

# Measures of Tax Compliance among Small and Medium Enterprises in Tagum City: an Exploratory Factor Analysis

Jovit G. Cain<sup>1</sup>, Vicente Salvador E. Montaña<sup>2</sup>

<sup>1</sup>Lecturer III at UM Tagum College, <sup>2</sup>Dean of College of Business Administration Education at University of Mindanao, Davao City

**Abstract:** The study's general objective was to develop tax compliance domains among Small and Medium Enterprises (SMEs) in Tagum City. The study used a non-experimental quantitative research design employing exploratory factor analysis. The study's respondents, randomly chosen from a total of one hundred fifty (150) owners, managers, bookkeepers, accountants, and other personnel in charge of the company's tax. The researcher constructed the contextualized instrument integrating the measures affecting tax compliance adopted from various sources and literature. Frequency, hierarchical clustering analysis ward method, factor analysis, measures of sampling adequacy and sphericity, and factor rotation method were the statistical tools used for data treatment. Data gathered were analyzed first with hierarchical cluster analysis ward method to group significant items, and later the clustered items were factor analyzed to get the domains of tax compliance. The findings revealed that there were a total of four measures that influence tax compliance among SMEs in Tagum City. For both cluster 1 were perception of equity and fairness and tax psychological cost; while for cluster 2 (knowledge of current tax policies/tax rates; and quality of tax officers' service).

**Keywords:** exploratory factor analysis, non-experimental quantitative, SME, tax compliance, Philippines

## I. INTRODUCTION

Tax compliance in developing countries, such as the Philippines, is a significant problem for tax officials and hampers tax revenue efficiency (Engida & Baisa, 2014; Friedman, 2011; Wadesango et al., 2018). Filing income tax returns is one of Filipinos' most pressing concerns in every tax season, which runs until April 15 of each year. Also, failure to file and pay the tax is a significant burden on taxpayers as it would make it hard to pay fines, penalties, or worst, which could lead to the business's closure. Furthermore, tax compliance and reduction of tax evasion and tax avoidance are important issues, particularly in developing countries, which can lead to revenue losses and create problems for government-funded projects (Assfaw & Sebhat, 2019; Mohamad & Mohd Ali, 2017; Musimenta et al., 2017).

Because of the essential role of local tax collections and taxes in the state, researchers and policymakers should consider the importance of Small and Medium Enterprises' (SMEs) intentions to comply with taxation. These intentions would help to assist governments by giving inputs in enhancing tax collection and policy-making as they struggle to meet financial, trying to balance deficits and infrastructure demands of a country. Furthermore, these would help educate taxpayers on the importance of voluntary compliance rather than enforced compliance heavily influenced by tax audit and sanction severity for tax penalties, interest, and surcharges (Liu, 2014; Remali et al., 2018; Wadesango et al., 2018).

There are various studies on the multidimensionality of tax compliance, and it is a function of different factors. The survey of Engida and Baisa (2014) mentioned nine determinants of tax compliance. These are the tax knowledge, the role of the tax authority, referral group, changes to government policies, financial constraints, penalty, perception of equity and fairness, perception of government spending, and the probability of being audited. On the other hand, Puspita, Subroto, and Baridwan (2016) identified factors that influence tax compliance, such as perceptions of fairness in the tax system, tax knowledge, tax planning, quality of tax officers' service, tax lessoning, and tax planning motivation. Besides, O'Shaughnessy (2014) identified several key tax compliance determinants. These include age, gender, education, marital status, religiosity, fairness, trust, peers, social norms, tax morale, income level, occupation, tax rate, audit risk, complexity, economic development, corruption, and culture.

There were several studies on tax compliance, but no studies regarding tax compliance measures among SMEs in Tagum City, Davao del Norte conducted. To add, with three years of work experience in an accounting firm, the researcher has observed that most SMEs still have problems with tax compliance matters. Like, the closure of two pharmacies in Tagum City for failure to pay proper taxes and a total of eleven branches of a salon padlocked by the tax administrators. In this context, the researcher would like to attempt to do one. The result can raise awareness of its intended beneficiaries and possibly develop an action plan to improve tax compliance, thus conducting this study.

The study's main thrust was to develop a framework that characterizes the tax compliance among small and medium enterprises in Tagum City. Moreover, it sought to answer the following objectives: to identify the determinant factors of tax compliance among small and medium enterprises in Tagum City; to determine the index of the factors of tax compliance among small and medium enterprises in Tagum City; and, to develop a framework that characterizes the tax compliance among small and medium enterprises in Tagum City.

The study's findings will contribute to the tax compliance literature by providing reliable and valid constructs in measuring compliance among SME taxpayers. The study also offers fresh insights and, at the same time, an addition to the existing body of knowledge on tax compliance. The identified determinants may strengthen the proposition or way to disprove existing propositions. Also, it may serve as the basis in formulating factors affecting tax compliance that may be used to all Small and Medium Enterprises (SMEs). The result of the study will benefit the community in giving inputs in tax compliance. Moreover, this research's outcome may provide important information about tax compliance measures among SMEs in Tagum City. Specifically, this study will be useful to the following groups of individuals and business firms. Additionally, this study will be valuable to the taxpayers, the Bureau of Internal Revenue (BIR) and future researchers. Through this study, it will be beneficial to the part the taxpayers because it will acquire more knowledge and provide analytical capabilities that will help them in making effective decision making. It will also benefit the part of the BIR because it will help in giving inputs for improving tax compliance behavior. Likewise, this study will serve as a catalyst for future researchers on their studies about the related variable.

## **II. METHOD**

This part presents the methods behind the measures of tax compliance among Small and Medium Enterprises (SMEs) in Tagum City. The study methods include research design, research locale, population and sample, research instruments, data collection, statistical tools, and ethical consideration. The study has 150 respondents from the list provided and randomly chosen by the researcher until the desired sample size is attained. The sample size was also assured to be acceptable based on the number of items in the final survey questionnaire to avoid factor rotation issues (Bujang et al., 2018). The research respondents were focused on the owners, managers, bookkeepers, accountants, or other persons in charge of the company's tax.

The compliance of SME taxpayers' questionnaire was a researcher's constructed instruments taken from various literature and sources, which was modified to fit the study and subjected to the experts' validation. Lastly, the reliability of the questionnaires was tested through pilot testing using Cronbach Alpha (Gliem,2003).

This study used a non-experimental quantitative research design, particularly the exploratory method. This design is suitable for scale or instrument development, developing a classification for testing, or identifying variables (Cameron 2009). This quantitative research highlights target estimations and statistical, mathematical, or numerical investigation through a survey. This is an approach to assess phenomena through statistical analysis (Bonds-Raacke & Raacke, 2014; Thompson & Panacek, 2007). The exploratory factor analysis technique is a non-experimental design and the best design to effectively extract information from large corresponding data bodies. The researcher summarizes the data by grouping correlated variables in a natural setting without manipulation or control. Factor analysis allows the data to be translated and structured as it provides tools for reducing information into an understandable form (Bryant & Yarnold,1995). Therefore, the researcher used exploratory factor analysis to determine the measures that influence tax compliance practices among small and medium enterprises in Tagum City, Davao del Norte.

While in the course of collecting the data slated in November 2019 to February 2020, the researcher followed these steps: first, the researcher presented the letter to conduct a study to the local government unit of Tagum City for approval; second, secure a list of the names of the beneficiaries from the Department of Trade and Industry (DTI); third, administer the survey questionnaire to all the respondents; finally, the data gathered was being tallied, tabulated, analyzed and interpreted statistically before the results will be discussed and presented.

The statistical tools used in the conduct of this study were frequency, Hierarchical Clustering Ward Method, Exploratory Factor Analysis, Measures of Sampling Adequacy and Sphericity, and Factor Rotation Method. Frequency applies to the number of cases in which one of its potential values is taken by a parameter. Hierarchical Clustering Ward Method is used to reduce significant items or elements into a meaningful group or clusters based on similarities without any pre-classified grouping before you proceed to EFA (Exploratory Factor Analysis). Exploratory Factor Analysis is an interdependence technique whose primary purpose is to define the underlying structure among the analysis variables. This analysis provides the tools for analyzing the interrelationships' structure (correlations) among many variables by defining sets of highly interrelated variables, known as factors. Measures of Sampling Adequacy and Sphericity ensures the appropriateness or fitness of the data set to the factoring test and its assumptions. The Kaiser-Meyer-Olkin Test examines the adequacy of sampling for each element that ranges between 0 and 1. The values nearest to 1 are stronger and the minimum proposed is the value of 0.6. Bartlett's Test of Sphericity establishes the minimum criterion for Factor Analysis to continue. Considering that the dataset is deemed valid or appropriate for factor analysis, it must have a p-value (Sig.) of  $0.000 < 0.05$ . Lastly, Factor Rotation Method determines the factors which passed the required loading value after several rotations and extractions.

### III. RESULTS

Table 1 shows The Kaiser-Meyer-Olkin (KMO) Index as it is used to assess sampling adequacy (Kaiser & Rice, 1974). This measure ranges from 0 to 1; a value of 0.6 is suggested minimum for satisfactory factor analysis to proceed, but values closer to 1 are best. It shows that KMO index of clusters 1 and 2 were 0.979 and 0.771, respectively. Thus, the results suggested that the sample size is adequate for both cluster 1 and cluster 2 as it exceeded the acceptable value of 0.6. This aggregate index indicates that the data supports exploratory factor analysis, and that the data can filter into smaller groups of underlying variables. As a whole, the 150-respondent dataset is suitable for factor analysis. Moreover, the analysis also included Bartlett's test of sphericity. In this study, table 1 shows that the approximate chi-square value for cluster 1 is high (12,389.10) with a degree of freedom (df) of 528 and  $p < 0.05$ , while for cluster 2, the test value is high (378.792) with a degree of freedom (df) of 36 and  $p < 0.05$ . To be small enough to reject the hypothesis, the significance value of Bartlett's test of sphericity should be less than 0.05 (Armstrong & Soelberg 1968). Therefore, the dataset for both clusters is deemed appropriate for factor analysis.

TABLE 1. Measures of Sampling Adequacy and Sphericity.

Test	Value		
	Cluster 1	Cluster 2	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.979	0.771	
Bartlett's Test of Sphericity	Approx. Chi-Square	12,389.1	378.792
	Degree of Freedom	528	36
	Significance	$p < 0.05$	$p < 0.05$

Presented in table 2, the latent root criterion's result reveals that two factors or components can be extracted from the 33 items for cluster 1. Two factors or components can be extracted from the eight items for cluster 2 as submitted for dimensional reduction. These two factors explained 91.325 percent and 53.779 percent cumulative variations for clusters 1 and 2, respectively. Also in Table 2 are the degrees of variance explained by the explored dimensions or components of tax compliance. For cluster 1, Component 1 has a sum of squared loading value of 28.544 and explains 86.496 percent of the variance of tax compliance. While Component 2 has a sum of squared loading value of 1.594 and explains 4.829 percent of tax compliance variance. On the other hand, for Cluster 2, Component 1 has a sum of squared loading value of 2.842 and explains 31.572 percent of the variance of tax compliance. While Component 2 has a sum of a squared loading value of 1.999 and explains 22.206 percent of the tax compliance variance. Overall, there were 91.325 percent and 53.779 of the variance, for clusters 1 and 2.

TABLE 2. Latent Roots Criterion for the Extracted Factors

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
Cluster 1			
1	28.544	86.496	86.496
2	1.594	4.829	91.325
Cluster 2			
1	2.842	31.572	31.572
2	1.999	22.206	53.779

Table 3 shows the factor loadings of the items that comprise Cluster 1's first and second components or tax compliance dimensions. These were as follows:

**Perception of Equity and Fairness.** This indicator was considered a determinant of tax compliance practices as small and medium enterprises (SMEs) believed that tax evasion is morally wrong in any amount with the loading .983, and local tax bureau must treat SMEs fairly and reasonably with the same loading of .983. Small and medium enterprises agreed to pay a claimed fair share of individual income tax with a loading of .982. The local government must spend a reasonable amount of the local tax revenue on public service with loading of .981. Also, SMEs claimed a fair share of individual income tax compared to people who earn about the same as them with loading of .979. They believe that the local tax bureau is accountable for what they do, and treating honesty by local tax bureau in their tax affairs unless they act otherwise, all of them have a loading of .979. SMEs further claimed that their family, close friends, and colleagues were approving the decision to have proper, correct income on their income tax return with a loading of .978. If they faced a similar situation, their family, close friends, and colleagues would not understate their income tax returns and have a loading of .978. Also, SMEs claimed that paying individual income tax to the local tax bureau is fair considering the local government's benefits with the loading of .977 and offering professional service and assistance by the local tax bureau to help understand and meet tax obligation with the same loading of .977. Besides, small and medium enterprises claimed that the making income tax system is well developed with loading of .976. Also, SMEs claimed on paying tax on time, and on the actual tax assessed, both have a loading of .974. In adhering to professional ethics, SMEs further contended that it is unethical to evade taxes with a factor loading of .973 and accurately fill tax returns to BIR with correct tax assessment with a factor loading of .971. Also, SMEs claimed on believing that fines and penalties cause from not filing taxes to the BIR with the loading of .968, disclosing revenue from all sources for tax purposes with the loading of .966, and thinking they pay taxes because BIR has the authority to collect it with the same loading of .966. Moreover, SMEs claimed on assuring the income tax system is transparent with the loading of .964, believing that the tax rates the SME pay are reasonable with the loading of .960.

Furthermore, small and medium enterprises claimed that the process of computing tax obligations to different taxpayers is fair with loading .955 and do not resent paying taxes with .954. SMEs claimed that tax revenue-generating activities need to keep the correct record behavior regarding taxation with a loading of .943. Also, in believing that tax amnesties enacted frequently result in tax equality with the loading of .939, in thinking that willful payment of tax obligation by all with the loading of .933, and believing the who has the higher income should expect to pay higher taxes than that of those who have low income with the loading of .930. Also, SMEs claimed that the tax rate should be fair on all businesses with the same level with a loading of .925. In believing that tax audit is sufficient with the loading of .907, in believing that tax law is simple and straightforward with the loading of .899, the tax system is fair with the loading of .878. The factor loadings of the first dimension of tax compliance include 31 items. These attributes speak of a local tax bureau spends a reasonable amount of local tax revenue on public service, fairness in individual income tax, good tax audit, amnesties, penalties in failure to pay taxes, fair and reasonable tax rate, and willful acceptance in paying tax. The dimensions also include items that discussed the prompt payments of taxes, keeping open records, tax evasion as unethical, and tax transparency. Thus, this dimension is named the "Perception of Equity and Fairness" dimension.

**Tax Psychological Cost.** This second indicator was considered a determinant of tax compliance practices as small and medium enterprises (SMEs) claimed that the tax law's continuous reforming leads them to apply it adequately with a loading of 0.866. Also, SMEs contended that the tax compliance requirement does not cause me stress and anxiety with loading 0.859. These attributes speak about tax compliance's adequacy due to the tax law's continuous reform and stress

and anxiety in tax compliance requirements. Moreover, these attributes talk of a psychological effect of tax compliance to its taxpayers. Thus, this dimension is named the "Tax Psychological Cost" dimension.

TABLE3. Rotated Component Matrix (Cluster 1)

ITEM	PERCEPTION OF EQUITY AND FAIRNESS	LOADING
Q82	Believing that tax evasion is morally wrong in any amount.	0.983
Q72	Local tax bureau treating fairly and reasonably.	0.983
Q77	Paying fair share of individual income tax.	0.982
Q75	The local government where spending reasonable amount of local tax revenue on public service.	0.981
Q78	Paying fair share of individual income tax as compared to people who earn about the same as me.	0.979
Q71	Believing that the local tax bureau are accountable for what they do.	0.979
Q73	Treating honesty by local tax bureau in my tax affairs unless I act otherwise.	0.979
Q80	My family, close friends and colleagues approving decision to proper correct income on my income tax return.	0.978
Q81	If faced with a similar situation, my family, close friends and colleagues not understating the income on their income tax returns.	0.978
Q76	Paying individual income tax to the local tax bureau is fair considering the benefits receive from the local government.	0.977
Q74	Offering professional service and assistance by the local tax bureau to help understand and meet tax obligation.	0.977
Q70	Making income tax system is well developed.	0.976
Q66	Paying tax on time.	0.974
Q68	Paying the actual tax assessed.	0.974
Q49	Adhering to professional ethics, it is unethical to evade taxes.	0.973
Q65	Providing accurate reports to BIR for assessment of their tax liability.	0.971
Q50	Believing that failure to pay taxes attract penalties and fines from the BIR.	0.968
Q64	Disclosing all income earned for tax purposes.	0.966
Q51	Thinking taxpayers pay taxes because BIR has legal mandate to collect it.	0.966
Q69	Assuring income tax system is transparent.	0.964
Q44	Believing that the tax rates the SME pay are reasonable.	0.960
Q43	Thinking that the manner in which the tax burden is distributed across taxpayers is fair.	0.955
Q40	Don't resent in paying tax.	0.954
Q38	Thinking that, tax revenue generating activities to keep the record is correct behavior in terms of taxation.	0.943
Q39	Believing that tax amnesties enacted frequently result in tax equality.	0.939
Q41	Thinking that, paying tax is a responsibility that should be willingly accepted by all.	0.933
Q46	Believing high income earners should pay more than low income earners.	0.93
Q42	Believing that tax rate is fair as it is the same for every business at the same level.	0.925
Q37	Believing that tax audit is sufficient.	0.907
Q36	Believing that tax law is simple and clear.	0.899
Q35	Thinking that tax system is fair.	0.878
ITEM	TAX PSYCHOLOGICAL COST	LOADING
Q3	Continuous reforming of the tax law leads me to apply it adequately.	0.866
Q2	The tax compliance requirement does not cause me stress and anxiety.	0.859

Table 4 shows the result for cluster 2. It represents the third and fourth dimensions that affect tax compliance among small and medium enterprises (SMEs) in Tagum City, Davao del Norte. These were based on the rotated component matrix, and there were two components generated using principal component analysis for the clusters. These were as follows:

**Tax Psychological Cost.** This third indicator was considered a determinant of tax compliance practices as small and medium enterprises (SMEs), which claimed that when taxes are high in one location, some taxpayers shift to other places where there will be low tax with a loading .842. Believing the tax laws require taxpayers to pay more than the fair share of taxes with a loading of .773. SMEs claimed to persuade the government for changes in regulations with the loading of .698. Adapt to peers' action when there is a change in the tax system with loading of .664. Moreover, small and medium enterprises claimed that when taxpayers are not satisfied with the BIR assessment, they go to court with a loading of .650. These attributes speak about high taxes on one location, and tax laws require taxpayers to pay more than the fair share of taxes, government persuasion for changes in regulations, change in the tax system, and BIR assessment. Thus, this dimension is named the "Knowledge of Current Tax Policies/ Tax Rates" dimension.

**Quality of Tax Officers' Service.** This fourth indicator was considered a determinant of tax compliance practices as small and medium enterprises (SMEs) claimed in adapting technological developments by the BIR affects tax compliance with the loading of .826. Also, SMEs contended that enough staff is working in the BIR for valuable service with loading of .783. Lastly, SMEs claimed that the probability of tax audit is so low that it is reasonable to try to cut down a bit on my business taxes for several occasions with a loading of .618. These are five items found out in Table 4, which shows the factor loadings of the items that comprise the second component or dimensions of tax compliance for Cluster 2. The factor loadings of the second dimension of tax compliance include three items. These attributes speak of the ability of BIR to adopt technological developments to enhance tax compliance, enough staff working in the BIR, and the chances of being audited (tax audit). Thus, this dimension is named the "Quality of Tax Officers' Service" dimension.

TABLE4. Rotated Component Matrix (Cluster 2)

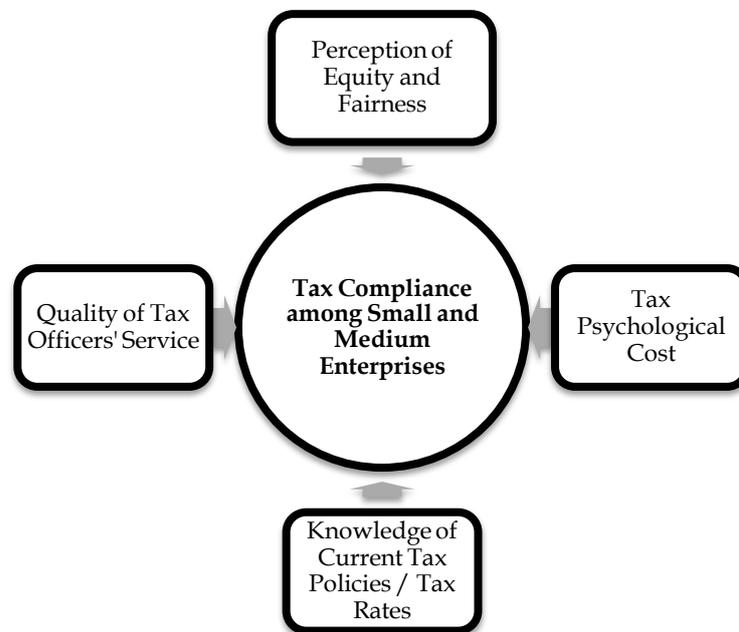
ITEM	KNOWLEDGE OF CURRENT TAX POLICIES/ TAX RATES	LOADING
Q61	Thinking that when taxes are high in one location, some taxpayers shift to other places where there will be low taxes.	0.842
Q48	Believing the tax laws require taxpayers to pay more than the fair share of taxes.	0.773
Q60	Persuading government for changes in regulations to which they are subjected.	0.698
Q59	Adapting to peers action when there is a change in the tax system.	0.664
Q47	Believing that when taxpayers are not satisfied with BIR assessment, they go to court.	0.650
ITEM	QUALITY OF TAX OFFICERS' SERVICE	LOADING
Q16	Adapting technological developments by the BIR affects tax compliance.	0.826
Q15	Thinking that there is sufficient number of staff working in the BIR for effective service.	0.783
Q9	Believing that the chances of being audited (tax audit) are so low that it is worthwhile trying to economize a little on my business income taxes for various reasons.	0.618

Table 5 shows extracted factors of tax compliance among Small and Medium Enterprises. Based on the descriptive analysis results, the overall level as perceived by the SME taxpayers has an overall mean score of 3.82 with a descriptive interpretation of "High". This indicates that tax compliance is often manifested. Among the four measures of tax compliance, perception of equity and fairness got a mean of 0.90 and a standard deviation of 0.90, described as high. Second, tax psychological cost got a mean result of 3.91 and a standard deviation of 0.83, described as high. Third, quality of tax officers' service with a mean result of 3.71 and a standard deviation of 0.99, describe as high. Lastly, knowledge of current tax policies/ tax rates got a mean score of 3.59 and a standard deviation of 0.87, describe as high.

**TABLE5.** Extracted Factors of Tax Compliance among Small and Medium Enterprises

Dimensions	SD	Mean	Descriptive Levels
Perception of Equity and Fairness	0.90	4.06	High
Tax Psychological Cost	0.83	3.91	High
Quality of Tax Officers' Service	0.99	3.71	High
Knowledge of current tax policies/ tax rates	0.87	3.59	High
<b>Overall</b>	<b>0.90</b>	<b>3.82</b>	<b>High</b>

In Figure 1, the framework developed from the extracted four factors such as the perception of equity and fairness, tax psychological cost, knowledge of current tax policies/tax rates, and quality of tax officers' service. The researcher did not come across any model and framework that determined tax compliance factors among small and medium enterprises before the conduct of this study. Hence, this would serve as a basis for developing a measurement tool.



**Fig 1.**Final Framework Showing the Measures of Tax Compliance among SMEsin Tagum City, Davao del Norte.

#### IV. CONCLUSION AND DISCUSSIONS

This study employed data reduction through Exploratory Factor Analysis (EFA), where many variables were analyzed using principal component factor analysis with a threshold of .6. Items that did not reach .6 were removed from the scale. The varimax rotation result revealed four factors: the perception of equity and fairness, tax psychological cost, current tax policies/tax rates, and quality of tax officers' service.

The first identified factor is the perception of equity and fairness. The result showed that small and medium enterprises are particular with and are performing equity and fairness. There were 31 items found out to comprise the first dimension. The items speak about: local tax bureau spending a reasonable amount of local tax revenue on public service, fairness in individual income tax, sufficient tax audit, amnesties, penalties in failure to pay taxes, fair and reasonable tax rate, and wilful acceptance in paying tax, the prompt payments of taxes, keeping honest records, tax evasion as unethical, and transparency of income tax system. These attributes speak of taxpayers' perception in a fair dealing of tax

submissions and equity among different companies. Thus, this dimension is named "Perception of Equity and Fairness" dimension.

This is corroborated by the studies of Puspita, Subroto and Baridwan (2016), Musimenta et al. (2017); and Serim, Inam, and Murat (2012) revealed that the tax system's perception of fairness influences taxpayer compliance. Further claims that there will be higher taxpayer compliance when there is higher perceived fairness on the tax system. Taxpayers are also compliant because they think the government is trustworthy, effective, and fair (Sour, 2002). However, the result contradicts the studies of Engida and Baisa (2014) and O'Shaughnessy (2014), which suggested that in making decisions to comply with taxes, the sense of confidence and fairness towards the government the tax system is not enough. Furthermore, tax evasion is often motivated by taxpayers' perception of the fairness of the tax system (Jackson & Milliron, 1986; Richardson, 2006).

The second identified factor is tax psychological cost. The second measure covers items that discuss stress and anxiety in tax compliance requirements, and the continuous reform of the tax law will result in adequate tax compliance. These attributes speak of a psychological effect of tax compliance to its taxpayers. Thus, this dimension is named the "Tax Psychological Cost" dimension.

The second component generated affirms with Yesegat (2017), and Yurdadog, Gökbunar and Tunçay (2016) studies, which averred that tax compliance would depend upon the psychological impact or stress and anxiety to taxpayers resulting from the strict imposition of penalties and tax audits. Furthermore, the study is a corollary to the findings of Mulugeta (2016), Richardson (2016), and Swistak (2016), which pointed out that companies with higher psychological costs will affect compliance requirements to tax laws and policies. Subsequently, various studies stated that penalties and tax audits effectively enforce compliance (Alm et al., 1994; Chalu & Mzee, 2018; Liu, 2014; Remali et al., 2018). However, the result contradicts the study of Sapiei, Kasipilai and Eze (2014) stated that taxpayers' stress and anxiety resulted from strict penalties imposition tended to be more non-compliant. Tax audits were more insignificant among SMEs, and tax audits focused on tax evasion of small and medium-sized businesses by quickly relocating without consulting the tax authorities during the audit (Nyamwanza et al., 2014).

The third identified factor is the knowledge of current tax policies/tax rates. The third component or dimension of tax compliance covers items that speak of: variation of taxes from one location to another location; tax laws that force taxpayers to contribute more than their fair share; trying to persuade the government for changes in regulations; and peers' action on the difference in the tax system and BIR assessment.

The result affirms the studies of Lewis, Webley and Furnham (2012), Prince and Anayduba (2014), and Remali et al. (2018, p. 20) explained that understanding tax law is very relevant for individuals because it influences their ability to cooperate. However, some reports dispute the result, suggesting that knowledge on taxation matters has no substantial influence on SMEs' tax enforcement behavior. This is since more SME businesses are assumed to be familiar with the ins and outs of taxes, there is a possibility that they will also know how to escape the tax regulations. This, in return, could also contribute to tax evasion (Brainyiah, 2013; Fauziati et al., 2016; Nasution et al., 2020).

Lastly, the fourth identified factor is the quality of tax officers' service. The result showed that small and medium enterprises are particular with the quality of tax officers' service. The component or dimension of compliance includes chances of being audited (tax audit), sufficient number of staff working in the BIR, and the ability of the BIR to adopt technological developments.

The result is consistent with Hardiningsih and Yulianawati's (2011) study, which postulated that the tax authorities' services' quality affects taxpayers' willingness to pay taxes. Besides, It has also been mentioned that a government's position has an important positive effect on the determination of taxpayers' attitudes to comply. The study of Serim, Inam and Murat (2014) stated that tax officers must be equipped with a physical and technical environment that will help them concentrate solely on the taxpayer and their jobs. This is to ensure that tax officers are actively engaged in improving workers' empathy and taxpayer engagement. Furthermore, tax authorities will provide the taxpayer with ease in complying with their tax obligations if the tax authorities can enhance their quality of services (Jatmiko, 2006; Pramushinta & Siregar, 2011; Puspita, Subroto & Baridwan, 2016).

Based on the findings, the researcher concluded that there were factors that determined tax compliance among SMEs in Tagum City. Correspondingly, there are four determinants or factors of tax compliance practices that Small and Medium Enterprises. The exploratory factor analysis revealed that SMEs' tax compliance determinants stemmed from the perception of equity and fairness, tax psychological cost, current tax policies/tax rates, and quality of tax officers' service.

## REFERENCES

- [1] T. G.Engida, and G. A.Baisa,Factors influencing taxpayers' compliance with the tax system: An empirical study in mekelle city, Ethiopia, *EJournal of Tax Research*, 12(2), 2014, 433-452.
- [2] E. Friedman, The determinants of unofficial activity. *Journal ofPublic Economics*, vol. 76, no. 3, 2011, 59-93.
- [3] N. Wadesango, A. Mutema, C. Mhaka, and V. O.Wadesango,Tax compliance of Small and Medium Enterprises through the self-assessment system: issues and challenges, *Academy of Accounting and Financial Studies Journal*,22(3),2018, 1-15.
- [4] A. M. Assfaw, and W. Sebhat, Analysis of Tax Compliance and Its Determinants: Evidence from Kaffa, Bench Maji and Sheka Zones Category B Tax Payers, SNNPR, Ethiopia, *Journal of Accounting, Finance and Auditing Studies*, 5(1),2019, 32-58.
- [5] M. Mohamad and M. A. Mohd Ali, Examining the Factors of Tax Non-Compliance: A Case Study of Small and Medium Enterprises in Metro Area, *EDP Sciences, Les Ullis.*, 2017.
- [6] D. Musimenta, S. K. Nkundabanyanga, M. Muhwezi, B. Akankunda, and I. Nalukenge, Tax compliance of small and medium enterprises: a developing country perspective, *Journal of Financial Regulation and Compliance*,25(2),2017, 149-175.
- [7] X. Liu,Use tax compliance: the role of norms, audit probability, and sanction severity, *Academy of Accounting and Financial Studies Journal*, 18(1), 2014, 65-80.
- [8] A. M. Remali, N. S. A. Satar, F. N. A. Mamad, N. F. Z. Abidin, and S. Z. Zainuddin,Tax knowledge, tax penalty and tax rate on tax compliance among small medium enterprise in Selangor, *Global Business and Management Research*,10(3),2018, 12.
- [9] A. F. Puspita, B. Subroto, and Z. Baridwan,The analysis of individual behaviour of corporate taxpayers' obedience: Tax compliance model (study of hotels in malang and batu), *Review of Integrative Business and Economics Research*,5(3),2016, 135-160.
- [10] D. B. O'Shaughnessy,Tax compliance determinants: A proposed model for cross-country analysis" (Order No. 3636430). Available from ProQuest Central.2014.
- [11] M. A. Bujang, N. Sa'at, T. M. I.Tg Abu BakarSidik, and C. J. Lim, Sample size guidelines for logistic regression from observational studies with large population: emphasis on the accuracy between statistics and parameters based on real life clinical data,*Malays J Med Sci*2018, 25(4),2018, 122-130.
- [12] J. Gliem, Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for likert-type scales, *American Educational Journal*, 2(3), 2003,45-56.
- [13] R. Cameron, A sequential mixed model research design: Design, analytical and display issues. *International Journal of Multiple Research Approaches*, 3(2),2009, 140-152.
- [14] J. Bonds-Raacke, and J. Raacke, *Research Metods: Are You Equipped?*(Kendall Hunt Publishing, 2014).
- [15] C. B. Thompson, and E. A. Panacek, Research study designs: Non-experimental,*Air Medical Journal*, 26(1), 2007, 18-22. <https://doi.org/10.1016/j.amj.2006.10.003>
- [16] F. B. Bryant, and P. R. Yarnold,Principal-Components Analysis and Exploratory and Confirmatory Factor Analysis. In L. G. Grimm & P. R. Yarnold (Eds.), Reading and understanding multivariate statistics, Washington, DC, US: American Psychological Association, 1995, 99-136,
- [17] H. F. Kaiser and J. Rice, Little jiffy, mark IV, *Educational and Psychological Measurement*,34(1),1974, 111-117.
- [18] J. S. Armstrong and P. Soelberg, On the interpretation of factor analysis, *Psychological Bulletin*, 70(5), 1968, 361.
- [19] N. Serim, B. Inam, and D. Murat,Factors affecting tax compliance of taxpayers: The role of tax officer the case of Istanbul and Canakkale,*Business and Economics Research Journal*, 5(2),2014, 19-31.
- [20] D. L. Sour, An analysis of tax compliance for the mexican case: Experimental evidence (Order No. 3039056),2002, Available from ProQuest Central. (305518209). Retrieved from <https://search.proquest.com/docview/305518209?accountid=31259>
- [21] B. R. Jackson, and V. C. Milliron, Tax compliance research: Findings, problems, and prospects,*Journal of Accounting Literature*, 5,1986, 125-65.
- [22] G. Richardson,The impact of tax fairness dimensions on tax compliance behaviour in an Asian jurisdiction: The case of Hong Kong, *International Tax Journal*, Winter,2006, 29-42.
- [23] W. A. Yesegat, *Value added tax in Ethiopia: A study of operating costs and compliance*, ATAX, University of New South Wales, Sydney, Australia, 2017.
- [24] V. Yurdadog, R. Gökbnar, and B. Tunçay,VergiyumunubelirleyenfaktörleregenelbirBakis/An overview of the factors determining tax compliance, *Yonetim VeEkonomi*, 23(3),2016, 805-816.
- [25] T. Mulugeta, A close scrutiny of self-assessment system and its impact on tax compliance level for taxpayers,*Global Society of Scientific Research*, 7(8),2016, 26.
- [26] G. Richardson, Determinants of tax evasion,*Journal of international accounting*, 6(8),2016, 23-65.
- [27] A. Swistak, Tax penalties in SME tax compliance,*Financial theory and practice*, 40(1),2016, 129-147.
- [28] J. Alm, I. Sanchez, and A. De Juan,*Economic and noneconomic factors in taxcompliance*.1994
- [29] H. Chalu, and H. Mzee,Determinants of tax audit effectiveness in Tanzania, *Managerial Auditing Journal*,33(1), 2018, 35-63.
- [30] N. S. Sapiei, J. Kasipilai, and U. C. Eze,Determinants of tax compliance behaviour of corporate taxpayers in Malaysia, *EJournal of Tax Research*, 12(2), 2014, 383-409.

- [31] T. Nyamwanza, S. Mavhiki, D. Mapetere, and L. Nyamwanza, An analysis of SMEs attitude and practices toward tax compliance in Zimbabwe. *Sage*, 4, 2014, 1-6.
- [32] A. Lewis, P. Webley and A. Furnham, *The new economic mind: The social psychology of economic behaviour*. (New York: Harvester, 2013)
- [33] K. Prince, and J. O. Anayduba, The impact of tax audit on tax compliance in Nigeria. *International Journal of Business and Social Science*, 5(9), 2014, 20-27.
- [34] M. Q. Brainyyah, The Effect of Tax Fairness, Tax Knowledge, and Tax Complexity on Tax Compliance: The Case of SME Entrepreneurs' Taxpayers in Malang *Jurnal Ilmiah Mahasiswa*, 1(2), 2013
- [35] P. Fauziati, A. F. Minovia, R. Y. Muslim, and R. Nasrah, 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), 2016, 22-30.
- [36] M. K. Nasution, F. Santi, H. Husaini, F. Fadli, and K. Pirzada, Determinants of tax compliance: a study on individual taxpayers in Indonesia, *Entrepreneurship and Sustainability Issues*, 8(2), 2020, 1401-1418.
- [37] P. Hardiningsih, and N. Yulianawati, Faktor-Faktor yang Memengaruhi Kemauan Membayar Pajak, *Dinamika Keuangan dan Perbankan*, 3(1), 2011, 126 - 142.
- [38] A. N. Jatmiko, Pengaruh Sikap Wajib Pajak pada Pelaksanaan Sanksi Denda, Pelayanan Fiskus, dan Kesadaran Perpajakan terhadap Kepatuhan Wajib Pajak" (Studi Empiris Terhadap Wajib Pajak Orang Pribadi di Kota Semarang). *Tesis. Semarang: Fakultas Ekonomi Universitas Diponegoro*, 2006.
- [39] B. Pramushinta and B. Siregar, Pengaruh Layanan Fiskus dan Pelaksanaan Sunset Policy Terhadap Kepatuhan Wajib Pajak Dalam Upaya Peningkatan Pajak, *Jurnal Ekonomi dan Bisnis*, 5(2), 2011, 173-189.