

**TAX COMPLIANCE MODELING REGARDING INDIVIDUAL CHARACTERISTICS, INFORMATION TECHNOLOGY KNOWLEDGE AND SANCTIONS ON TAXPAYER AWARENESS, ABILITY, WILLINGNESS AND COMPLIANCE AS IMPACTS OF THE DEVELOPMENT OF THE CENTRAL BUSINESS DISTRICT OF SURABAYA CITY**

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**Tri Jarwa , Tri Ratnawati , Mulyanto Nugroho , Tax Compliance Modeling Regarding Individual Characteristics, Information Technology Knowledge And Sanctions On Taxpayer Awareness, Ability, Willingness And Compliance As Impacts Of The Development Of The Central Business District Of Surabaya City , Palarch's Journal Of Archaeology Of Egypt/Egyptology 18(7). ISSN 1567-214x.**

**Keywords: Tax Compliance Modeling, Individual Characteristics, Information Technology, Sanctions, Awareness, Ability.**

**ABSTRACT:**

The purpose of this study is to analyze tax compliance modeling related to individual characteristics, knowledge of information technology and sanctions on the awareness, ability, willingness and compliance of taxpayers as the impact of the development of the central business district of Surabaya city. This study uses a qualitative and quantitative research approach or a mixed method research method. In this study, the sample size was 145 people. This study uses primary data by making direct observations, questionnaires, and interview guides (interviews). The technique used to collect primary data is preliminary survey, interview and questionnaire. The results show that the results of the measurement model analysis on the construct of individual characteristics explain that of the three indicators, all of them contribute significantly in shaping the individual characteristics of taxpayers. The indicator that has the greatest contribution in shaping the individual characteristics of taxpayers is the indicator that has the biggest factor loading, namely perception. Taxpayer knowledge does not positively affect taxpayer compliance and also proves that taxpayer

interaction and knowledge of fraud have a positive effect on their tax compliance. So the implication of this research is that the tax authorities can apply tax laws which include tax penalties and penalties equally at each level of taxpayers and improve services in the taxation sector.

## **INTRODUCTION:**

Taxes are a source of government funds for development, both central and local governments. People who pay taxes will not benefit from taxes directly (Bahl & Bird, 2008). This is because taxes are used for public purposes, not for personal gain. Tax compliance can be seen from two approaches. First, using an economic approach with the tax gap concept (Feld & Frey, 2007). Taxgap is the difference between the amount of potential taxes that can be collected (taxes owed) and the amount of realized tax revenue. Taxgap shows the potential for revenue that has not been successfully realized by a country's tax authorities (Cheeseman & Griffiths, 2005; Khwaja & Iyer, 2014). Using taxgap, the performance of a country's tax authority is measured by its ability to collect tax revenue compared to what should be collected. The measure is how capable the tax authority in a State makes its taxpayers obey in carrying out their tax obligations in accordance with the applicable taxation provisions. Efforts to reduce tax gaps include increasing the ability of tax authorities to access data and increasing taxpayer voluntary compliance (Lederman, 2003; Abiola & Asiweh, 2012; Mebratu, 2016).

The second approach uses behavior (behavioral approach). Behavioral approach uses the concept of voluntary compliance. This second approach emphasizes the behavior of taxpayers to comply in fulfilling their tax obligations in accordance with applicable regulations or voluntary compliance. Theoretically, tax compliance or tax compliance. An illustration of the realization of the Taxpayer's will in fulfilling its obligations, either voluntarily or by force (Kiow et al., 2017; Ramadayanti, 2020). The same thing was conveyed by Andreoni et al., 1998, Palil (2011) that tax compliance is the willingness and willingness of the taxpayer to comply with tax laws.

The analysis tool used is the Structural Equation Model (SEM) with the help of SmartPLS software. The results of this study prove that tax penalties, service quality, and tax penalties have a positive effect on taxpayer compliance. The results of this study also prove that taxpayer knowledge does not positively affect taxpayer compliance and also proves that taxpayer interaction and knowledge of fraud have a positive effect on their tax compliance. So the implication of this research is that the tax authorities can apply tax laws which include tax penalties and penalties equally at each level of taxpayers and improve services in the taxation sector in the form of providing information to taxpayers.

Indriyani & Sukartha (2014) show moral responsibility, tax awareness, tax sanctions and service quality in taxpayer reporting compliance. This study aims to determine the effect of moral responsibility, taxpayer awareness, tax sanctions and service quality on corporate taxpayer reporting compliance at KPP Pratama Badung Utara. Taking and determining the sample in this study using accidental sampling technique. Respondents in this study amounted to 98 corporate taxpayers with the minimum criteria of accounting staff or tax staff, working at least 2 years and having filled out an annual tax return. The results showed that moral responsibility has a positive effect on reporting compliance of corporate taxpayers. Taxpayer awareness has a positive effect on reporting compliance of corporate taxpayers. Tax sanctions have a positive effect on reporting compliance.

Other research suggests that service quality has a positive effect on reporting compliance of corporate taxpayers as shown in research (Joseph & Jacob, 2018). The main

objective of this study is to examine the relationship between various factors in determining the tax compliance behavior of MSMEs under the Goods and Services Tax regime. . The conceptual model proposed in this study can be validated through empirical testing. Compliance among MSMEs should be aimed at identifying the factors that influence tax compliance. By theoretically establishing a relationship between the factors that influence tax compliance, this study allows policy makers and MSMEs to implement appropriate strategies to improve tax compliance and collect government tax revenue.

The purpose of this study is to analyze tax compliance modeling related to individual characteristics, knowledge of information technology and sanctions on the awareness, ability, willingness and compliance of taxpayers as the impact of the development of the central business district of Surabaya city.

## **METHODS:**

This study uses a qualitative and quantitative research approach or a mixed method research method. Mixed Method is a method that combines qualitative and quantitative approaches in terms of methodology. Research data using SEM analysis. The selection of the population is a homogeneous population, so that the choice of land and building tax objek is PBB OP which is a non-office residence or a place that is used as a place of business, the fastest growing areas in Surabaya City are West Surabaya and East Surabaya. The East Surabaya area in this research covers 6 (six) Districts covering; GunungAnyar, Sukolilo, Tambaksari, Mulyorejo, Rungkut, TenggilisMejoyo. West Surabaya region 12 meliputi sub-districts; Benowo, Pakal, AsemRowo, Sukomanunggal, Tandes, Sambikerep, Lakarsantri, Wiyung, KarangPilang, Wiyung, KarangPilang, Hamlet Pakis. In this study, the sample size was 145 people. This study uses primary data by making direct observations, questionnaires, and interview guides (interviews), so the design is made as efficient as possible with tools and techniques as well as the characteristics of the respondents (Nazir, 2014). While the techniques used to collect primary data are preliminary surveys, interviews and questionnaires.

## **RESULTS AND DISCUSSION:**

### **Measurement Model Analysis:**

Measurement model analysis is also called the confirmatory factor analysis (CFA) test. CFA is used to identify whether the indicators are constructs of the research variables or in other words, these indicators are a single unit or have un-dimensionality in reflecting the construct. The CFA test is carried out with three objectives, namely testing the suitability of the measurement model (fit), construct validity (construct validity), and construct reliability.

### **Measurement model fit:**

The results of estimating the suitability of the measurement model fit in exogenous and endogenous constructs are as follows:

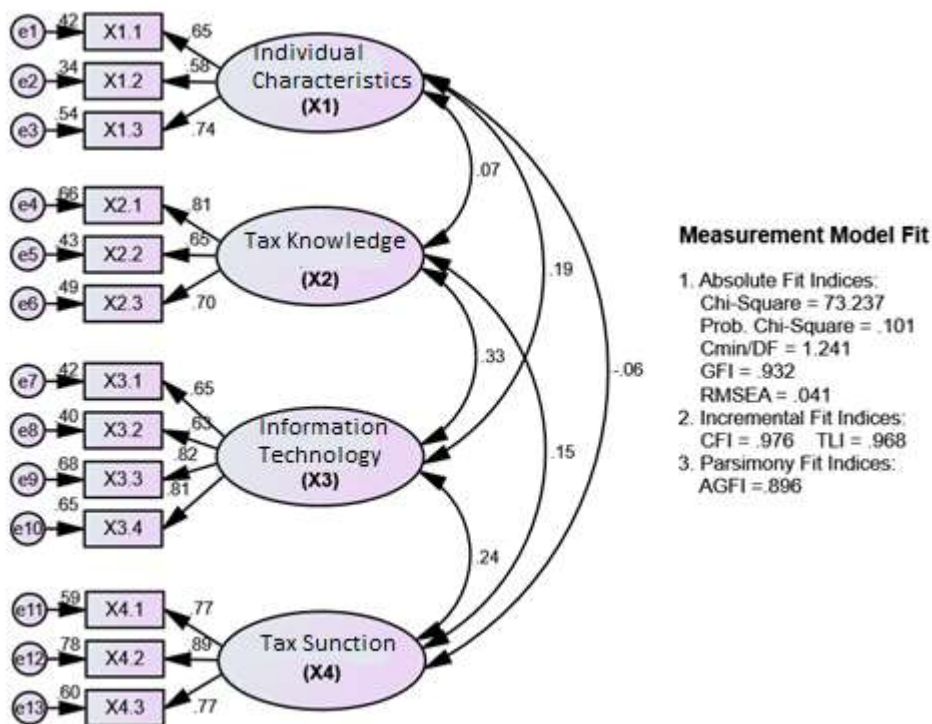


Figure 5.1 : Evaluation of Exogenous Construct Measurement Models (Source: Appendix 8)

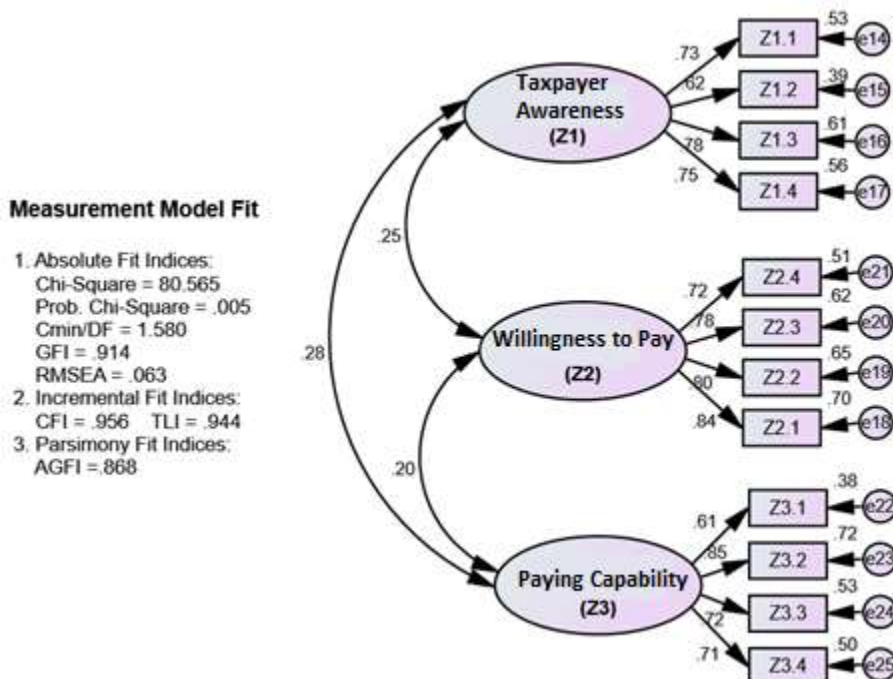
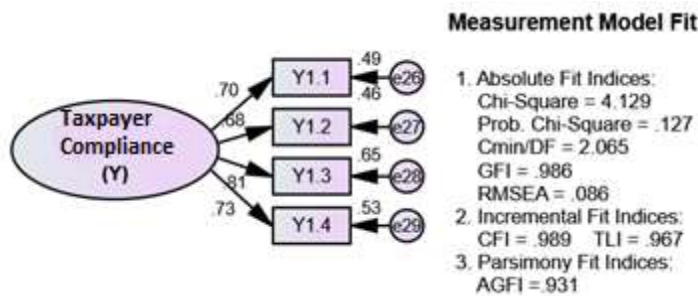


Figure 1 : Evaluation of the Intervening Construct Measurement Model (Source: Appendix 8)



**Figure 2 : Evaluation of the Endogenous Construct Measurement Model**

Hair et al (2014) stated that the model fit test in the measurement model is to use at least one absolute fit index and one incremental fit index. The absolute index that is often used is GFI, while the incremental index that is often used is CFI, because this index is not sensitive to the impact of model complexity (Hair et al., 2014). The GFI and CFI values for each exogenous construct, intervening construct, and endogenous construct are presented in the following table:

**Table 1 : Measurement Model Fit**

Measurement Model	GFI	CFI	Description
Exogenous constructs	0,932	0,976	Good fit
Intervening constructs	0,914	0,956	Good fit
Endogenous constructs	0,986	0,989	Good fit
Terms	$\geq 0,90$	$\geq 0,95$	

Table 1 shows the evaluation of the suitability of the measurement model for exogenous and endogenous constructs consisting of individual characteristic variables, tax knowledge, information technology, tax sanctions, taxpayer awareness, willingness to pay, ability to pay, and taxpayer compliance showing the value of GFI on all more constructs. is greater than 0.90 and the CFI value is also greater than 0.95, which indicates the good fit category. Thus, the measurement model of the exogenous construct, the intervening construct, and the endogenous construct is concluded to be fit with the data.

**Construct validity:**

Construct validity shows a test to determine the extent of the indicator in measuring the construct. In SEM, the construct validity test is carried out through convergent validity, with the rule of thumb that the construct is said to meet convergent validity if the indicators in the construct have a standardized regression weight (lambda / factor loading) value above 0.50 and Average Variance Extracted (AVE) as well. greater than 0.50.

The results of evaluating construct validity for exogenous constructs, intervening constructs, and endogenous constructs can be seen in Table 2:

**Table 2 : Construct Validity Test**

Variable	Indicator	Construct Validity		
		Factor Loading	AVE	Description
Individual Characteristics	X1.1	0,650	0,563	Valid
	X1.2	0,583		Valid

(X1)	X1.3	0,735		Valid
Tax Knowledge (X2)	X2.1	0,812	0,525	Valid
	X2.2	0,653		Valid
	X2.3	0,699		Valid
Information Technology (X3)	X3.1	0,649	0,538	Valid
	X3.2	0,634		Valid
	X3.3	0,823		Valid
	X3.4	0,807		Valid
Tax Sanctions (X4)	X4.1	0,766	0,656	Valid
	X4.2	0,885		Valid
	X4.3	0,774		Valid
Consciousness (Z1)	Z1.1	0,726	0,522	Valid
	Z1.2	0,624		Valid
	Z1.3	0,781		Valid
	Z1.4	0,749		Valid
Willingness to Pay (Z2)	Z2.1	0,836	0,618	Valid
	Z2.2	0,803		Valid
	Z2.3	0,784		Valid
	Z2.4	0,717		Valid
Ability to Pay (Z3)	Z3.1	0,614	0,530	Valid
	Z3.2	0,846		Valid
	Z3.3	0,725		Valid
	Z3.4	0,707		Valid
Taxpayer Compliance (Y)	Y1.1	0,697	0,534	Valid
	Y1.2	0,682		Valid
	Y1.3	0,809		Valid
	Y1.4	0,728		Valid

Table 2. shows that each indicator in the exogenous construct, intervening construct, and endogenous construct consisting of individual characteristic variables, tax knowledge, information technology, tax sanctions, taxpayer awareness, willingness to pay, ability to pay, and taxpayer compliance, all have the factor loading value is greater than 0.50, and each construct also produces an AVE value greater than 0.50, so that the indicators are valid in forming a construct and can be used to build a model.

### Construct reliability:

The construct reliability test is checked using the construct reliability value, a construct is said to be reliable if the construct reliability value is large than 0.70 (Solimun, 2017: 78). Hair et al (2014) added that the rule of thumb construct reliability value must be greater than 0.70, but actually the internal consistency test (reliability) is not absolutely necessary if the validity of the indicators has been fulfilled, because a valid construct is a reliable construct, vice versa. a reliable construct is not necessarily valid, thus the value of construct reliability is greater than 0.60 which is still acceptable as long as each indicator has met the convergent validity.

The results of evaluating construct reliability on exogenous constructs and endogenous constructs can be seen in Table 3 below:

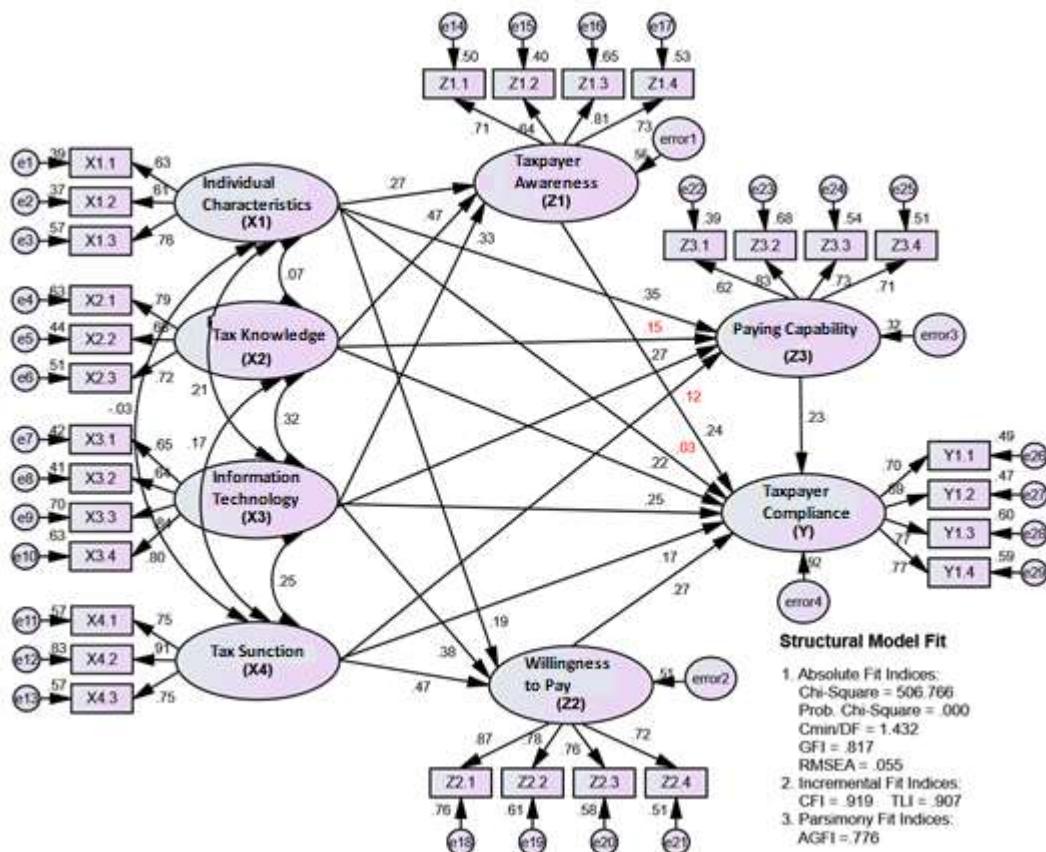
### Table 3: Construct Reliability Test

Variable	Construct Reliability	Description
Individual Characteristics (X1)	0,793	Reliable
Tax Knowledge (X2)	0,767	Reliable
Information Technology (X3)	0,821	Reliable
Tax Sanctions (X4)	0,851	Reliable
Consciousness (Z1)	0,813	Reliable
Willingness to Pay (Z2)	0,866	Reliable
Ability to Pay (Z3)	0,816	Reliable
Taxpayer Compliance (Y)	0,820	Reliable

Table 3 shows that each variable in the exogenous construct, the intervening construct, and the endogenous construct results in each construct reliability value greater than 0.70, so it is concluded that these indicators are reliable in reflecting the construct consisting of individual characteristic variables, tax knowledge, information technology, tax sanctions, taxpayer awareness, willingness to pay, ability to pay, and taxpayer compliance.

### Structural Model Fit Evaluation:

After the measurement model analysis stage is met, the next step is structural model analysis. The structural model stage begins with an evaluation of the structural model fit (goodness of fit) which functions to ensure that the model developed is in accordance with the data (fit). The estimation results of the structural model and the value of the goodness of fit criteria are presented in Figure 5.4 below:



**Figure 3 : Estimation Results of Structural Equation Modeling (Initial Model)**

The results of the calculation of the goodness of fit index values generated by the SEM structural model are as follows:

**Table 4 : Goodness of Fit Criteria at Initial SEM Model**

Goodness of Fit Criteria		Model Test Results	Critical Value	Conclusion
Absolute Fit Indices	Probability Chi-square	0,000	$\leq 0,05$	Poor fit
	Cmin/DF	1,432	$\leq 2,00$	Good fit
	GFI	0,817	$\geq 0,90$	Marginal fit
	RMSEA	0,055	$\leq 0,08$	Good fit
Incremental Fit Indices	CFI	0,919	$\geq 0,95$	Marginal fit
	TLI	0,907	$\geq 0,95$	Marginal fit
Parsimony Fit Indices	AGFI	0,776	$\geq 0,90$	Poor fit

Hair et al (2014) stated that testing the suitability of the model on the structural model (structural model fit) uses at least one criterion on absolute fit indices and one criterion on incremental fit indices. Hair et al (2014) also explained that the parsimony fit indices criterion is only useful for comparing the suitability of two models, one model is more complex than the other, with the aim of getting the best model, so this criterion is useless when assessing the suitability of a single model. In this study, the model suitability test was

only carried out on a single model, so that the criteria for the suitability of the model to be used were absolute fit indices and incremental fit indices.

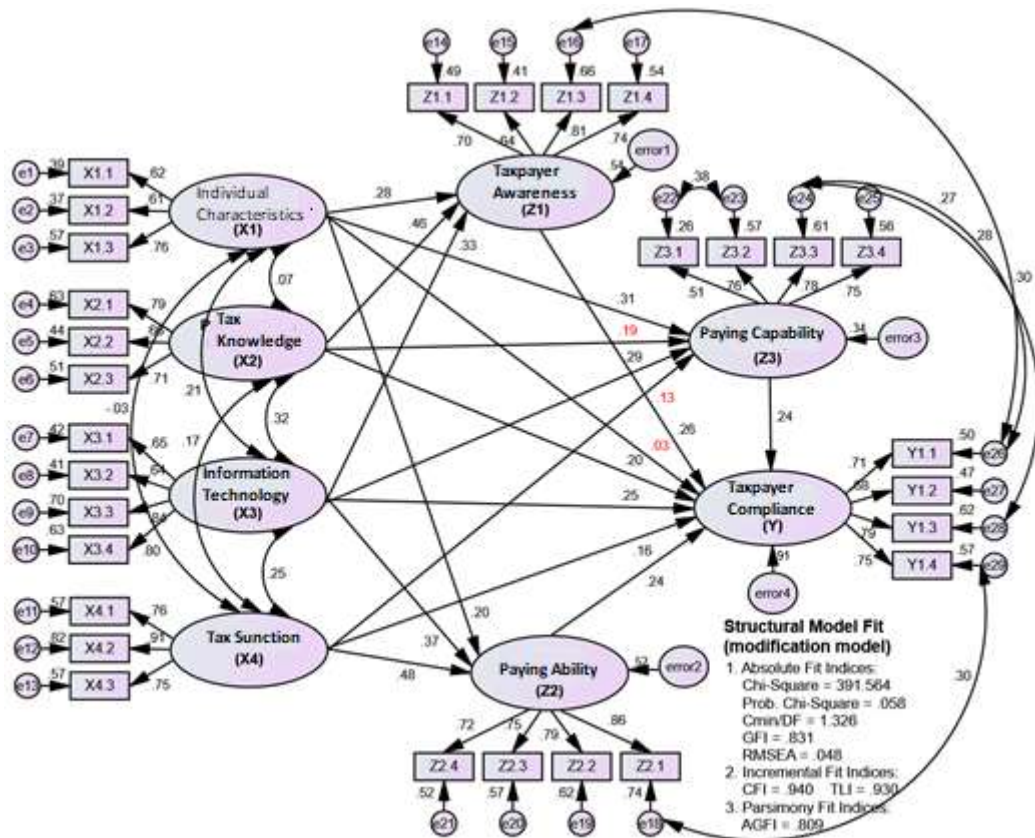
The results of the structural model suitability test (base model) show that at least one criterion for absolute fit indices and incremental fit indices is eligible, namely Min / df, GFI and RMSEA for absolute fit indices, as well as TLI and CFI for incremental fit indices, so that the structural model (initial model) is actually acceptable. However, there are two criteria for goodness of fit that are still not good (poor fit), namely the chi-square probability and AGFI, so the researcher wants the structural model to be even better by modifying the model.

**Modification Model:**

Hair et al (2014) explained that model modification is to make changes to the model, namely by connecting between variables or between indicators to the possibilities that are not yet in the initial model. Hair also summarizes that modification of the SEM model can be done by: Guiding the modification index issued by the AMOS program, the pathway with a large modification index ( $\geq 4$ ) shows a pathway that is empirically significant, and can be added to the model. It can only be done by linking error indicators on the same variable, not with other variables. Because the concept of construct validity in SEM is cross loading, that is, an indicator must have a high correlation with the construct being measured and have low correlation with indicators in other constructs. Connecting between constructs, only if it can be justified by theory (justified by theory).

In this study, the process of modifying the SEM model based on the above conditions is presented in the following Figure:





**Figure 4 : Estimation Results of Structural Equation Modeling (Modification Model)**

The results of the calculation of the values of the goodness of fit indices produced by the structural model of the SEM modification model are as follows:

**Table 5 : Goodness of Fit Criteria in the SEM Modification Model**

Goodness of FitCriteria		Model Test Results	Critical Value	Conclusion
Absolute Fit Indices	Probability Chi-square	0,058	$\leq 0,05$	Good fit
	Cmin/DF	1,326	$\leq 2,00$	Good fit
	GFI	0,831	$\geq 0,90$	Marginal fit
	RMSEA	0,048	$\leq 0,08$	Good fit
Incremental Fit Indices	TLI	0,930	$\geq 0,95$	Marginal fit
	CFI	0,940	$\geq 0,95$	Marginal fit
Parsimony Fit Indices	AGFI	0,809	$\geq 0,90$	Marginal fit

The results of the structural model suitability test (modification model) showed that all the model suitability criteria had met the requirements (marginal fit or good fit). The explanation of each goodness of fit criterion is as follows: (1) Chi-square, the chi-square statistic ( $\chi^2$ ) is the most fundamental test tool for measuring model fit, however this statistic is very sensitive to the number of samples and the complexity of the model, so it needs to be accompanied with another index. The estimation result of the structural model produces a chi-square probability of 0.058, this value is greater than the 5% real level, so that the structural model is decided to be good fit. (2) Normed chi-square (Cmin / df), the ratio

between Chi-Square divided by the degree of freedom. The recommended value, the lower limit is 1, the upper limit is 2 or 3. The structural model estimation results produce a  $\chi^2/df$  of 1.326, this value is smaller than 2 which indicates a good fit structural model. (3) Goodness of Fit Index (GFI), GFI is a suitability index to calculate the weighted proportion of the variance in a systemized population covariance matrix. GFI values range from 0-1, with higher scores the better. A GFI of more than 0.90 is a good fit, while a GFI value between 0.80-0.90 is a marginal fit. The results of the structural model estimate produce a GFI value of 0.831, this value is in the range 0.80-0.90 which indicates that the structural model is still acceptable (marginal fit). (4) Root Mean Square Error of Approximation (RMSEA), RMSEA measures the deviation of the parameter values of a model with its population covariance matrix. A model is said to be close fit if it has an RMSEA value of less than or equal to 0.05 and a model is said to be good fit if it has an RMSEA between 0.05-0.08. The results of the structural model estimation produce an RMSEA value of 0.048, this value is less than 0.08, which indicates that the structural model is decided to be good fit. (5) Comparative Fit Index (CFI), the value of CFI ranges from 0 to 1. A model is said to be good fit if it has a CFI value greater than or equal to 0.95 and it is said to be marginal fit if it has a CFI value between 0.80-0.95. The results of the structural model estimation produce a CFI value of 0.940, this value is in the range 0.80-0.95 which indicates that the structural model is still acceptable (marginal fit). (6) Tucker Lewis Index (TLI), TLI is also known as a non-normed fit index, the value of TLI ranges from 0 to 1. A model is said to be good fit if it has a TLI greater than or equal to 0.95 and is considered acceptable (marginal fit) if the TLI value is between 0.80-0.95. The results of the structural model estimation produce a TLI value of 0.930, this value is in the range 0.80-0.95 which indicates that the structural model is still acceptable (marginal fit). (7) Adjusted Goodness of Fit Index (AGFI), AGFI is a modification

of GFI for the degree of freedom (df) in the model. A model is said to be good fit if it has an AGFI greater than or equal to 0.90 and it is said to be marginal fit if it has an AGFI between 0.80-0.90. The results of the structural model estimation produce an AGFI value of 0.809, this value is in the range 0.80-0.90 which indicates that the structural model is still acceptable (marginal fit).

Additional detection to determine whether the structural model is appropriate or not, is by looking at the value of standardized residual covariances. The resulting standardized residual covariances (Appendix 10) gives the lowest value (min) of -2.069 and the largest value (max) is 2.461, so that all the values of standardized residual covariances are within the range of  $\pm 2.58$ . Thus, it can be concluded that the structural model is acceptable and can be continued to the next analysis.

The results of the measurement model analysis on the construct of individual characteristics explain that of the three indicators, all of them contribute significantly in shaping the individual characteristics of taxpayers. The indicator that has the greatest contribution in shaping the individual characteristics of taxpayers is the indicator that has the largest factor loading, namely perception, so it is very important for the Surabaya city government to improve the characteristics of individual taxpayers by improving public perceptions about PBB, namely overcoming perceptual errors. and communications that are still appearing in the minds of the public about the UN to raise awareness

The analysis tool used is the Structural Equation Model (SEM) with the help of SmartPLS software. The results of this study prove that tax penalties, service quality, and tax penalties have a positive effect on taxpayer compliance. The results of this study also prove that taxpayer knowledge does not positively affect taxpayer compliance and also proves that taxpayer interaction and knowledge of fraud have a positive effect on their tax compliance.

So the implication of this research is that the tax authorities can apply tax laws which include tax penalties and penalties equally at each level of taxpayers and improve services in the taxation sector in the form of providing information to taxpayers.

SigitHandoyo, HardhikaMaghribiCandrapuspa (2017) examined using taxpayers in Banguntapan as respondents. The analysis tool used is the Structural Equation Model (SEM) with the help of SmartPLS software. The results of this study prove that tax sanctions have a positive effect on taxpayer compliance.

### **CONCLUSION:**

The results of the measurement model analysis on the construct of individual characteristics explain that of the three indicators, all of them contribute significantly in shaping the individual characteristics of taxpayers. The indicator that has the greatest contribution in shaping the individual characteristics of taxpayers is the indicator that has the biggest factor loading, namely perception.

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