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DETERMINANTS OF TAX COMPLIANCE: A STUDY ON INDIVIDUAL TAXPAYERS IN INDONESIA

Musthafa Kemal Nasution ¹, Fitri Santi ², Husaini ³, Fadli ⁴, Kashan Pirzada ⁵

¹²³⁴Faculty of Economics and Business, University of Bengkulu, Jl. WR. Supratman, Bengkulu 38371 Indonesia

⁵Asian Research Institute for Corporate Governance (AIRCG) and Tunku Puteri Intan Safinaz School of Accountancy, College of Business, Universiti Utara Malaysia, Sintok, Malaysia

E-mails: ¹ kemnas73@gmail.com; ² fitri_santi@unib.ac.id; ³ husaini@unib.ac.id; ⁴ fadli_abdullah@yahoo.com; ⁵ kashan@uum.edu.my

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Abstract. This study aims to analyze the effect of tax knowledge, tax complexity, and tax justice on taxpayers' trust and tax compliance as well as the differences in tax compliance levels in South Sumatra. The research is explanatory and takes a quantitative approach. The method of data collection used a questionnaire containing the variables and documentation outlined by the study. The research questions were tested using hypothetical compliance scenarios, with 900 registered individual taxpayers from five major cities in South Sumatra as participants. The researchers used confirmatory factor analysis (CFA) with the structural equation modeling (SEM) approach. Results of the research show that (1) tax knowledge has no effect on taxpayers' trust, (2) tax complexity has no effect on taxpayers' trust, (3) tax justice has an effect on taxpayers' trust, (4) tax knowledge has no effect on tax compliance, (5) tax complexity has no effect on tax compliance, (6) tax justice has an effect on tax compliance, (7) taxpayers' trust has an effect on tax compliance, and (8) there were differences in the level of tax compliance after the implementation of the SMS blast program.

Keywords: Tax Compliance; Taxpayers' Trust; Tax Knowledge; Tax Complexity; Tax Justice; Individual Taxpayers

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JEL Classifications: C83, H21, H24

1. Introduction

The low level of tax compliance in Indonesia is as crucial as it is in other countries. According to OECD (2017), the Indonesian tax ratio reached 11.8% in 2015. This is lower than other Southeast Asian countries, such as Malaysia (15.3%), Singapore (13.6%) and the Philippines (17%). This is further explained by Araki and Claus (2014), who classified Indonesia into group of other countries with low levels of tax compliance, such as Cambodia and India. This is significant because Indonesia had the 16th highest gross domestic product (GDP) in 2019 (World Bank, 2019) and is one of the six non-OECD countries with largest economies, along with Brazil,

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Russia, India, China, and South Africa (BRICS) (OECD, 2008). To increase the tax ratio and the nation's income, the Indonesian government must improve tax compliance by exploring the determinants of individual taxpayers' compliance. Chau and Leung (2009) state that "tax compliance is growing international concerns for tax authorities and public policy makers as tax evasion seriously threatens the capacity of government to raise public revenue" (p. 34). Tax compliance is also a main topic in economic psychology. This issue has been analyzed from different perspectives that focus on several aspects of taxpayer behavior. Attitude is measured, social norms are applied, and common theories are explored when people declare their annual tax return (Kirchler, 2007). In Indonesia's case, the number of individual taxpayers dominates all registered taxpayers, at around 90% of the total. However, their share in terms of tax contribution is still low.

Previous studies have tried to explain the arguments concerning factors that influence tax compliance, but it is unclear whether these studies contribute to the tax system in developing countries because, in some developing countries, local authorities tend to have less power and public trust due to political, social, and economic instability, leading to low tax compliance. On the contrary, some developed countries have demonstrated stronger tax regulation and higher trust, which generate high tax compliance (Bird, Martinez-Vazquez, and Torgler, 2008). The present research names tax compliance as the second endogenous latent variable and applies the theory of planned behavior (TPB) (Ajzen, 1991) to its hypothesis. This research also uses a combination of concepts revealed by Bărbuță-Mișu (2011) and Alm (2018), who divided factors influencing tax compliance into two groups, namely, economic and noneconomic. This study utilizes several applied theories based on the review of the related literature to analyze the other identified variables: (1) the first endogenous latent variable (taxpayers' trust) and (2) the exogenous latent variables (tax knowledge, tax complexity, and tax justice). This study aims to analyze the effect of tax knowledge, tax complexity, and tax justice on taxpayers' trust and tax compliance as well as the differences in tax-compliance levels in South Sumatra. The researchers selected this region because no tax compliance-related studies have examined it and the rate of individual taxpayers' compliance is still low. Additionally, it may become the benchmark for other regions in Indonesia to increase their tax compliance.

The novelty of this research is the categorization of registered individual taxpayers into two groups: (1) compliant taxpayers (CT) who regularly pay taxes and file an annual tax return and (2) noncompliant taxpayers (NCT). CT consists of paying-filing taxpayers (PFT). NCT is divided into three subgroups: paying-nonfiling taxpayers (PNFT), filing-nonpaying taxpayers (FNPT), and nonpaying-nonfiling taxpayers (NPNFT). Furthermore, none of the previous studies has focused on the differences in tax-compliance levels among individual taxpayers categorized as noncompliant, before and after the implementation of a certain tax scheme. Hence, this study employs a short message service (SMS) blast to test individual taxpayers' compliance levels in South Sumatra. This study contributes to improving tax compliance in South Sumatra and expanding the Indonesian tax base because the focus is shifted from increased tax revenue to new tax revenue generated from NPNFT.

The rest of this paper is organized as follows: a survey of related literature and the development of hypotheses are provided in Section 2. Section 3 describes the research objective and methodology employed in this paper. The results and discussion are reported in Section 4, and Section 5 concludes the paper.

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2. Literature review

2.1 Effect of tax knowledge on taxpayers' trust

Fahr and Djawadi (2013) explain that tax compliance is considered high in a tax system with low power of authority when complete transparency concerning public expenses is provided and when taxpayers are given options in utilizing the taxes they paid. Fahr and Djawadi (2013) further demonstrate that strong tax authority, reflected from high tax audits, does not guarantee the improvement of tax compliance, even when taxpayers' trust is increased. However, with adequate tax knowledge, taxpayers are more likely to trust the tax authorities, ultimately leading to tax compliance. Palil, Akir, and Ahmad (2013) found that tax compliance is lower among people with less tax education and knowledge. In other words, with proper tax knowledge, taxpayers will be able to decide whether they trust the tax authorities. This emergence of trust will eventually determine the taxpayer's decision to comply with tax obligation. Gitaru (2017) argues that electronic education of taxpayers, print media, taxpayers' education, and the stakeholders' engagement influence tax compliance among small-medium enterprises (SMEs) in Nairobi, Kenya. The sensitivity of stakeholders is positively related to taxpayers' education in calculating correct tax liabilities (Susanto, Pirzada, and Adrienne, 2019). Overall, education influences taxpayers' trust in the tax authorities. This will lead to taxpayers' willingness in paying their taxes voluntarily. Considering these studies, the first hypothesis predicts:

H1: Tax knowledge influences taxpayers' trust in South Sumatra.

2.2 Effect of tax complexity on taxpayers' trust

Forest and Sheffrin (2002) state that tax complexity influences taxpayers' trust on tax authorities. Budak and James (2018), who believe that complexity has a significant part in improving the costs of tax compliance, support Forest and Sheffrin's idea. Complexity particularly affects compliance related to complex legislation because complicated legislation makes it costly for taxpayers to comply with their obligations. Saad (2014) proves that tax complexity influences tax compliance. It is caused by the huge amount of paperwork to be completed by taxpayers in New Zealand in complying with their tax obligations. Gambo, Mas'ud, Nasidi, and Oyewole (2014), who investigated tax compliance in 44 African countries, suggest that tax complexity negatively affects taxpayers' trust toward tax authorities. Brainnyah and Rusydi (2016) conducted a study on SME entrepreneurs in Malang, East Java, and discovered that tax complexity has significant and negative correlations with tax compliance behavior. This study indicates that the more complex a tax regulation is, the more ignorant the taxpayers will be. Furthermore, Mahangila (2017), who studied 75 SME entrepreneurs in Dar es Salaam, Tanzania, suggests that tax complexity has an impact on taxpayers' trust toward tax authorities. Based on these studies, the second hypothesis is proposed:

H2: Tax complexity influences taxpayers' trust in South Sumatra.

2.3 Effect of tax justice on taxpayers' trust

Benk, Budak, and Cakmak (2012) identify six dimensions of tax fairness, namely, general fairness, tax share and tax burden of middle-income earners, exchange with the government, tax-rate structure, special provisions, and tax system equality and inequality. Benk, Budak, and Cakmak, (2012) further conclude that tax fairness has an impact on taxpayers' trust in Turkey. Gberegbe, Idornigie, and Nkanbia-Davis (2015) explain that taxpayers' perceptions toward tax justice applied by tax authorities affects taxpayers' trust. Faizal and Palil (2015), who

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studied individual taxpayers in Malaysia, reveal that tax fairness perception influences individual taxpayers' trust. This illustrates that the more fairness is perceived by taxpayers, the higher the level of taxpayers' trust will be. Belay and Viswanadham (2016) researched several cities in Amhara Regional State, Ethiopia, and discovered that perceptions of tax fairness have an impact on individual taxpayers' trust. They further explain that there are concerns regarding several aspects of the country's income tax system that need to be improved. Based on the preceding discussions, the third hypothesis is formulated:

H3: Tax justice influences taxpayers' trust in South Sumatra.

2.4 Effect of tax knowledge on tax compliance

Newman and Nokhu (2018), who studied several SMEs in Zimbabwe, identified that these SMEs possess basic tax knowledge but no deeper understanding concerning the differences between presumptive taxation and income-based taxation. However, this result insignificantly affects their noncompliance, meaning tax knowledge influences tax compliance. Newman and Nokhu (2018) further explain that to positively impact tax compliance, tax tariff and corruption issues must be taken seriously. Bernard, Memba, and Oluoch (2018) conducted a study on investors in export processing zones (EPZs) in Kenya and advised that tax knowledge has a close relationship with taxpayers' ability to understand tax rules and regulations as well as their willingness to comply with them. A company with employees trained in taxation matters is likely to voluntarily fulfill their tax obligations based on applied tax rules and regulations. Due to these findings, the fourth hypothesis is as follows:

H4: Tax knowledge influences tax compliance in South Sumatra.

2.5 Effect of tax complexity on tax compliance

Krause (2000) proves that uncertainty, ignorance, and burdensome documentation requirements prevent some taxpayers from taking advantage of legitimate tax rebates and deductions, while others find opportunities to avoid taxes in such ambiguous provisions. Complexity has undermined the ability of Internal Revenue Service (IRS) ability to distinguish between intended tax avoidance and honest misinterpretation regarding tax codes and planning Rudyanto and Pirzada, 2020). McKerchar (2005), who surveyed tax agents in Australia, discovered that these agents disagree with the increased complexity of tax laws Richardson (2006), in his research of 45 countries, suggests that complexity is the main driver of noncompliance besides education, source of income, justice, and tax morale. His findings are consistent with that of Cox and Eger III (2006) who believe that complexity leads to misdirection of objectives of the tax agency an increased opportunity for noncompliance. Similarly, Kirchler, Niemirowski, and Wearing (2006) argue that the possibility of compliance is higher when tax laws are considered less complex. These thoughts lead to the fifth hypothesis:

H5: Tax complexity influences tax compliance in South Sumatra.

2.6 Effect of tax justice on tax compliance

Musthapha (2010) performed a study in Nigeria and believes that two out of five dimensions of tax justice, namely, exchange with government and special provisions, affect tax compliance. Similarly, Mukasa (2011) states that an increase in tax justice will lead to the improvement of tax compliance. Gberegbe and Umoren (2017) claim that distributive justice, procedural justice, retributive justice, and perceptions of tax justice affect individual taxpayers' compliance in Rivers State, Nigeria. Olaoye, Ayeni-Agbaje, and Alaran-Ajewole (2017) studied block

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molding firms in Ekiti Province, Nigeria, and point out that tax knowledge has a higher tendency to promote tax compliance than tax administration. Furthermore, Sidik, Zandi, and Ruhoma (2019), who researched individual taxpayers in Libya, state that tax justice influences tax compliance. They believe that public perception of fairness depends on how they perceive tax system to be fair or not. These findings lead to the next hypothesis:

H6: Tax justice influences tax compliance in South Sumatra.

2.7 Effect of taxpayers' trust on tax compliance

Wahl, Kastlunger, and Kirchler (2010) discovered that power and trust have a positive impact on tax payment. Dependable and reliable tax authorities could increase tax compliance voluntarily or by law enforcement. Kogler et al. (2013) and Muehlbacher, Kirchler, and Schwarzenberger (2011) revealed similar findings, suggesting that trust in tax authorities increases voluntary tax compliance. Additionally, Bornman (2015) proposes that perceptions of fairness, treatment of authorities, norms and attitudes, and subjective tax knowledge are the main factors determining trust in tax authorities. However, several studies use limited descriptors when measuring this relationship. Bornman (2015) further suggests that standard survey instrument need to be developed to measure this perception. Based on these studies, the seventh hypothesis is proposed:

H7: Taxpayers' trust influences tax compliance in South Sumatra.

2.8 Differences in taxpayers' compliance levels

Najah (2008) and Husaini, Pirzada, and Saiful (2020) argues that there is no difference in corporate taxpayers' compliance levels before and after the enactment of a tax audit. Komalasari and Nasih (2010) tested the influence of taxpayers' reported income toward the level of their compliance and found that there was no significant difference in the level of taxpayer compliance whether a 15% or 30% tax tariff was imposed. Fajarwati, Kertahadi, and Kurniawan (2004) conducted a study in several tax offices in Malang Raya, East Java and found that there was a significant difference between the degrees of tax compliance before and after the implementation of a tax modernization program. These studies explain the differences in taxpayers' compliance levels before and after the implementation of tax-related schemes. Accordingly, this study applies a tax program called an SMS blast to test the compliance levels in South Sumatra. This leads to the eighth hypothesis:

H8: There will be differences in taxpayers' compliance levels before and after the implementation of the SMS blast program.

3. Research objective and methodology

3.1 Design, variables, measurements, and sources

This research is explanatory with a quantitative approach. Three main objectives were achieved through this study. The first objective is a description of taxpayers' trust as the first endogenous latent variable (Y1); tax compliance as the second endogenous latent variable (Y2); and tax knowledge (X1), tax complexity (X2), and tax justice (X3) as exogenous latent variables (X). The second is the effect of the exogenous latent variables on Y1 and Y2 and the influence of Y1 on Y2. The third objective is to identify the differences in tax compliance among individual taxpayers who fall into the noncompliant category consisting of PNFTs, NPFTs, and NPNFTs.

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3.2 Population, sample, data collection, and method of analysis

The population of this study includes all individual income taxpayers registered in tax offices in the five provinces of South Sumatra, including Jambi, South Sumatra, Bengkulu, Lampung, and the Bangka Belitung Islands (see Table 1). The study used representative sampling to reflect the characteristics of the larger population. Research questions were tested using hypothetical compliance scenarios with 900 registered individual taxpayers from five major cities in South Sumatra as participants. The determination of the sampling method was based on the idea that “the number of samples in the SEM study was 5–10 times the number of indicators” (Hair et al., 2014, p. 615). In this study, the multiplier factor of 10 is used to provide a more detailed and accurate picture of the five variables studied. With a total of 78 indicators, the total sample was 780 people. The sample size was increased to 900 people to anticipate insufficient or incomplete data. In practice, out of five tax offices, 180 samples of individual taxpayers were determined in each province and divided into two groups, consisting of 90 employees and 90 nonemployees. The characteristics of the respondents include gender, age, education, type of employment, and duration as taxpayer (see Table 2).

Table 1. Research Population

No.	Provinces	Registered Individual Taxpayers		Subtotal
		Employees	Nonemployees	
1	Jambi	33,286	17,823	51,109
2	South Sumatra	58,976	29,632	88,608
3	Bengkulu	31,717	15,898	47,615
4	Lampung	52,294	27,118	79,412
5	Bangka Belitung Islands	13,265	7,096	20,361
Total		189,538	97,567	287,105

Source: Indonesian Directorate General of Taxes (2018)

Table 2. Characteristics of Research Respondents

Characteristics	Items	Number of respondents	Percentage (%)
Gender	Male	547	70.13
	Female	233	29.87
Age	17–25 years	3	1.18
	26–35 years	72	28.23
	36–45 years	40	15.67
	46–55 years	140	54.90
Education	High school graduate	78	10.00
	Tertiary education (Grade 1–3)	141	18.08
	Bachelor’ degree	492	63.08
	Master’s degree	53	6.79
	Doctoral degree	16	2.05

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Type of employment	Employee a. Civil servant	195	25.00
	b. Private	195	25.00
	Nonemployee	390	50.00
Duration as taxpayer	1–5 years	139	15.29
	5–10 years	434	52.55
	> 10 years	207	32.16

Registered taxpayers in South Sumatra are dominated by men (70.13%), age 46–55 (54.90%) with undergraduate qualifications (63.08%).

Data collection used a questionnaire containing the latent variables and documentation. The data was then processed using a Likert scale. of the data was analyzed using a quantitative approach to test the effect of the exogenous latent variables (X1, X2, X3) on the first endogenous latent variable (Y1) and the second endogenous latent variable (Y2) and to test the effect of Y1 on Y2. The quantitative analysis also examines the differences in compliance levels of noncompliant taxpayers (NCT), who are divided into three subgroups: paying-nonfiling taxpayers (PNFT), filing-nonpaying taxpayers (FNPT), and nonpaying-nonfiling taxpayers (NPNFT). The analysis method uses confirmatory factor analysis (CFA) with the structural equation modeling (SEM) approach. A statistical program called a linear structural relationship (LISREL) was applied to estimate SEM. Other statistical tools included statistical package for the social sciences (SPSS) to perform descriptive statistics, a validity test, a reliability test, and a Z-test. Based on the analyses of previous studies related to tax compliance, trust, tax knowledge, tax complexity, and tax justice, a research framework as seen in Figure 1 was developed.

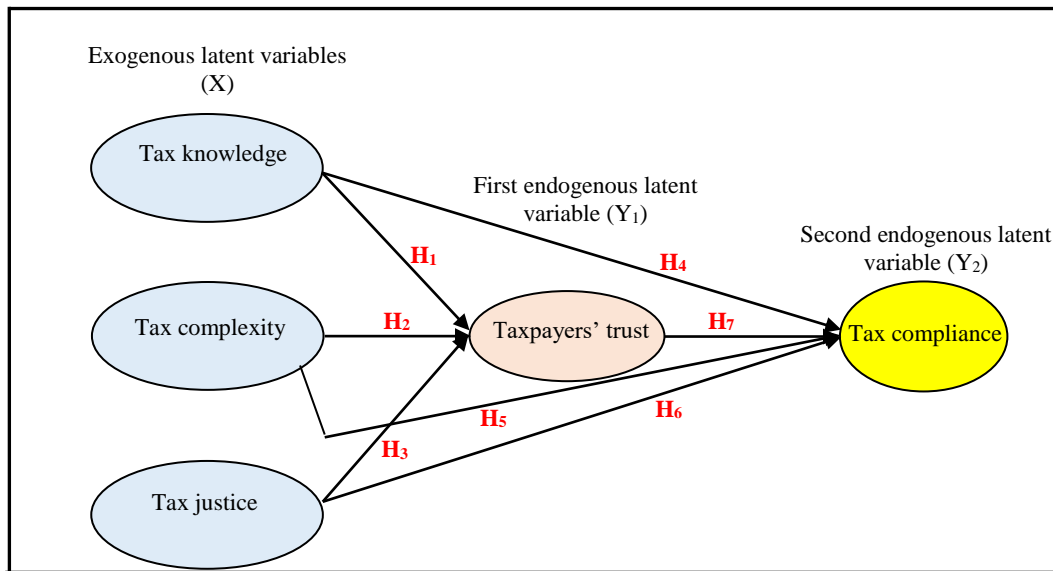


Figure 1. Conceptual Framework

Sources: Tax compliance: Alm (2018); Bărbuță-Mișu (2011); Taxpayers' trust: Bornman (2015); Tax knowledge: Asrinanda & Diantimala (2018); Istiqamah et al. (2018); Saad (2014); Tax complexity: AICPA (1992); Cox & Eger III (2006); McCaffery (1990); Pau et al. (2007); Richardson & Sawyer (1998); Saw & Sawyer (2010); Tax justice: Colquitt (2001); Farrar et al. (2013); Gberegbe et al. (2015); Kirchler et al. (2014)

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3.3 Validity and reliability test

The validity test is a measure of the accuracy of the instruments used in the study (Linn and Grondlund, 2000; Stewart, 2009), while a reliability test shows the number of measurement errors in a test (Tavakol and Dennick, 2011, p. 53). Reliability and validity are concepts used to evaluate the quality of research. They indicate how well a method, technique, or test measure something. This study employs these two tests to measure the accuracy and consistency of questionnaire items in explaining indicators of each research variable. Hair, Black, Babin and Anderson (2010) suggest that an item is considered valid if it has a factor loading value > 0.6 , while Nunnally and Bernstein (1994) point out that data is reliable if Cronbach's alpha value is > 0.7 . The test results are shown in Table 3.

Table 3. Results of Validity and Reliability Test

No.	Research variables	AVE value	Result	Cronbach's alpha	Result
1	Tax compliance	0.76	Valid	0.793	Reliable
2	Taxpayers' trust	0.73	Valid	0.746	Reliable
3	Tax knowledge	0.76	Valid	0.711	Reliable
4	Tax complexity	0.74	Valid	0.737	Reliable
5	Tax justice	0.73	Valid	0.752	Reliable

Research variables with a value of AVE > 0.6 indicate there is sufficient convergence for each variable. Cronbach's alpha value is greater than 0.7, meaning all five variables are reliable for further processing.

4. Results and discussion

4.1 Descriptive statistics

Table 4 shows that the number of respondents is 780 people and tax compliance had an average value of 298.32 (the lowest value). This indicates that, compared to other variables, tax compliance has the lowest preference among respondents. Taxpayers' trust had an average value of 309.71. Tax knowledge had an average value of 339.50. Tax complexity had an average value of 343.46, and tax justice had an average value of 344.29 (the highest value).

Table 4. Descriptive Statistics Results

No.	Research variables	n	Maximum	Minimum	Mean
1	Tax compliance	780	615	19	298.32
2	Taxpayers' trust	780	627	9	309.71
3	Tax knowledge	780	688	9	339.50
4	Tax complexity	780	689	3	343.46
5	Tax justice	780	694	6	344.29

The amount of data to be studied is 780 samples. The tax compliance variable has a mean value of 298.32, meaning an average of 298 individual taxpayers in South Sumatra show preference for tax compliance.

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4.2 Confirmatory factor analysis

This study utilizes confirmatory factor analysis (CFA) with the SEM approach to analyze the effect of the exogenous latent variables on Y1 and Y2 and the influence of Y1 on Y2. The analysis tool uses a computer-based application program, namely, a linear structural relationship (LISREL). The stages of CFA are as follows (Hair et al., 2010, p. 628):

4.2.1 Development of theory-based model

The research model was based on the theory of planned behavior (TPB) (Ajzen, 1991) and a combination of concepts by Bărbuță-Mișu (2011) and Alm (2018), who place factors influencing tax compliance into two groups, namely, economic and noneconomic. TPB suggests that a person's motivation to perform a certain behavior is also influenced by the individual's perception of how easy or difficult the behavior is. This justifies the need to expand the model to understand other factors that influence tax compliance. This theory-based model consists of five variables, including taxpayers' trust as the first endogenous latent variable (Y1), tax compliance as the second endogenous latent variable (Y2), and tax knowledge, tax complexity and tax justice as exogenous latent variables (X1–X3). The model developed in this study is illustrated in Figure 1.

4.2.2 Path diagram development

The path diagram aims to predict the causal relationship between predetermined variables and tests the contribution of each exogenous latent variable to Y1 and Y2 and the contribution of Y1 to Y2 (the test result is not presented in this paper).

4.2.3 Conversion of path diagram into equations

The next step after the theoretical model is developed and depicted in a path diagram is to convert the model into a series of equations, which include:

- A structural equation, which aims to determine the causal relationship between various variables. This study produces a structural equation as follows:
$$\text{Tax Compliance (TCO)} = \text{Taxpayers' Trust (TPT)} + \text{Tax Knowledge (TK)} + \text{Tax Complexity (TC)} + \text{Tax Justice (TJ)} + \text{error}$$
- The measurement model equation, which only involves the indicators of the variable gauges. The measurement model uses the equation $x = \lambda\xi + e$

4.2.4 Selection of input matrix and estimation technique

The input matrix is used to test the causality between variables. The input matrix used in this study is the covariance matrix. The estimation technique is the maximum likelihood estimation method (Hair et al., 2010, p. 631). This technique is carried out in stages by estimating the measurement model with CFA, which aims to determine the suitability of the model and the causality relationship that is built. CFA analysis in this study is carried out in two forms, namely, CFA for exogenous latent variables and for endogenous latent variables. The test results of the exogenous latent variables confirmatory factor model are shown in Table 5.

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Table 5. Exogenous Latent Variables Confirmatory Factor Model Test Results

Goodness of fit indices	Cut-off value	Results	Model evaluation
<i>Chi-square</i>	χ^2 dengan DF = 83; P: 5% = 91,273	83.731	Good
<i>Probability</i>	≥ 0.05	0.066	Good
CMIN/DF	< 2.00	1.748	Good
GFI	≥ 0.90	0.911	Good
AGFI	≥ 0.90	0.929	Good
TLI	≥ 0.95	0.965	Good
CFI	≥ 0.95	0.979	Good
RMSEA	≤ 0.08	0.073	Good

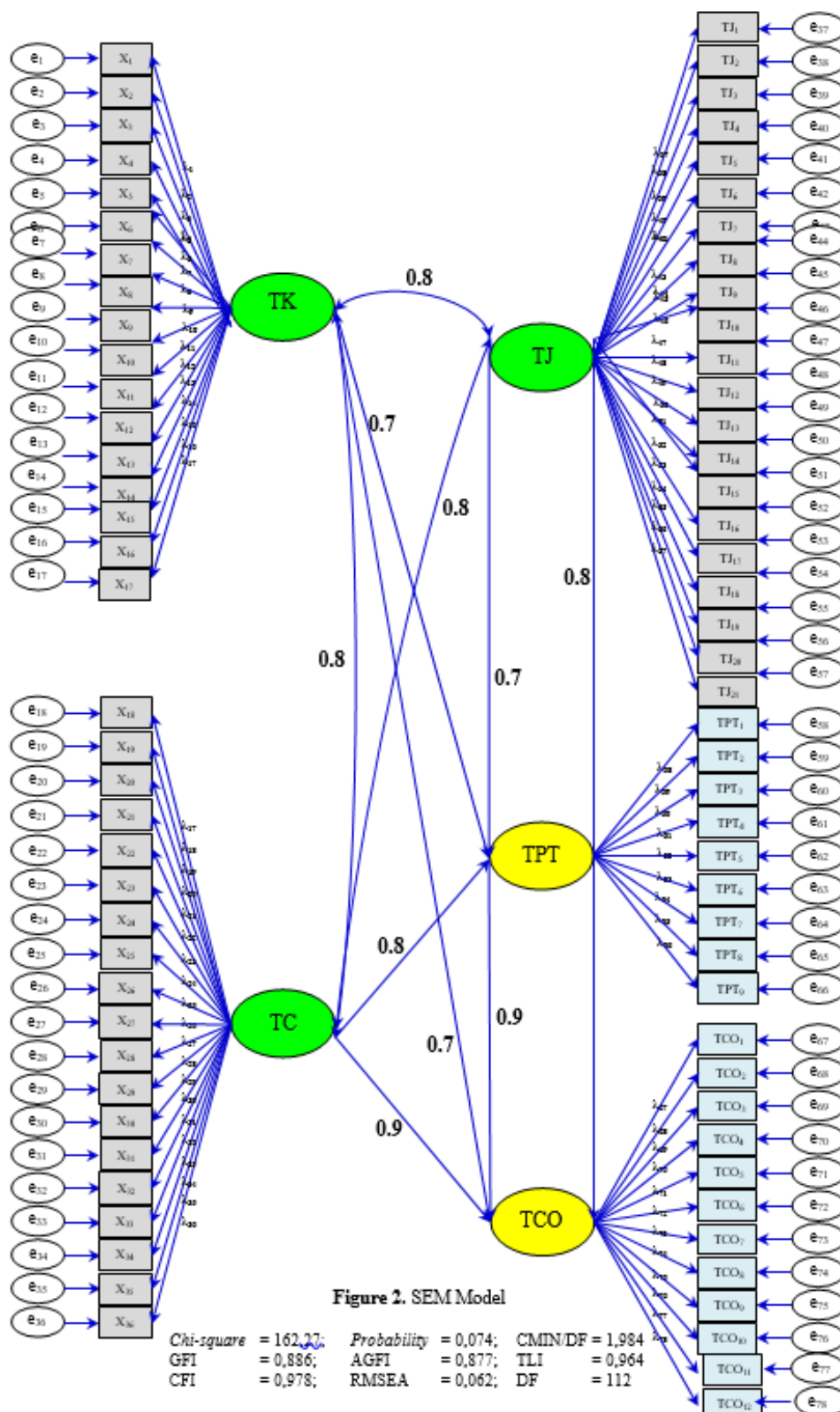
The exogenous latent variable confirmatory model is feasible to be tested at the full-model stage. This is indicated by the value of the calculation results that meet the criteria of a decent model based on various parameters of the feasible model (goodness of fit indices).

Table 5 illustrates that all the parameter values obtained meet the specified cut-off value. The results of the calculation show that each of the forming indicators of each exogenous latent variable meet the criteria, indicated by the critical value (CR), which is greater than 2.58 with probability (P) less than 0.01. Conversely, there is no specific variable that influences the second endogenous latent variable (tax compliance). Therefore, a confirmatory analysis of the second endogenous latent variable is not applied in this study.

4.2.5 Structural equation modeling analysis

Structural equation modeling (SEM) consists of two types: (1) SEM with a covariance-based approach, in which the statistical tools are AMOS/LISREL, and (2) SEM with a variant/component-based approach (Chin, 1998; Fornell and Bookstein, 1982). This study employs LISREL because the sample is more than 500 people. The results of data processing for SEM analysis in the full model are presented in Figure 2.

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Figure 2 shows that the full-model analysis meets the fit criteria. This is indicated by the value of the calculation that meets the eligibility criteria for the full model. The test results in the full-model analysis are also converted into tabular form as seen in Table 6.

Table 6. Full-Model Test Results

Goodness of fit indices	Cut-off value	Results	Model evaluation
<i>Chi-square</i>	χ^2 dengan DF = 112; P: 5% = 168.800	162.271	Good
<i>Probability</i>	≥ 0.05	0.089	Good
CMIN/DF	< 2.00	1.984	Good
GFI	≥ 0.90	0.886	Good
AGFI	≥ 0.90	0.877	Good
TLI	≥ 0.95	0.963	Good
CFI	≥ 0.95	0.978	Good
RMSEA	≤ 0.08	0.062	Good

The results of the chi-square test calculation on the full model show that the chi-square value of 162.271 is smaller than the chi-square table for 112 degrees of freedom at a significant level (p) 5% of 168.800.

Table 6 shows that all parameter values obtained meet the specified cut-off value. Therefore, it can be concluded that the exogenous latent variables meet the criteria for the fit model (goodness of fit indices). Based on these results, all exogenous latent variables can be processed with the full model. SEM results testing is then carried out through the calculation of full-model regression weights. The calculation results show that of the seven hypotheses tested, there are four influences with a CR value smaller than 2.58 and a P value greater than 0.01, namely, the effect of tax knowledge on taxpayers' trust, the influence of tax knowledge on tax compliance, the effect of tax complexity on taxpayers' trust, and the effect of tax complexity on tax compliance. Based on these results, these four hypotheses are rejected. In conclusion, only three of the seven hypotheses that use CFA with the SEM approach are accepted.

4.2.6 Evaluate the criteria for goodness of fit

Goodness of fit evaluation aims to assess how well the research model is being developed. One way is to test the normality of the data. The data normality test seeks to test whether the regression model has normal data distribution by using the Skewness–Kurtosis test. The values of Z-Skewness and Z-Kurtosis are shown in Table 7.

Table 7. Results of Data Normality Test

Observed values	TCO	TPT	TK	TC	TJ
<i>Z-Skewness</i>	-1.723	-1.837	1.542	1.976	1.612
<i>Z-Kurtosis</i>	1.961	-1.488	-1.863	1.265	1.070

TCO = Tax compliance; TPT = Taxpayers' trust; TK = Tax knowledge; TC = Tax complexity; TJ = Tax justice

Table 7 shows that none of the tested variables has Z-Skewness and Z-Kurtosis values smaller than -2.58 and greater than +2.58. Based on these results, it can be concluded that the data for the five research variables were normally distributed.

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4.2.7 Model interpretation and modification

A good model has a small standard residual covariance value. The standard residual covariance allowed is +2.58. These results show that the standard residual covariance exceeds +2.58 in 12 factors. The 12 factors include x3 (bachelor degree), x7 (tax course), x8 (comparative tax study), x17 (self-employed), x23 (difficulty calculating taxable income), x28 (online completion of tax registration), x34 (overly long sentences), x41 (bias), x48 (appropriateness), x49 (timeliness), x53 (taxpayers' technical competency) and x65 (social norms). Based on these results, data modification of the full model is not necessary because only a few indicators exceed +2.58.

4.2.8 Hypotheses testing

Results of the research show that the first hypothesis (H1) has a critical ratio (CR) value of $2.467 < 2.58$ and probability (P) of $0.018 \geq 0.01$, meaning H1 is rejected. This shows that tax knowledge has no effect on taxpayers' trust. The second hypothesis (H2) has a CR value of $2.496 < 2.58$ and P of $0.013 \geq 0.01$, meaning H2 is rejected. This result shows that tax complexity has no effect on taxpayers' trust. The third hypothesis (H3) has a CR value of $2.593 \geq 2.58$ and P of $0.002 < 0.01$, meaning H3 is accepted. This result shows that tax justice influences taxpayers' trust. The fourth hypothesis (H4) has a CR value of $2.521 < 2.58$ and P of $0.054 \geq 0.01$, meaning H4 is rejected. This result shows that tax knowledge has no effect on tax compliance. The fifth hypothesis (H5) has a CR value of $2.368 < 2.58$ and P of $0.059 \geq 0.01$, meaning H5 is rejected. This result illustrates that tax complexity has no effect on tax compliance. The sixth hypothesis (H6) has a CR value of $2.685 \geq 2.58$ and P of $0.004 < 0.01$, meaning H6 is accepted. This result shows that tax justice influences tax compliance. The seventh hypothesis (H7) has a CR value of $5.727 \geq 2.58$ and P of $0.003 < 0.01$, meaning H7 is accepted. This result shows that taxpayers' trust influences tax compliance.

4.3 Z-test analysis

The following is the result of differences in levels of tax compliance before and after the implementation of a short message service (SMS) blast program (see Table 8).

Table 8. Differences in Individual Tax Compliance Levels Before and After the Implementation of the SMS Blast Program

Implementation of SMS Blast				Finding
Before		After		
x	μ	x	μ	
4.31	5.62	7.09	8.08	$\bar{x} \neq \mu$

The result of the Z-test (particularly, two-way hypotheses with SPSS as a statistical tool) shows that there are differences in tax-compliance levels after the implementation of the SMS blast program. This is because the average value of the population (x) does not equal the average sample (μ). Before the implementation of the SMS blast, the tax-compliance levels of the semi-noncompliant groups of individual taxpayers, which are a combination of PNFT and NPFT, are better than that of NPNFT. After the implementation of this program, the semi-noncompliant groups became more compliant and partly turned into compliant group PFT. Additionally, the NPNFT group became more compliant and partially converted into a semi-noncompliant group. These facts show that there are differences of tax-compliance levels after the implementation of the SMS blast and that this program is effective in increasing tax compliance in South Sumatra. Therefore, the eighth hypothesis (H8) of this research is accepted.

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This study finds that tax knowledge does not affect taxpayers' trust. It reveals that the availability of dimensions along with indicators that form tax knowledge are not able to influence the trust of individual taxpayers. This finding corresponds to the results of Manual and Xin (2016). However, there are some important differences between the two studies, especially regarding variable indicators. "Remembering" was the strongest indicator of the tax-knowledge variable, while "tax training" was the weakest.

This research also reveals that tax knowledge has no effect on tax compliance, similar to a study by Fauziati, Minovia, Muslim, and Nasrah (2016). Based on these two findings, this study suggests that the Indonesian tax authorities need to provide more tax training to improve taxpayers' knowledge, as explained by Anderson et al. (2001). Moreover, this study shows that tax complexity does not affect the trust of individual taxpayers. This contradicts results reported by Budak and James (2018), Forest and Sheffrin (2002), and Mahangila (2017). This study also notices that tax complexity has no effect on tax compliance. In contrast, Kirchler et al. (2006) argue that the possibility of taxpayers to comply is higher when tax laws are less complex.

This study reveals that "appropriateness of tax rates increase" and "difficulty in calculating taxable income" are the strongest indicators of tax complexity, while "overly long sentences" and the "use of difficult words in tax forms" are the weakest. This study also reveals that tax justice affects the trust of taxpayers. Similarly, Faizal and Palil (2015), who researched individual taxpayers in Malaysia, prove that the perception of tax justice impacts taxpayers' trust. In this research, "correction" was the most robust indicator of tax justice that affects taxpayers' confidence in taxes, while "criminal sanction" was the weakest. Additionally, tax justice was found to influence tax compliance. These findings support the results of Gilligan and Richardson (2005). Concerning the measures of the tax justice variable, this study notices that "consistency," "compatibility," "correction," "respect," "appropriateness," and "tax penalties" are the most robust indicators of tax justice that affect tax compliance. Conversely, the "bias" indicator is the weakest. Furthermore, this study exhibits that taxpayers' trust influences tax compliance, similar to a study by Damayanti and Martono (2018), who utilize the slippery slope theory in their research. This present research also contributes to the findings of "obedience to the law," "trust in tax authority action," and "legal norms" as the strongest gauges of taxpayers' trust that affect tax compliance, while "sense of responsibility," "social norms," and "personal norms" are the weakest.

Finally, this study shows that there are differences in tax-compliance levels after the implementation of the SMS blast program. This is in line with that of Wardani and Wati (2018), who discovered significant differences before and after the enactment of tax counseling. This study also offers the categorisation of noncompliant registered individual taxpayers, consisting of paying-nonfiling taxpayers (PNFT), filing-nonpaying taxpayers (FNPT), and nonpaying-nonfiling taxpayers (NPNFT), as the novelty of this research. This is because none of the previous studies have focused on the differences in tax-compliance levels among individual taxpayers before and after the implementation of certain tax schemes.

5. Conclusions

This study has shown that tax justice and taxpayers' trust are determinants of tax compliance in South Sumatra, Indonesia. However, two other variables analyzed in this study, namely, tax knowledge and tax complexity, are proven to not influence tax compliance. The survey results also show that tax complexity has the lowest score among the variables. Therefore, tax authorities need to reassess their policies in improving tax compliance and give more attention to weak predictors of variable indicators, particularly those with the lowest scores. Additionally, this study reveals differences in tax-compliance levels after the implementation of the SMS blast program.

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The findings of this study have three main implications. First, it provides a comprehensive review of prior research that had studied the influence of economic and noneconomic factors on tax compliance. Second, it determines which variables are significant predictors of the outcome variables. This relates to the four variables involved in this study as determinants of tax compliance: tax knowledge, tax complexity, tax justice, and taxpayers' trust. By understanding the determinants of tax compliance, the management team of tax authorities in South Sumatra will be able to find solutions to repair and upgrade the variables that have no effect on tax compliance. Third, this study delivers suggestions to the Indonesian tax authorities for improving tax compliance not only based on accelerated tax revenue but also new tax revenue generated from nonpaying-nonfiling taxpayers (NPNFT). The key direction for future research is a wider coverage of respondents to include registered and unregistered taxpayers as well as samples that capture the voice of the population and taxpayers in other regions. This will provide a more comprehensive explanation of the low tax compliance phenomenon in Indonesia.

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Musthafa Kemal NASUTION is a PhD candidate in management science, Faculty of Business and Economics at University of Bengkulu, Bengkulu, Indonesia. He is currently working as the head of the Tax Audit Section at the Indonesian Directorate General of Taxes. Research interests: taxation, behavioral finance.

ORCID ID: <https://orcid.org/0000-0002-7337-7621>

Fitri SANTI is an Associate Professor of management and finance in the Management Department, University of Bengkulu. She works at the University of Bengkulu, Faculty of Economics and Business. Research fields: banking, finance and investment, behavioral finance and corporate governance. She has published papers both in national and international journals and presented papers at various international conferences.

ORCID ID: <https://orcid.org/0000-0002-2404-5604>

HUSAINI is an Associate Professor of Accounting in the Accounting Department, University of Bengkulu. He works at the University of Bengkulu, Faculty of Economics and Business. Research fields: corporate governance, risk management, and auditing.

ORCID ID: <https://orcid.org/0000-0001-6482-9844>

FADLI is a lecturer and researcher in the Accounting Department, University of Bengkulu. He works at the University of Bengkulu, Faculty of Economics and Business. His research fields are accounting and management.

ORCID ID: <https://orcid.org/0000-0001-6874-1858>

Kashan PIRZADA is an Asst. Prof. of financial accounting at the Asian Research Institute for Corporate Governance (AIRCG) and Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia. He continues researching on financial accounting issues in both advanced capitalist countries and emerging/less-developed countries.

ORCID ID: <https://orcid.org/0000-0003-1186-0631>

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