficient	Standard Deviation	T Statistics	P Values
H3 Moderates TAK -> VTC	0.117	0.049	2.40 9	0.0 16
H2 TSQ -> VTC	0.679	0.066	10.3 01	0.0 00
H1 TAK -> VTC	-0.008	0.074	0.10 4	0.9 17

Discussion

The finding as presented earlier is examine the moderated relationship between tax service quality, tax knowledge and voluntary tax compliance. The hypotheses reveal both acceptances and rejection in the study. The first hypothesis establishes a negative and insignificant effect between tax knowledge and voluntary tax compliance. The finding is in line with the previous study of (Loo et al., 2010; Salawati et al., 2021). This indicated that taxpayers do not have the technical knowledge to compute their tax liabilities or they find it difficult when doing the calculation. It is the responsibility for government through the tax authority to ensure that taxpayers are being educated on this responsibility. The result further indicated that tax service quality has a positive and significant effect on voluntary tax

compliance. The result is being supported by prior researches conducted by (Joni & Handryno, 2021; Seralurin et al., 2021). It shows that the quality of services in term of responsiveness and reliability to taxpayers have influence on their ability to comply. On the other hand, the final result indicated that there is a positive and significant moderating role of tax service quality between the tax knowledge and voluntary tax compliance. The result is similar with findings of (Mustapha & Obid, 2015; Seralurin et al., 2021). The moderation of tax service quality had strengthened the weak direct relationship between tax knowledge and voluntary tax compliance. Government had to understand that quality service delivery can make the taxpayers willingly educate themselves to comply effectively. According to Amin et al (2022) noted that educating the taxpayers on tax knowledge enhances tax compliance. Likewise, the more taxpayers comply with tax, the more government realizes adequate revenue.

Conclusion

The summary of the major findings indicated that tax service quality influences the voluntary tax compliance among self-taxpayers and also it was found that tax service quality positively moderates the relationship between tax knowledge and voluntary tax compliance in the study. The findings have immense contribution to the vast literature of tax compliance both locally and internationally. The government might use this information to improve their ability to educate the taxpayers especially those businesses owners in Nigeria. The government also will use this study understand that quality of tax services provided to taxpayers would enhance tax compliance. Hence, government can generate more revenue to enable it discharge the civic responsibilities of providing security, social amenities to its citizens. This study is so important to government, taxpayers, policy makers and researchers. However, the study has limitation which is the scope of the respondents that focuses only on self-employed taxpayers instead of combining corporate taxpayers and tax official together. In future studies, the scope can be expanded to accommodate other categories of taxpayers. This study had made outstanding improvement with regards to taxpayers' knowledge using tax service quality as a catalyst in improving government revenue through tax compliance. Finally, this study has contributed to the existing body of knowledge in explaining how tax knowledge moderated by tax service quality were able to enhanced tax compliance among self-employed taxpayers in Nigeria.

References

- Adeyemi, A., & Adeduro, A. (2020). INSIGHT : Tax Revenue Mobilization in Nigeria. *Daily Tax Report : International*, 1–6.
- Adeyeye, G. B., Adeoye, A. O., & Adeyeye, A. M. (2018). Personal Income Tax Administration in the Rural Communities (a Study of Selected Local Government Areas in Ogun State, Nigeria). *Annals of Spiru Haret University. Economic Series*, 18(2), 25–52.
- Aladejebi, D. O. (2018). Measuring Tax Compliance among Small and Medium Enterprises in Nigeria. *International Journal of Accounting and Taxation*, 6(2), 29–40.
- Amayi, C. G., & Machogu, J. B. (2013). The effect of taxpayer education on voluntary tax Compliance, among SMES in Mwanza city- Tanzania. *International Journal of Marketing, Financial Services & Management Research*, 2(8), 12–23.
- Amin, S. N., Zaqqeya, P., Buhari, A., Yaacob, A. S., & Iddy, Z. (2022). Exploring the Influence of Tax Knowledge in Increasing Tax Compliance by Introducing Tax Education at Tertiary Level Institutions. *Open Journal of Accounting*, 11, 57–70.
- Batrancea, L., Nichita, A., Olsen, J., Kogler, C., Kirchler, E., Hoelzl, E., Weiss, A., Torgler, B.,

- Fooker, J., Fuller, J., Schaffner, M., Banuri, S., Hassanein, M., Alarcón-García, G., Aldemir, C., Apostol, O., Bank Weinberg, D., Batrancea, I., Belianin, A., ... Zukauskas, S. (2019). Trust and power as determinants of tax compliance across 44 nations. *Journal of Economic Psychology, 74*.
- BBC. (2019). Nigeria: Why is it struggling to meet its tax targets? *BBC News: Reality Check, 1–13*.
- Bhalla, N., Sharma, R. K., & Kaur, I. (2022). Effect of Tax Knowledge and Technological Shift in Tax System on Business Performance: A PLS-SEM Analysis. *Sustainability (Switzerland), 14(16)*, 1–18.
- Chindengwike, J. D., & Kira, A. R. (2022). The Effect of Tax Rate on Taxpayers' Voluntary Compliance in Tanzania. *Universal Journal of Accounting and Finance, 10(5)*, 889–896.
- Choong, K. F., & Khin, E. W. S. (2011). A study on self-assessment tax system awareness in Malaysia. *Australian Journal of Basic and Applied Sciences, 5(7)*, 881–888.
- Dennis, A., & Emmanuel, O. (2014). The Impact of Taxation on Revenue Generation in Nigeria: A Study of Federal Capital Territory and Selected States Afuberoh, Dennis 1 & Okoye Emmanuel, PhD 2 1. *International Journal of Public Administration and Management Research (IJPAMR), 2(2)*, 22–47.
- Dwi Karyanti, T., & Nafiah, Z. (2022). Taxpayer Compliance Analysis with Tax Knowledge, Tax Sanctions, and Income Levels Through Taxpayer Awareness as Moderating Variables. *Jurnal Ilmiah Multidisiplin, 1(7)*, 2022.
- Ebimobowei, A., & Nkwazema, O. G. (2014). Self-Assessment Scheme and Revenue Generation in Nigeria. *Developing Country Studies, 4(10)*, 102–111.
- Endsley, M. R. (1988). Design and Evaluation of Situation Awareness Enhancement. *The Human Factors Society 32nd Annual Meeting*.
- Endsley, M. R. (2018). Toward a Theory of Situation Awareness in Dynamic Systems. *Human Error in Aviation, 37(1)*, 217–249.
- Fatt, C. K. (2009). Hawkers and the self-assessment tax system: Survey evidence from Malaysia. *Oxford Journal, 8*, 119–132.
- FIRS. (2012). *Handbook on the implementation of self assessment tax regime in Nigeria*.
- FIRS. (2021). FIRS : Nigeria now has 41 million taxpayers — but revenue generation still low. *SecureAge Technology, 10–14*.
- Frohlich, M. T. (2002). Techniques for improving response rates in OM survey research. *Journal of Operations Management, 20(1)*, 53–62.
- Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems, 16(1)*, 5.
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research, 109*(November 2019), 101–110.
- Hair, Joe F, Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science, 40(3)*, 414–433.
- IMF. (2015). *Current Challenges in Revenue Mobilization: Improving Tax Compliance* (Issue April). <https://www.imf.org/external/np/pp/eng/2015/020215a.pdf>
- In Tishar, A., Hasanuzzaman, S., Tishar, I. A., & Hasanuzzaman, S. (2019). Examining Different Factors of Income Tax Non-Compliance in a Small Sample in Bangladesh. *Economics and Business, 33(1)*, 35–49.

- Jackson, R. V., & Milliron, V. C. (1986). Tax compliance research: Findings, problems and prospects. *Journal of Accounting Literature*, 55, 125–165.
- Joni, S. S. . B., & Handryno, B. (2021). The Effect of Tax Service Quality on Taxpayer Compliance in Paying Land and Building Tax. *International Journal of Scientific and Research Publications (IJSRP)*, 11(7), 637–642.
- Jusoh, M. Y. H., Mansor, F. A., Abd Razak, A. S. N., & Noor, W. M. (2021). The Effects of Tax Knowledge, Tax Complexity and Tax Morale Towards Tax Compliance Behaviour Among Salaried Group in Malaysia. *Advances in Business Research International Journal*, 7(2), 250–266.
- Khalid, M. A. Y., Turmin, S. Z., & Palil, M. R. (2021). Understanding Corporate Tax Avoidance and the Causal Factors : Some Evidence from Malaysia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 1(3), 271–282.
- Kirchler, E., & Wahl, I. (2010). Tax compliance inventory TAX-I: Designing an inventory for surveys of tax compliance. *Journal of Economic Psychology*, 31(3), 331–346.
- Kogler, C., Muehlbacher, S., & Kirchler, E. (2015). Testing the “slippery slope framework” among self-employed taxpayers. *Economics of Governance*, 16(2).
- Krejcie, R. V., & Morgan, D. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Loo, E. C., Evans, C., & McKerchar, M. (2010). Challenges in understanding compliance behaviour of taxpayers in Malaysia. *Asian Journal of Business and Accounting*, 3(2), 145–161.
- Mas’ud, A. (2013). Cost, Penalty and Risk Avoidance in Self-Assessment System: Some Suggestions for Self-Employed Taxpayers. *International Journal of Management Research and Review*, 3(4), 766–774.
- Mukasa, J. (2011). *Tax knowledge, perceived tax fairness and tax compliance in Uganda: the case of small and medium income tax payers in Kampala Central Division*. 70.
- Mustapha, B., & Obid, S. N. B. S. (2015). Tax Service Quality: The Mediating Effect of Perceived Ease of Use of the Online Tax System. *Procedia - Social and Behavioral Sciences*, 172(February), 2–9.
- Okello, A. (2014). Managing Income Tax Compliance through Self-Assessment. *IMF Working Papers*, 14(41), 1.
- Otusanya, O. J., & Lauwo, S. G. (2019). Corruption and socio-political economic structures: a case of Nigeria. *Journal of Financial Crime*, 26(1), 330–371.
- Oyedeji, O. (2021). Nigeria Laments Low Tax Income , Has it Considered Changing Demographics of Taxpayers ? *Dataphyte*, 1–8.
- Taiwo, O. (2019). Guess how many Nigerians pay tax and how our government spends the money. *PWC*.
- Palil, M. R. (2010). Tax Knowledge and Tax Compliance Determinants in Self Accessment System in Malaysia. *Journal of International Development*, 4(3), 61–1.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale For Measuring Consumer Perception. *Journal of Retailing*, 64(1), 12.
- Purwanto, A., & Sudargini, Y. (2021). Partial Least Squares Structural Squation Modeling (PLS-SEM) Analysis for Social and Management Research: A Literature Review. *Journal of Industrial Engineering & Management Research*, 2(4), 114–123.
- Rosid, A., Evans, C. C., & Tran-Nam, B. (2019). Perceptions of Corruption and Tax Non-Compliance Behaviour: Policy Implications for Developing Countries. *SSRN Electronic Journal*, 1–43.

- Rusli, R., Ratnawati, V., & Wahyuni, N. (2021). Investigating of Factors Affecting Tax Payers Compliance: The Moderating Role of Tax Authorities' Moral Obligations. *Archives of Business Research*, 9(8), 190–201.
- Saad, N. (2014). Tax Knowledge, Tax Complexity and Tax Compliance: Taxpayers' View. *Procedia - Social and Behavioral Sciences*. <https://doi.org/10.1016/j.sbspro.2013.12.590>
- Salawati, S., Sritharan, N., Sheung, S. C. C., & Mohamed, A. S. (2021). Does Tax Knowledge Motivate Tax Compliance in Malaysia? *Research in World Economy*, 12(1), 238.
- Seralurin, Y. C., Kbarek, T. J., & Pattiasina, V. (2021). Effect of Tax Socialization and Tax Service Quality on Taxpayer Compliance with Tax Knowledge Asintervening Variables. *Central Asian Journal of Theoretical and Applied Sciences*, 02(11).
- Slemrod, J. (1998). on Voluntary Compliance, Voluntary Taxes, and Social Capital: Introduction. *National Tax Journal*, 51(3), 485–491.
- Sugiyarti, S., Larasati, E., Suwitri, S., & Ngatno, N. (2021). *Tax Service Quality In Increasing Taxpayer Compliance In The Cirebon Satu Pratama Office*.
- Suleiman, N., Yahaya, L., & Abba, M. (2018). *Influence of Corporate Taxpayers Knowledge on Tax Compliance Behaviour under Self- assessment System in Nigeria*. May.
- Susuawu, D., Ofori-Boateng, K., & Amoh, J. K. (2020). Does Service Quality Influence Tax Compliance Behaviour of SMES? A New Perspective from Ghana. *International Journal of Economics and Financial Issues*, 10(6), 50–56.
- Thecable. (2021). Protection vs Evolving Malware From 10m in 2015 , Nigerian taxpayers ' soon to hit 45m .' *Thecable News*, 19–23.
- Twum, K. K., Martin, K. A., Assabil, E. N., Adombire, M. A., Edisi, D., & Akuetteh, C. (2020). Tax Knowledge and Tax Compliance of Small and Medium Enterprises in Ghana. *South East Asia Journal of Contemporary Business, Economics and Law*, 21(August), 222–231.
- Yahaya, L. (2014). *Tax determinants towards Self-assessment System: A case of Corporate Taxpayers in Nigeria*. International Islamic University Malaysia (IIUM).
- Yahaya, L. (2015). The Perception of Corporate Taxpayers' Compliance Behaviour under Self-assessment System in Nigeria. *Journal of Management Research*, 7(2), 343.
- Yahaya, L., Lawal, I., & Ahmed, A. J. (2013). Effect of Corporate Taxpayers Awareness of Tax Authority ' s Responsibilities on Compliance Behaviour under Self-assessment System in Nigeria. *International Journal of Finance and Accounting*, 2(8), 459–464.
- Yahaya, L., Turmin, S. Z., Johari, J., & Osman, M. N. H. (2022). Understanding the Effect of Government Attitudes on Voluntary Tax Compliance in Nigeria. *Interenational Journal of Academic Research in Accounting, Finance and Management Sciences*, 12(3), 71–85.
- Yankelovich, D., Skelly, & White, I. (1984). *Taxpayer attitudes study: Final report*.