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Mkenda, Gregory; Nchimbi, Mariam; Mahangila, Deogratius

## Article

# Moderating effect of financial condition on the influence of tax knowledge on tax compliance behaviour among SMEs in Tanzania

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## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

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## Moderating Effect of Financial Condition on the Influence of Tax Knowledge on Tax Compliance Behaviour among SMEs in Tanzania

**Gregory V. Mkenda<sup>1</sup>**

*Assistant Lecturer- Department of Economics and Tax Management , The Institute of Finance Management, Dar es Salaam,, Tanzania*

**Mariam I. Nchimbi**

*Senior Lecturer- Department of Accounting, University of Dar-es-Salaam Business School*

**Deogratias N. Mahangila**

*Senior Lecturer- Department of Accounting, University of Dar-es-Salaam Business School*

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### Abstract

*This paper examines the moderating effect of financial conditions on the influence of tax knowledge on tax compliance behaviour among SMEs in Tanzania. A cross-section survey of 377 SMEs-Owners was conducted in three regions of Tanzania - Dar es Salaam, Morogoro and Mbeya. Descriptive and partial least square path modelling were used for data analysis, with the aid of SPSS and SmartPLS3.0. The findings of the study supported the hypothesised direct relationship that tax knowledge has a significant positive influence on tax compliance behaviour among SMEs in Tanzania. The findings imply that SME-Owner managers who possess greater tax knowledge demonstrate high tax compliance behaviour compared to those with less tax knowledge. Moreover, the financial condition of SMEs was found to have a positive significant moderating effect between tax knowledge and tax compliance behaviour among SMEs in Tanzania, implying that the existence of strong financial stability among SME-owners combined with tax knowledge increases SMEs tax compliance behaviour compared to those with limited financial resources. Thus, the government, through the Tanzania Revenue Authority, is advised to enhance taxpayer education initiatives, especially for SMEs, which may result in improving the level of tax compliance behaviour and institute generous compliance measures during difficult financial conditions.*

**Keywords:** Tax Compliance, Tax Knowledge, Financial Condition, SMEs, Tanzania.

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<sup>1</sup> Corresponding Author: [gregorymkenda@yahoo.com](mailto:gregorymkenda@yahoo.com)

## **Introduction**

Tax compliance is a significant policy concern on a global scale, impacting tax revenue agencies, economic progress, and overall development. The observed phenomenon can be attributed to the escalating occurrences of the avoidance and evasion of taxes on a global scale, with a particular emphasis on developing nations such as Tanzania. Avoidance and evasion of taxes have impacts on the ability of governments to mobilise revenues to finance public expenditures. Studies have shown the importance of tax compliance for nations around the world (Musimenta et al., 2017; Ali et al., 2013; Cerqueti & Coppier, 2015). Most governments all over the world are mapping out strategies to increase revenues in order to be able to provide their population with basic needs and improve service delivery. Despite the government's reliance on tax revenue, taxpayer non-compliance remains a global challenge, and particularly, sub-Saharan Africa is adversely affected (McKerchar & Evans, 2009).

In Tanzania, efforts to improve voluntary taxpayer compliance behaviour have been made by the Tanzania Revenue Authority in recent years, including the introduction of the Block Management System (BMS). Despite this, the country has tax revenue collection to GDP ratio of 13.1%, 12.5%, 12.3%, 11.7%, 12.2%, and 11.4% in the fiscal year 2015/16 to 2020/21, respectively, well below the sub-Saharan average of 16.5% (URT, 2022; Semboja & Msafiri, 2022). Moreover, the tax growth rate has been declining from 24% in the fiscal year 2015/16 to 0.0% in the fiscal year 2020/21 (URT, 2022). In the views of the International Monetary Fund (IMF), the average tax revenue to GDP ratio for low-income countries is 15% (IMF, 2005). For Tanzania, however, both the highest and the lowest tax revenue to GDP ratios are below the average (15%) ratio, thus implying that, generally, the country has been less efficient in tax revenue collections.

Government regulations, especially taxation, are the primary concerns of the business sector—particularly small and medium-sized enterprises (SMEs)—throughout the world (Inasius, 2018). The law requires that SMEs abide by all applicable laws, especially those pertaining to taxes. Tanzania's economy mainly comprises small and medium-sized enterprises (SMEs), much like other developing nations. SMEs contribute revenue to the government, create employment and fosters economic growth. SMEs contribute significantly to the GDP and make up a sizable portion of the private sector in emerging nations (Musimenta et al., 2017). Over 70% of all registered enterprises in Tanzania are SMEs, accounting for over 95% of all businesses and almost 40% of its GDP in the country (Ubabuko et al., 2010). Estimates show that there are over 2.7 million businesses in the nation, with 60% of them situated in cities (URT, 2012).

Despite their high contribution to GDP, SMEs are claimed to have a high rate of tax non-compliance (Akhand, 2012). This can be evidenced by the fact that the Tanzania Revenue Authority (TRA) collects below 30% of tax revenue from SMEs, which form 90% of all taxpayers in the country (Khalfan et al., 2020). In order to better understand Tanzanian SME taxpayer behaviour and develop solutions that would improve tax compliance, it is crucial to research on tax compliance. Research on SMEs is vital because findings from studies large taxpayers cannot be used to explain SMEs' tax compliance behaviour. This is because SMEs differ from large taxpayers in many aspects, such as business age, ownership type, business size, industry type, financial condition and level of tax compliance (Kirchler, 2007).

Dealing with the problem of tax non-compliance in SMEs requires an in-depth understanding of the factors enhancing tax compliance behaviour (Kamleitner et al., 2012). Literature has provided evidence that though non-compliance is influenced by numerous factors (Alabede et al., 2011a; Hassan et al., 2016; Evans et al., 2013; Tan & Liu, 2016), tax knowledge has been identified as an essential determinant of tax compliance behaviour (Saad, 2014; Palili & Mustapha, 2011). However, the majority of the studies (Saad, 2014; Harris, 1989; Manual & Xin, 2016; Tan & Liu, 2016; Mukhlis et al., 2015) that have been conducted on tax knowledge and tax compliance produce mixed and inconclusive findings. Moderating role of tax knowledge in tax compliance behaviour was not considered by these studies. However, the literature suggests that mixed and inconclusive results on the relationship between variables may be moderated by certain variables to strengthen or weaken the relationship; to have a positive or negative effect (Baron & Kenny 1986).

Behavioural studies (Alabede et al., 2011a) indicate that the financial condition of an individual moderates their ability to pay tax. This indicates that financial difficulties might moderate SME owners' commitment to delivering their responsibilities, including tax payments. Despite the justification of moderation, relatively little is known about the moderating role of financial condition on the relationship between tax knowledge and tax compliance behaviour. Therefore, this research examined the causal effect of tax knowledge on tax compliance behaviour and the moderating effect of financial condition on the relationship between tax knowledge and tax compliance behaviour among SMEs' in Tanzania using the lens of the theory of planned behaviour.

Theoretically, the study contributes to the inclusion of the theory of planned behaviour in explaining tax compliance behaviour of SMEs, using tax knowledge and financial condition as moderators in the context of Tanzania. Empirically, this research adds to existing knowledge on tax compliance behaviour in Tanzania, thus bridging the existing research gap between developed and developing countries. Practically, the research is helpful to governments in developing countries, particularly Tanzania, tax policymakers and tax administrators. It helps them to understand the critical segment of tax knowledge that affects the tax compliance behaviour of SMEs and may assist in designing suitable tax policies and strategies for SMEs that ensures increased tax compliance and hence generation of more tax revenue. The structure of this study is four-fold. First, it reviews the existing theoretical and empirical literature. Second, it presents the research methodology. Third, it presents the results of the study and discussion. Finally, it presents the conclusion, implications and limitations of the study.

## **Literature Review**

### ***Theoretical Literature Review***

The present research employed the Theory of Planned Behaviour (TPB) (Ajzen, 1991), which is widely used in research from many different fields of study in explaining intention toward adopting certain behaviours (Krueger et al., 2000). The theory has been used in some notable fields such as education (Ariff et al., 2010) and organisational behaviour (Lanigan & Bentley, 2006). The TPB has also proven to be successful in explaining intention to adopt tax compliance behaviour (Bobek & Hatfield, 2003; Damayanti, 2012, Trivedi & Shehata, 2005).

The TPB posits that behavioural intentions are influenced by attitudes, subjective norms, and perceived behavioural control (Ajzen, 1991). In the context of tax compliance among SMEs in Tanzania, TPB implies that SMEs with better tax knowledge may develop more positive attitudes toward tax compliance if they perceive it as fair and necessary for societal benefits. Tax knowledge may influence SME owners' perceptions of what others expect regarding tax compliance. Positive social norms around compliance can be reinforced with increased tax knowledge. TPB is also used to explain how financial conditions moderate the influence of tax knowledge in the study. It is important to note that SME taxpayers' intentions to comply do not only depend on their will; rather, they may be willing to comply but eventually fail to comply due to difficulties or barriers encountered in performing such behaviour (Richardson & Sawyer, 2001). For SMEs facing financial constraints, a positive attitude toward tax compliance might be more challenging to maintain, even with high tax knowledge. Thus, high tax compliance can be achieved when SMEs have good tax knowledge and are financially stable.

### ***Hypotheses Development***

#### **Tax Knowledge and Tax Compliance Behaviour**

The acquisition of tax knowledge is a crucial component of a taxpayer's tax compliance behaviour, particularly when utilising the Self-Assessment System (SAS), which necessitates the application of tax knowledge (Kasippilai & Jabbar, 2003; Palil & Mustapha, 2011; Saad, 2014). On the other hand, an inadequate understanding of taxes due to a lack of tax knowledge can result in non-compliant actions, whether deliberate or accidental. It is imperative that all taxpayers possess a certain level of tax knowledge in order to file their tax returns by the deadline, record their tax affairs truthfully, and accurately calculate their tax liabilities. Australian small business taxpayers may unintentionally engage in a non-compliance activity because they are unaware of their lack of tax understanding (McKerchar, 1995). However, small firms find it more challenging to get the tax knowledge required to assure procedural compliance than large businesses (Gaetan, 2008).

Findings show that when the self-assessment system was implemented, tax knowledge significantly affected Malaysia's tax compliance level (Loo et al., 2009). They went on to say that a tax payer's capacity to correctly calculate their tax due, claim reliefs and refunds, and declare their taxable income can all be influenced by how well-versed in tax policy they are. Research on tax compliance in small and medium-sized enterprises (SMEs) in Nigeria demonstrates a strong positive relationship between tax compliance and tax awareness, suggesting that more tax knowledge will result in higher tax compliance among SMEs (Oladipo & Obazee, 2016). Mukhlis et al. (2015) also discovered a statistically significant positive relationship between tax education, tax knowledge and tax compliance in Indonesia's handicraft SMEs. This suggests that taxpayers with adequate tax knowledge can accurately assess their tax liability and file tax return forms timely.

Alongside the above results, which show a significant positive effect between tax knowledge and compliance behaviour, other research revealed no significant effect. For example, Harris (1989) and Manual & Xin (2016) found that the tax knowledge did not significantly affect taxpayers' compliance behaviour. This suggests that having more tax knowledge may result in less tax compliance behaviour. This is because a greater level of tax knowledge is linked to an understanding of the legal ways to lower or even altogether avoid taxes, as well as gaps in tax

regulations. Tax knowledge had a significant negative effect on enforced compliance, according to a study on SMEs' tax compliance behaviour in New Zealand (Tan & Liu, 2016). This means that while those with more tax knowledge are better able to take advantage of tax loopholes, those with less tax knowledge were uncertain about the law and complied out of fear of being discovered and penalised. One of the possible explanations for the inconsistency of the results could be differences in tax jurisdictions, as most of the studies cited were conducted in Australia, New Zealand, Malaysia, or Nigeria.

In conclusion, after considering previous literature's findings, it is evident that raising taxpayers' level of tax literacy is crucial to running an effective tax system— particularly for SMEs. If taxpayers are able to accurately file their tax forms and make the proper payments on time, they will be able to achieve a sufficient degree of voluntary compliance. Therefore, in order to accomplish the goal of tax compliance, taxpayers must be knowledgeable and well-educated (especially when it comes to tax issues), and their level of tax literacy must be regularly increased in order to maintain current and applicable information about taxes. Thus, this research postulates the first hypothesis that,

*H<sub>1</sub>: Tax knowledge has a positive effect on tax compliance behaviour.*

#### **The Moderating Effect of Financial Condition**

There is currently conflicting and inconclusive evidence about the possible effect of tax knowledge on tax compliance behaviour (Fauziati et al., 2016; Saad, 2014; Tan & Liu, 2016). On the basis of mixed and inconclusive results presented in the previous empirical studies about the effect of tax knowledge on tax compliance behaviour, literature indicates that the influence may be moderated by introducing specific variables to strengthen the influence with positive or negative effects (Baron & Kenny, 1986; Kirchler et al., 2007; Ramayah et al., 2018; Memon et al., 2019; Hair et al., 2017). Prior several scholars have examined the moderating effects of a few variables on the relationship between tax compliance and its drivers (Murphy, 2007; Wenzel, 2004a). Nevertheless, no moderating variable was considered on the influence of tax knowledge on tax compliance behaviour. Certain behavioural research suggests that an individual's financial condition moderates the relationship between knowledge and behaviour (Brett et al., 1995). Taxpayers with personal financial difficulties are more likely to prioritise their financial demands and obligations over paying taxes than those less financially distressed (Engida & Baisa 2014). This suggests that SME owners' commitment to fulfilling their responsibilities, including paying taxes, may be moderated by their financial condition. This is consistent with research by Bloomquist (2003) that found that taxpayers with fewer financial resources are more likely to be non-compliant than taxpayers in good financial standing because they are more susceptible to financial stress. Moreover, Mohan (2001) states that individuals with financial struggles engage more in evasion intentionally than individuals who can afford to settle the tax payables.

Empirically, the relationship between the tax system structure, non-professional occupation, and tax compliance behaviour was significantly moderated by the financial condition of the taxpayer (Alabede et al., 2011c). However, no significant moderating effect was found in the relationship between the taxpayer's attitude towards tax evasion and compliance behaviour (Alabede et al., 2011b). Notwithstanding the explanation provided for the aforementioned

occurrence, not much is known about how the financial condition moderates the influence of tax knowledge on tax compliance behaviour. Hence, the second hypothesis is formulated:

*H<sub>2</sub>: The financial condition of SME owners moderates the influence of tax knowledge on tax compliance behaviour among SMEs in Tanzania.*

## Methodology

The study context was based on Tanzanian small and medium enterprises (SMEs). The SMEs are categorised as micro, small, medium and large enterprises and differ in many aspects, including business age, business size, and level of tax compliance (URT, 2003; Khalfan et al., 2020). However, for the purpose of this study, SMEs constitute enterprises with 5 to 99 employees or whose capital investment ranges from 5 million to 800 million Tanzanian shillings (URT, 2003). These types of SMEs are the second largest after micro businesses compared to other businesses, estimated to be 88,150 (MIT, 2012; URT, 2016). The study was conducted in Dar es- Salaam, Mbeya and Morogoro regions. The regions were selected because of their comparatively greater SME business densities. Moreover, Dar es Salaam was chosen due to its reputation as a commercial center and business hub (URT, 2016). The unit of analysis in this study was SMEs, while the unit of inquiry was the SMEs' owner-managers. The SMEs owner-managers were selected because they are involved in the day-to-day management of the business and primarily involved in the role of decision-making in tax issues; therefore, they were expected to have adequate information on the tax-related matters of the business (Kamleitner et al., 2012). However, in the absence of SME owners, managers were used as respondents on trust that they had a good understanding and experience in dealing with tax matters.

Based on the objective of this study, in testing the influence of tax knowledge on tax compliance behaviour and the moderating effect of financial condition, the study adopted a positivism philosophy and a deductive approach. Moreover, the study adopted an explanatory cross-sectional research design to determine and explain effect of tax knowledge on tax compliance behaviour. Owing to financial constraints and time limitations, a cross-sectional design was deemed suitable, as data were only gathered once. In this study, the sample size of 398 SMEs was obtained from the population size of 88,150 SMEs. The sample size was calculated using Taro Yamane's formula at the 95% confidence interval and 5% margin error (Yamane, 1967). The study adopted the use of a multistage probability sampling technique (Bhattacharjee, 2012), where a stratified sampling technique was applied to categorise SMEs into three groups, namely, manufacturing, trade and services, so as to ascertain all sectors were represented depending on their proportional population distribution. Following this, simple random sampling technique was employed to collect the needed data from the SMEs. The Primary data were collected during the period of January to July, 2021 by employing a self-administered pre-tested structured questionnaire utilising a drop-off and pick-up method. The questionnaire was selected because to its greatness as a data gathering instrument that can swiftly and affordably analyse the behavior, attitudes, perceptions and intentions of a large number of respondents (Saunders et al., 2019). According to Jackson-Smith et al. (2016), the methods of drop-off and pick-up were preferred due to their ability to reduce time and yield acceptable response rates. The reliability of the data was assessed using composite reliability

whereas validity was assessed using average variance extracted for convergent validity and HTMT for discriminant validity (Hair et al., 2019; Henseler et al., 2015).

Three primary variables were examined in this study: financial status served as the moderating variable, tax compliance behaviour served as the dependent variable, and tax knowledge served as the independent variable. Tax knowledge was measured through general tax knowledge, legal tax knowledge and technical tax knowledge (Saad, 2011). Seven indicators were employed and were measured on a five-point Likert scale, (ranging from 1= strongly disagree to 5 = strongly agree). Financial condition was operationalised as the extent to which the SME owner is satisfied with his/her financial condition and that of his/her household (Torgler, 2003; 2007). Four indicators were measured as dissatisfied and satisfied on a five-point Likert scale (ranging from 1= strongly disagree, 5= strongly agree). Tax compliance behaviour was operationalised as hypothetical self-reporting of accurate reporting of the tax base, correct computation of the tax liabilities, timely filing of tax returns and timely payment of the amount due as tax (Chatopadhyay & DasGupta, 2002; Chan et al., 2000; Gilligan & Richardson, 2005). Nine indicators were measured on a five-point Likert-scale (ranging from 1= strongly disagree, 5= strongly agree). A five-point Likert scale was used because the researchers felt that it would improve response rates and quality while also lowering respondents' levels of frustration (Sachdev & Verma, 2004).

**Table 1: SMEs Profiles**

<b>Profile Details</b>	<b>Number</b>	<b>Percentage</b>
<i><b>Location</b></i>		
Dar es Salaam	214	56.8
Mbeya	85	22.5
Morogoro	78	20.7
<i><b>Type of business</b></i>		
Manufacturing	98	26
Traders	163	43.2
Services	101	26.8
Others	15	4
<i><b>Form of Business</b></i>		
Sole Proprietor	201	53.3
Partnership	74	19.6
Private Limited Company	102	27.1
<i><b>Business Age</b></i>		
<2 years	41	10.9
2-5 years	99	26.3
>5 years	237	62.9
<i><b>Number of Staffs</b></i>		
≤ 4	94	24.9
5 to 49	254	67.4
50 to 99	23	6.1
≥ 100	6	1.6
<i><b>Capital</b></i>		
5 mill -200 mill.	281	74.5
Above 200 mill. - 800 mill.	80	21.2
Above 800 mill.	16	4.2



## **Data Analysis and Results**

### ***SMEs and Participants Profiles***

The demographic data of the SMEs and the survey participants were described using descriptive statistics. This included information about the SMEs' length of operation, number of employees, type of business or activity, business form of operation, current position of the respondents, and level of education. As indicated in Table 1, out of 377 SMEs, 214 (56.8%) were from Dar es Salaam, 85 (22.5%) were from Mbeya, and 78 (20.7%) were from Morogoro. Dar es Salaam had many SMEs because it is the commercial region and business hub (URT, 2016). This study found that 163 (43.2%) SMEs were in trade business, 101 (26.8) SMEs dealt with service businesses, and 98 (26%) SMEs were in manufacturing businesses. The remaining 15 (4%) of the SMEs were in other businesses. However, the majority of SMEs, 201 (53.3%) were sole proprietor businesses. Moreover, the age of the firm has an impact on the behaviour of business tax compliance (Palil, 2010). The majority of the SMEs contacted (62.9%) had existed for more than five years. The results also indicate that the majority of the SMEs, 254 (67.4%) were small enterprises that had between 5 and 49. The findings showed that 281 (74.5%) of the visited SMEs had paid up capital between 5 million to 200 million.

**Table 2: Demographic Profiles of Respondents**

<b>Profile Details</b>	<b>Frequency</b>	<b>Per cent</b>
<b><i>Position</i></b>		
Managing Director	64	17
Owner Manager	296	78.5
Manager	17	4.5
<b><i>Gender</i></b>		
Male	250	66.3
Female	127	33.7
<b><i>Age</i></b>		
<30	45	11.9
30-39	117	31
40-49	132	35
50-59	63	16.7
>59	20	5.3
<b><i>Education Attained</i></b>		
Primary Education	70	18.6
Secondary Education	71	18.8
Certificate	45	11.9
Diploma	36	9.5
Bachelor Degree	93	24.7
Master's Degree or higher	62	16.4

### ***Respondents Profiles***

Table 2 indicate the respondents' profiles. About the position of the respondents, the findings show that 296 (78.5%) were owner-managers, 64 (17%) of the respondents were managing directors, and the remaining 17 (4.5%) of the respondents were managers. Moreover, the study indicates that about 250 (66.3%) of the respondents were male, and 127 (33.7%) were female. This suggests that men ran the majority of SME firms. The findings are consistent with Tanzanian traditional culture, which shows that most women take care of their families and

children by staying at home. On age grouping, the majority of the respondents, 132 (35%), were between 40-49 years. This implies that most of the SME businesses were operated by respondents with age of 40-49. According to the results, 93 (24.7%) of the participants held a bachelor's degree.

### ***Hypotheses Testing***

The two stages of the PLS path model assessment were evaluated in this study using SmartPLS 3.0, which also evaluated and interpreted the findings of the direct relationships and moderating interactions (Hair et al., 2021; Hair et al., 2019; Henseler et al., 2009). First, the measurement model (outer model) was tested to ensure its validity and reliability. Second, the structural model (inner model) or path model was evaluated. Lastly, hypothesised direct relationship and the moderating effect were examined to obtain the significance level of the path coefficients by running PLS algorithm and bootstrapping algorithm procedure of 5,000 replications (Hair et al., 2014; Hair et al., 2021; Sarstedt et al., 2021; Valerie 2012).

#### **Assessment of the Reflective Measurement Model**

The measurement model seeks to ascertain the extent to which the indicators capture their constructs per the measurement theories underpinning them. Every indicator in the measurement model in this research was reflective. Reliability and validity are the two main metrics utilised in the PLS model to assess the measurement model. The primary criteria used to assess reflective measurement or outer models are the indicator reliability test, internal consistency reliability test, convergent validity test, and discriminant validity test as proposed by scholars (Hair et al., 2021; Hair et al., 2019; Hair et al., 2017; Henseler et al., 2009). Reliability was deemed satisfactory when indicator outer loading was above 0.708; in which case the construct was deemed to account for more than 50 per cent of the indicators' variance (Hair et al., 2021). Hulland (1999), however, noted that in social science studies, when using recently produced scales, researchers often receive weaker indicator loadings (<0.708). Moreover, a cut-off point of 0.40 has been proposed by several researchers, meaning that any indicator loading below 0.4 needs to be eliminated from the measurement (outer) model (Hair et al., 2014; Hulland, 1999; Hair et al., 2011). Nevertheless, indicators with outer loadings between 0.40 and 0.70 should only be taken into consideration for removal from the scale if doing so increases composite reliability and average variance extracted (AVE) above the recommended threshold value of 0.5 (Hair et al., 2021; Hair et al., 2017). The model in this study contained twenty reflecting indicators in total. All twenty reflective indicators indicate acceptable degrees of indicator reliability.

Composite reliability (CR) was utilised to evaluate internal consistency construct reliability. Values falling between 0.60 and 0.70 were considered acceptable, while values exceeding 0.95 are considered undesirable as they suggest that all items are measuring the same phenomenon and, thus, are unlikely to be valid measures of the variable (Hair et al., 2019; Hair et al., 2017; Henseler et al., 2009). The internal consistency reliability of every latent construct in this research was more than adequate. The CR verified and confirmed the internal consistency reliability (Table 2) based on the above expert suggestions. The convergent validity of the constructs was evaluated using AVE. To create acceptable convergent validity, it is generally recommended that each construct's AVE threshold be equal to or higher than 0.50 (Hair et al., 2021). When the AVE is 0.50 or higher, it means that the construct reaches convergent validity by explaining at least 50% of the variance of the indicators that comprise the construct (Hair

et al., 2017; Hair et al., 2021). According to Table 2, there is sufficient convergent validity because all AVE values fell within the range of 0.619 and 0.744. Thus, the current research has demonstrated convergent validity.

Furthermore, the discriminant validity of the constructs was evaluated using the Heterotrait-Monotrait ratio of correlation (HTMT). Heterotrait-Monotrait (HTMT) ratio criterion is superior to the traditional approaches for measuring discriminant validity because both the Fornell-Larcker criterion and the assessment of the cross-loadings criterion were insufficiently sensitive to detect discriminant validity problems (Henseler et al., 2015). According to Henseler et al. (2015), HTMT is the mean value of item correlations across constructs in proportion to the mean of average correlations for the items measuring the same construct. According to Voorhees et al. (2016), the primary criterion for the HTMT test is whether the HTMT ratio approaches 1.0, meaning that values that are close to or more than 1.0 would be considered violations of discriminant validity. Although the exact HTMT ratio that would result in a discriminant validity violation is unclear, however, 0.85 and 0.90 have been proposed as helpful starting points (Henseler et al., 2015). As shown in Table 3, all HTMT values in this investigation were less than 0.90, suggesting their acceptability and applicability and proving discriminant validity.

**Table 3: HTMT Results**

Construct	Financial Condition	Tax Compliance Behaviour	Tax Knowledge
<b>Financial Condition</b>			
<b>Tax Compliance Behaviour</b>	0.057(0.032, 0.067)		
<b>Tax Knowledge</b>	0.059 (0.035, 0.061)	0.150 (0.086, 0.244)	

#### Structural Model Results

The structural model used in this study appears to have a medium predictive capacity because most of the indicators in the PLS-SEM analysis have small prediction errors when compared to the naive LM benchmark.

On the basis of the information displayed in Table 6, hypothesis 1 ( $H_1$ ) proposed a positive effect between tax knowledge and tax compliance behaviour. With a beta ( $\beta$ ) value of 0.177,  $t=2.91$ ,  $p<0.01$  and C.I [-0.212; 0.229], the interpretation is that there is a positive effect. Hypothesis 1 is therefore supported. The findings indicate that the relationship is highly significant, meaning that tax compliance behaviour among small and medium-sized firms (SMEs) is considerably influenced by tax knowledge. This implies that SMEs with better tax knowledge develop a more positive attitude toward tax compliance.

**Table 6: Results of Hypotheses Testing (Direct relationship)**

Hypothesis	$\beta$ coefficient	t-statistic	p value	Decision
H1: KN $\rightarrow$ TCB	0.177	2.91	0.002***	Supported

*Note: TKN=Tax knowledge, TCB= Tax Compliance Behaviour*

A moderation analysis was performed to determine if exogenous constructs have an effect on the endogenous construct. The term "moderation" refers to a situation where the strength or even the direction of the relationship between an exogenous construct and an endogenous construct is affected by the third variable's values, known as a moderator variable (Hair et al., 2017; Baron & Kenny, 1986; Ramayah et al., 2018; Memon et al., 2019). Financial condition (FC) was proposed in this study as a moderator of the link between tax knowledge and tax compliance behaviour. Using a two-stage approach to create the latent interaction constructs, the moderating influence of financial condition was assessed using SmartPLS 3 software. Findings from the tests that were run in the current investigation for the moderating effect (indirect effect) using path coefficient values and bootstrapping are summarised in Table 7 and Figure 1.

**Table 7: Results of Hypotheses Testing (Moderating Effect)**

Hypothesis	Path Coefficient	t -statistic	p value	Remarks
H2: FC*TKN*TCB $\rightarrow$ TCB	0.137	2.046	0.02**	Supported

*Note: TKN=Tax knowledge, FC=Financial Condition and TCB= Tax Compliance Behaviour*

Hypothesis 2 (H2) predicted that the financial condition of SME owners would moderate the effect of tax knowledge on the tax compliance behaviour of SMEs. The study's findings in Table 7 indicate significant positive support for hypothesis 2 with a beta ( $\beta$ ) value of 0.137,  $t=2.046$ ,  $p<0.005$  and C.I [0.047; 0.233]. This suggests that financial condition had a moderating effect, suggesting that a high financial condition enhances or reinforces the positive effect between tax compliance behaviour and tax knowledge. This also implies that high tax compliance can be achieved when SMEs have good tax knowledge and are financially stable. Furthermore, the slope analysis shows that the interaction pattern supports H2, i.e., tax knowledge has a more significant effect on SMEs' tax compliance behaviour when the financial condition of SME owners is strong.

The importance-performance map analysis, or IPMA (Ringle & Sarstedt, 2016) shows that tax knowledge (TKN) is of high importance but has relatively low performance in the tax compliance behaviour of small and medium enterprises. Therefore, since tax knowledge is a construct with the highest importance but relatively low performance, policymakers and managers of the tax authority should prioritise improving the performance of aspects captured by tax knowledge when trying to improve tax compliance behaviour among small and medium enterprises. As a result, tax knowledge is the most pertinent factor in this study when it comes

to managerial action to enhance small and medium-sized businesses' tax compliance behaviour.

## **Discussion of the Findings**

The objective of the research was to determine the effect of tax knowledge on tax compliance behaviour among SMEs in Tanzania. Further, this research investigated the moderating effect of the financial condition on the influence of tax knowledge on tax compliance behaviour among SMEs in Tanzania. Two hypotheses were tested, and the results supported one direct hypothesis  $H_1$ , and the indirect hypothesis  $H_2$ . Statistical results revealed a significant positive influence of tax knowledge on tax compliance behaviour among SMEs in Tanzania (*Hypothesis 1*). The results indicated empirically that the level of tax knowledge of the SMEs is able to influence the behaviour of SME owners to comply with the tax law provisions. Moreover, these findings showed that owner-managers of SMEs are more likely to pay attention to tax compliance behaviour when they possess greater tax knowledge. The findings support the hypothesis that Kasippilai and Jabbar (2003) put out that tax knowledge plays a significant role in a taxpayer's tax compliance behaviour and that a higher compliance rate corresponds with increased tax knowledge. Furthermore, the findings are supported by previous research (Saad, 2014; Palili & Mustapha, 2011; Biru, 2020), which proposed that the most significant determinant of compliance behaviour in a self-assessment system is tax knowledge.

The positive influence of tax knowledge on tax compliance implies that tax knowledge assists SMEs with tax issues, promoting tax compliance among small and medium enterprises in Tanzania. The result has supported the propositions by the Theory of Planned Behaviour in explaining the effect of tax knowledge on tax compliance behaviour. According to the theory, a person's decision to engage in behaviour is influenced by their assessment of how simple or complex that behaviour is (Ajzen, 1991). Since tax knowledge helps SMEs to understand the general knowledge of taxes, legal implications (including offences, penalties, and interests), and technical expertise (including tax deductions), it makes the respondents believe tax compliance is simple; as a result, it reduces the barriers of hiring tax consultants, and therefore, enhances tax compliance behaviour. Given findings of this research, it is clear that greater tax knowledge can enhance SME owners' perceived ability to comply with regulations, reducing barriers and increase their sense of control over the compliance process.

The present study's findings align with those of research carried out in Malaysia. In this study, it was revealed that after the introduction of a self-assessment system, tax knowledge significantly affected Malaysia's level of tax compliance (Loo et al., 2009). Additionally, it is indicated that the capacity of taxpayers to comply with tax laws by reporting taxable income, claiming deductions, and computing tax liability accurately was influenced by sufficient taxpayers' tax knowledge. Similar studies have also supported that SMEs have a strong positive correlation between their tax compliance behaviour and tax knowledge (Oladipupo & Obazee, 2016; Mukhlis et al., 2015; Biru, 2020). However, tax literacy may also lead to taxpayer non-compliance. This occurs when having a greater level of tax knowledge is linked to being aware of the legal methods to lower or even completely avoid paying taxes and take advantage of the gaps in tax laws and systems. This has been observed in research on SMEs' tax compliance behaviour in New Zealand (Tan & Liu, 2016). The findings of the research revealed a significant negative association between tax knowledge and tax compliance

behaviour, indicating that those with lower level of tax knowledge were uncertain about tax laws and, hence, complied because they feared being caught and penalised. Furthermore, those with more knowledge about tax were able to capitalise on tax loopholes and did not comply. Other studies have also made similar observations that tax knowledge had a non-significant relationship with tax compliance behaviour (Harris, 1989; Manual & Xin, 2016; Engida & Baisa, 2014; Fauziati et al., 2016).

Based on the data gathered for this study, it appears likely that SMEs in the nation have low tax compliance rates largely because of the tax authority's low tax knowledge. This has been supported by the importance-performance map analysis, which shows that tax knowledge has the highest importance in improving tax compliance behaviour among SMEs in Tanzania compared to other constructs. However, it has relatively low performance. Consequently, among Tanzanian SMEs, tax knowledge and awareness have a big impact on their tax compliance practises.

Hypothesis (H<sub>2</sub>) investigated if the financial condition of SME-owners' moderates the relationship between tax knowledge and tax compliance behaviour in Tanzania. The finding has supported the interaction relationship between tax knowledge and tax compliance behaviour. Hence, the finding has confirmed that the association between tax knowledge and tax compliance behaviour is positive and significantly moderated by financial condition. This signifies that SMEs with sound financial ability are more likely to comply than those with limited financial resources.

The result is consistent with other behavioural studies suggesting that financial condition moderates the relationship of individual behaviour (Brett et al., 1995). Similar findings have demonstrated that financial condition significantly moderated the relationship between the tax system structure, non-professional occupation, and tax compliance behaviour (Alabede et al., 2011c). The current finding suggests that the effects of financial conditions tend to strengthen the influence of tax knowledge on tax compliance behaviour. In other words, the existence of good stable financial condition among SMEs and with tax knowledge more tax compliance behaviour is expected. Therefore, the results support the direction and statistical significance predicted, revealing that a possible proportion of SME owner-managers think that a strong financial condition combined with tax knowledge will raise Tanzanian taxpayers' compliance with tax laws.

## **Conclusion**

The present study concludes that tax knowledge had a positive and significant influence on SME's tax compliance behaviour in Tanzania. The results indicate that tax knowledge had high importance but low performance in the tax compliance behaviour of SMEs. However, it was discovered that the financial condition of SME owners had a positive, significant moderating influence on the effect between tax knowledge and tax compliance behaviour. This finding implies that SME owners who have stable financial conditions are more likely to comply with tax laws and tax payments compared to those with less financial stability.

The important theoretical contribution in this paper was the inclusion of the theory of planned behaviour in explaining tax compliance behaviour and tax knowledge. The application of this theory in tax compliance research has taken the lead in the context of Tanzania in testing tax knowledge. Therefore, the incorporation of these new behavioural predictor variables in the TPB has made a new theoretical contribution. The study also contributes to the tax compliance literature by incorporating the moderating effect of SME owners' financial condition on testing the relationship. The PLS-SEM results show that SME owners' financial condition significantly moderated the relationship between the tax knowledge and tax compliance behaviour. The study's findings are consistent with the literature's recommendation that some variables could moderate the relationship between predictor variables and tax compliance behaviour (Kirchler et al., 2007). As a result, by considering the moderating influence of financial condition, the link was reinforced, and SMEs' tax compliance behaviour in Tanzania was better understood.

Practically, the results of this research recommend that certain tax policy modifications are necessary to enhance tax compliance behaviour, especially among Tanzanian SMEs. To begin with, the findings are a good signal that the tax knowledge provided by the Tanzania Revenue Authority and the government significantly influence tax compliance behaviour among SMEs in Tanzania. Nevertheless, confirmation from the descriptive statistics of this research indicated that SMEs had a dim impression of the tax knowledge in Tanzania by indicating "strongly disagree" and "disagree" on the indicators of tax knowledge. Moreover, the importance-performance map analysis indicates that tax knowledge has a relatively low performance to tax compliance behaviour among SMEs in Tanzania when compared to other predictor variables in this study, but with very high importance. This means that tax knowledge is an essential predictor variable in influencing tax compliance behaviour among SMEs, but little has been done to improve its performance on compliance behaviour. It is suggested that tax professionals, government officials, and public policymakers devise plans to enhance the tax literacy of small and medium-sized enterprises in Tanzania. Enhancing the performance of tax knowledge in SMEs in Tanzania requires three areas of tax knowledge: general tax knowledge, legal tax knowledge, and technical tax knowledge as the foci of a change in policy.

Although this study has several intriguing findings and contributions, it has significant shortcomings that should be noted for future research. The present research collected data using a cross-sectional design. As a result, more study with a longitudinal design is required to determine the pattern of how tax knowledge affects tax compliance over a specific time frame. The study considered the quantitative method only, which provides an opportunity for further future research using a qualitative or mixed method approach to enhance the comprehension of the phenomenon. This study considered only one predictor variable to explain the phenomenon. However, tax compliance behaviour is a complex issue which is explained by a number of predictor variables. There is a need for future research that incorporates other predictor variables. The current study tested the moderation using one variable – financial condition. However, this is not the only moderator. Future research may be carried out that uses other constructs as a moderator of a similar study.

## References

- Ahsan, K., & Rahman, S. (2017). Green public procurement implementation challenges in Australian public healthcare sector. *Journal of Cleaner Production*, 152, 181–197.
- Ali, S. M., Jabbour, C. J. C., Paul, S. K., & Munim, Z. H. (2023). Guest editorial: Post-COVID-19 sustainable supply chain management in emerging markets. *International Journal of Emerging Markets*, 18(6), 1285–1288.
- Aliakbari Nouri, F., Shafiei Nikabadi, M., & Olfat, L. (2019). Developing the framework of sustainable service supply chain balanced scorecard (SSSC BSC). *International Journal of Productivity and Performance Management*, 68(1), 148–170.
- Aliakbari Nou Ahmed, E. & Braithwaite, V. (2005). Understanding small business taxpayers – issues of deterrence, tax morale, fairness and work practice. *International Small Business Journal*, 23 (5), 539-568.
- Ajzen, I. (1991). The theory of planned behaviour. *Organisational behaviour and human decision processes*, 50(2), 179-211.
- Akhand, Z. (2012). Coercion, persuasion and tax compliance: A multi-strategies analysis [Doctoral dissertation. University of Birmingham].
- Alabede, J. O., Ariffin, Z. Z., & Idris, K. M. (2011a). Determinants of tax compliance behaviour: A proposed model for Nigeria. *International Research Journal of Finance and Economics*, 78(1), 121-136.
- Alabede, J. O., Zainal Affrin, Z., & Md Idris, K. (2011b). Individual taxpayers' attitude and compliance behaviour in Nigeria: The moderating role of financial condition and risk preference. *Journal of accounting and taxation*, 3(5), 91-104.
- Alabede, J. O., Affrin, Z. Z., & Idris, K. M. (2011). The Moderating Effect of Financial Condition on the Factors Influencing Taxpayer's Compliance Behaviour in Nigeria. *Journal Finance And Management In Public Service*, 1(2), 42-53.
- Ali, M.; Fjeldstad, O. H. and Sjørusen, I. (2013), "Factors affecting tax compliance attitudes in Africa: Evidence from Kenya, Tanzania, uganda, and South Africa", Paper prepared for the *Centre for Study of African Economies 2013 Conference*, Oxford, 17-19 March 2013..
- Ariff, A. H. M., Bidin, Z., Sharif, Z., & Ahmad, A. (2010). Predicting entrepreneurship intention among Malay university accounting students in Malaysia. *UNITAR e-Journal*, 6(1), 1-10.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Becker, J. M., Ringle, C. M., Sarstedt, M., & Völckner, F. (2015). How collinearity affects mixture regression results. *Marketing Letters*, 26, 643-659.
- Biru, A. M. (2020). Factors That Affect Tax Compliance Behavior of Small and Medium Enterprises: Evidence from Nekemte City. *European Journal of Business and Management*, 12(19), 29-41.
- Bhattacharjee, A. (2012). Social science research: Principles, methods, and practices: Textbooks Collection. Book 3. [http://scholarcommons.usf.edu/oa\\_textbooks/3](http://scholarcommons.usf.edu/oa_textbooks/3).
- Bloomquist, K. M. (2003). Income inequality and tax evasion: A synthesis. *Tax Notes International*, 31(4), 347-367.



- Bobek, D. D., & Hatfield, R. C. (2003). An investigation of the theory of planned behaviour and the role of moral obligation in tax compliance. *Behavioral Research in Accounting*, 15(1), 13-38.
- Brett, J. F, Cron, W. L, & Slocum Jr, J.W. (1995). Economic dependency on work: A moderator of the relationship between organisational commitment and performance. *Academy of Management Journal*, 38 (1), 261-271.
- Carroll, J. S. (1986). A cognitive-process analysis of taxpayer compliance. *Symposium on Taxpayer Compliance Research*. Texas: National Academy Sciences.
- Cerqueti, R, & Coppier, R. (2015), "Corruptibility and tax evasion". *European Journal of Law and Economics*, 39(2), 355-373
- Chan, C.W., Troutman, C.S. & O'Bryan, D. (2000). An expanded model of taxpayer compliance: empirical evidence from the United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9 (2), 83-103.
- Chattopadhyay, S., & Das-Gupta, A. (2002). The personal income tax in India: Compliance costs and compliance behaviour of taxpayers. *New Delhi: National Institute of Public Finance and Policy*.
- Chin, W. W., Cheah, J.-H., Liu, Y., Ting, H., Lim, X.-J., & Cham, T. H. (2020). Demystifying the role of causal-predictive modelling using partial least squares structural equation modelling in information systems research. *Industrial Management & Data Systems*, 120(12), 2161–2209.
- Damayanti, T. W. (2012). Changes in Indonesia Tax Culture: Is there a way? Studies through the theory of planned behaviour. *Researchers World*, 3(4), 8-15.
- Danks, N. P., & Ray, S. (2018). Predictions from partial least squares models. In F. Ali, S. M. Rasoolimanesh, & C. Cobanoglu (Eds.), *Applying partial least squares in tourism and hospitality research* (pp. 35–52). Bingley: Emerald.
- Engida, T. G., & Baisa, G. A. (2014). Factors Influencing taxpayers' compliance with the tax system: An empirical study in Mekelle City, Ethiopia. *eJTR*, 12(2), 433-452
- Evans, C., Lignier, P., & Tran-Nam, B. (2013). Tax compliance costs for the small and medium enterprise business sector: Recent evidence from Australia. *Tax Administration Research Centre University of EXETER Discussion Paper*, 003-13.
- Fauziati, P., Minovia, A. F., Muslim, R. Y., & Nasrah, R. (2016). The impact of tax knowledge on tax compliance case study in Kota Padang, Indonesia. *Journal of Advanced Research in Business and Management Studies*, 2(1), 22-30.
- Gaetan, N. (2008). *Corporate income tax and economic distortions* (No. 2477). Working Paper
- Gilligan, G., & Richardson, G. (2005). Perceptions of tax fairness and tax compliance in Australia and Hong Kong: A preliminary study. *Journal of financial crime*, 12(4), 331-343.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modelling (PLS-SEM) using R: A workbook.
- Hair, J. F., & Sarstedt, M. (2021). Explanation plus prediction – The logical focus of project management research. *Project Management Journal*, 52(4), 319–322.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modelling (PLS-SEM)*. Sage Publications.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM) Second Edition*. Sage Publications.

- Hair, J. F., Hult, T., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equation modelling (PLS-SEM) (3rd ed.). Thousand Oaks: Sage.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19, 139–151.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hair, J., Anderson, J., Tatham, R., & Black, W. (2010). *Multivariate data analysis* (7th). Upper Saddle River: Pearson Education.
- Harris, T. D. (1989). The effect of type of tax knowledge on individuals' perceptions of fairness and compliance with the federal income tax system: an empirical study. [Unpublished PhD Thesis, University of South Carolina].
- Hassan, N., Nawawi, A., & Puteh Salin, A. S. A. (2016). Improving tax compliance via tax education-Malaysian experience. *Management & Accounting Review (MAR)*, 15(2), 1-20.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of the Academy of Marketing Science*, 43, 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modelling in international marketing. *Advances in International Marketing*, 20, 277–320.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195 – 204.
- IMF, (2005). *Monetary and fiscal policy design issues in low countries*. Washington, D.C: IMF, Policy Development and Reviews Department.
- Ignatius, F. (2019). Factors influencing SME tax compliance: Evidence from Indonesia. *International Journal of Public Administration*, 42(5), 367-379.
- Jackson-Smith, D., Flint, C. G., Dolan, M., Trentelman, C. K., Holyoak, G., Thomas, B., & Ma, G. (2016). Effectiveness of the drop-off/pick-up survey methodology in different neighbourhood types. *Journal of Rural Social Sciences*, 31(3), 35-67.
- Kamleitner, B., Korunka, C., & Kirchler, E. (2012). Tax compliance of small business owners: A review. *International Journal of Entrepreneurial Behavior & Research*, 18(3), 330-351.
- Kasipillai, J. & Jabbar, A. H. (2003). Tax compliance attitude and behaviour: Gender & ethnicity differences of Malaysian taxpayers. *The Malaysian Accountant*, 1-7.
- Khalfan, S., Kitindi, E., & Chalu, H. (2020). Income Tax Law Simplification And Tax Compliance: A Case of Medium Taxpayers in Zanzibar. *Business Management Review*, 23(1), 1-18.
- Kirchler, E. (2007). *The economic psychology of tax behaviour*. Cambridge University Press: Cambridge..
- Kirchler, E., Muehlbacher, S., Kastlunger, B., & Wahl, I. (2007). Why pay taxes? A review of tax compliance decisions. *International Studies Program, Working Paper* 07-30
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Lanigan, M. L., & Bentley, J. (2006). Collecting sophisticated evaluations even when corporate culture is resistant. *Performance Improvement*, 45(1), 32-38.
- Loo, E., Mckerchar, M. & Hansford, A. (2009). Understanding The Compliance Behaviour Of Malaysian Individual Taxpayers Using A Mixed Method Approach. *Journal of the Australasian Tax Teachers Association*, 4(1), 181 - 202.

- Manual, V & Xin, A.Z (2016), Impact of tax knowledge, Tax Compliance Cost, Tax Deterrent Tax measures towards Tax Compliance Behaviour: A survey on Self- Employed Taxpayers in West Malaysia. *Electronic Journal of Business and Management*, 1(1), 56-70
- McKerchar, M. (1995). Understanding small business taxpayers: Their sources of information and level of knowledge of taxation. *Australian Tax Forum*, 12(1), 25-41.
- McKerchar, M. (2010). *Design & Conduct of Research in Tax, Law & Accounting*. Thomson Reuters (Professional) Australia Pty Limited: Sydney.
- McKerchar, M., & Evans, C. (2009). Sustaining growth in developing economies through improved taxpayer compliance: Challenges for policymakers and revenue authorities. *eJournal of Tax Research*, 7(2), 171-201.
- Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: issues and guidelines. *Journal of Applied Structural Equation Modeling*, 3(1), 1-11.
- Ministry of Industry and Trade (MIT). (2012). *National Baseline Survey Report: Micro, Small and Medium Enterprises in Tanzania*. (Retrieved From [Http://Www.Mit.Go.Tz/Pdf/MSME%20Pages%20ST1\\_081513.Pdf](http://www.mit.go.tz/Pdf/MSME%20Pages%20ST1_081513.Pdf) on 08th February 2020)
- Mohani, A. (2001). *Personal income tax non-compliance in Malaysia*. Melbourne: Victoria University.
- Mukhlis, I., Utomo, S. H., & Soesetio, Y. (2015). The role of taxation education on taxation knowledge and its effect on tax fairness as well as tax compliance on handicraft SMEs sectors in Indonesia. *International Journal of Financial Research*, 6(4), 161-169.
- Murphy, K. (2007). *Procedural justice and the regulation of tax compliance behaviour: The moderating role of the personal norm*. Andrew Young School of Policy Studies international conference. Atlanta: Georgia State University.
- Musimenta, D., Nkundabanyanga, S. K., Muhwezi, M., Akintunde, B., & Nalukenge, I. (2017). Tax compliance of small and medium enterprises: a developing country perspective. *Journal of Financial Regulation and Compliance*, 25(2), 149-175.
- Neuman, W.L. (2003). *Social Research Methods: Qualitative and Quantitative Approaches* (5th Ed.). Boston: Allyn and Bacon
- Oladipupo, A. O., & Obazee, U. (2016). Tax knowledge, penalties and tax compliance in small and medium scale enterprises in Nigeria. *iBusiness*, 8(01), 1.
- Palil, M. R., & Mustapha, A. F. (2011). Factors affecting tax compliance behaviour in the self-assessment system. *African journal of business management*, 5(33), 12864-12872.
- Ramayah, T. J. F. H., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). *Partial least squares structural equation modelling (PLS-SEM) using SmartPLS 3.0. An updated guide and practical guide to statistical analysis*. Kuala Lumpur, Malaysia: Pearsons.
- Richardson, M., & Sawyer, A. J. (2001). A taxonomy of the tax compliance literature: further findings, problems and prospects. *Australian Tax Forum*, 16, 137-284.
- Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial management & data systems*, 116(9), 1865-1886.
- Saad, N. (2011). Fairness perceptions and compliance behaviour: Taxpayers' judgments in self-assessment environments. [PhD Thesis, University of Canterbury].
- Saad, N. (2014). Tax knowledge, tax complexity and tax compliance: Taxpayers' view. *Procedia-Social and Behavioural Sciences*, 109, 1069-1075.

- Sachdev, S. B., & Verma, H. V. (2004). Relative importance of service quality dimensions: A multisectoral study. *Journal of services research*, 4(1), 93
- Sarstedt, M., & Danks, N. P. (2022). Prediction in HRM research—a gap between rhetoric and reality. *Human Resource Management Journal*, 32(2), 485-513.
- Sarstedt, M. & Mooi, E.A. (2019). *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics*. Heidelberg: Springer.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In C. Homburg, M. Klarmann, & A. E. Vomberg (Eds.), *Handbook of Market Research* (pp. 1-47). Springer.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students*, Eighth edition: United Kingdom: Pearson Education Limited.
- Semboja, J. & Msafiri, D. (2022). The Performance of Tax Revenues in Tanzania: An attempt at explanation. REPOA Brief.
- Shmueli, G., & Koppius, O. R. (2011). Predictive analytics in information systems research. *MIS Quarterly*, 35(3), 553–572.
- Shmueli, G., Ray, S., Estrada, J. M. V., & Chatla, S. B. (2016). The elephant in the room: Predictive performance of PLS models. *Journal of Business Research*, 69(10), 4552–4564.
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322–2347
- Tan, L. M., & Liu, X. (2016). SMEs tax compliance: A matter of trust? *Australian Tax Forum*, 31(3), 527–554.
- Torgler, B. (2003). *Tax morale: Theory and empirical analysis of tax compliance*. [Doctoral dissertation, University of Basel].
- Torgler, B. (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Edward Elgar Publishing.
- Trivedi, V. U., Shebata, M., & Mestelman, S. (2005). Attitudes, incentives, and tax compliance. *Canadian Tax Journal*, 53, 29–61.
- Ubabuko, K., Ally Kavuwo, H., Kwaasi Adjei, E., & Shahihuzzaman, M. (2010). *Analysis of the SME sector in Tanzania and Ghana*. Gotland University, School of the Humanities and Social Science
- United Republic of Tanzania (URT). (2003). *Small and Medium Enterprises (SME) Development Policy*. Tanzania.
- United Republic of Tanzania (URT). (2016). *Estimation of Tax Gap for Tanzania for the period 2011/2012-2014/2015*.
- United Republic of Tanzania (URT). (2016). *Statistical Business Register Report, 2014/2015, Tanzania Mainland*
- United Republic of Tanzania (URT). (2019), *Tax Statistics Report, 2017/18 Tanzania Mainland*, National Bureau of Statistics.
- United Republic of Tanzania (URT). (2022). *Tax Statistics Report, 2020/2021 Tanzania Mainland*, National Bureau of Statistics.
- Valerie, FERNANDES (2012). Re-discovering the PLS approach in management science. *Management*, 15(1), 101-123.
- Voorhees, C. M., Brady, M. K., Calontone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: An analysis, causes for concern, and proposed remedies. *Journal of the Academy of Marketing Science*, 44(1), 119–134.

- Wenzel, M. (2004). The social side of sanctions: Personal and social norms as moderators of deterrence. *Law and Human Behavior*, 28(5), 547-567.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York: Horper