TAXPAYER COMPLIANCE MODEL BASED ON TRANSPARENCY, ETHICS, AND TRUST

YENNI MANGOTING (yenni@petra.ac.id)
HENRI TANGKELOBO
WIHELMINA LELY SIN

Accounting Department, Business and Economics Faculty, Petra Christian University, Indonesia.

ABSTRACT

The effort to develop the taxpayer compliance model is an effective way to understand taxpayers' motivation in paying tax, which affects tax-compliant behavior. This study uses transparency, ethics, and trust, as factors to predict taxpayers' compliance. Based on this background, the study aims to test the role of trust and ethics in mediating the factors of transparency and tax compliance. The respondent of this research is Individual Taxpayers running a business in the sector of trade, services, and others. Structural Equation Modelling-Partial Least Square (SEM-PLS) is used to analyze data. Based on empirical data collected from a survey of 113 individual taxpayers in Surabaya, the result shows that transparency and ethics are factors that partially affect tax compliance. The result of the mediating effect also demonstrates that ethics and trust are capable of affecting the role of transparency to increase tax compliance. Taxpayers' trust and ethical behavior will increase along with the government's ability to create transparency while governing the tax system and government's finance, which in return will influence taxpayer's compliance.

Keywords: Transparency, Ethics, Trust, Tax Compliance

INTRODUCTION

Voluntary tax compliance is an application of the self-assessment system, where taxpayers carry out their tax obligation without coercion. Several studies have described the factors affecting tax compliance based on self-assessment system is the knowledge of the taxpayer and good relations between taxpayers and tax officials (Palil & Mustapha, 2011; Wadesango & VO, 2018). Hence, voluntary tax compliance in the taxation system must be supported by taxpayers' trust in government (Gangl, Hofmann & Kirchler, 2015). Trust creates a mutually beneficial interaction between taxpayers and the government, thus affecting compliance behavior (Kastlunger, Lozza, Kirchler & Schabmann, 2013). Although tax authority, as government's representative, holds control over law enforcement, according to Serim, Inam and Murat (2014), trust regulates voluntary compliance. When tax authority relies more on aggressive law enforcement, it creates instead an antago-
nistic situation that disturbs taxpayers’ cooperation (Gangl et al., 2015).

The previous statement was affirmed by Hofmann, Gangl, Kirchler and Stark (2014) who stated that coercive power had a positive impact on the trust of taxpayers, as long as the government could concentrate on good governance strategies while simultaneously trying to protect honest taxpayers from tax evaders.

Beside trust, transparency may also influence taxpayers’ compliance. Holtzman (2007) linked transparency with simple taxation system in regards to the ease of calculating tax liability, easy-to-understand tax regulation, and the ease of finding information on taxpayers’ rights and obligations. Osborne (2004) also related transparency with information disclosure and general compliance. Information gap (asymmetry) caused by complex tax administration and tax collection system will cause uncertainty, leading to declining tax compliance. Chittenden and Foster (2008) remarked that “simplicity is an important indicator when assessing the fairness of tax systems”. Complexity in the taxation rules will open opportunities for tax avoidance and tax evasion (Alm, Cherry, Jones & McKee, 2010; Isa, 2014). Information transparency in tax will benefit both taxpayers and tax officers as the representation of government. This means that there would be no information asymmetry, or one-sided information control, which may influence decision making for taxpayers and tax officers, and affect compliant behavior.

One of the factors that can create that trust is transparency (Siahaan, 2013). Dutta and Roy (2016) associated transparency with the availability of the information used by the society to measure and evaluate government performance. Taxpayers see transparency as the disclosure of all actions and policies done by the tax authority. Transparency for taxpayers also means the ease of access and availability of information in order to do tax obligations; as well as the capability of government to manage tax revenues in a proper and responsible manner. The failure of tax authority to create the transparency of information could decrease taxpayers’ trust, as has happened to the government of Russia. The decline in the trust of Russian taxpayers is due to the high corruption of public officials, such that the government is considered to have failed in being responsible for the transparency of public finances management, which results in the decrease of tax compliance (Rothstein, 2000). Transparency builds the trust and belief that tax authority carries out its tasks and duties in a clean and respectable manner.

Razak and Adafula (2013) The razak also emphasized that the government needs to regularly inform taxpayers regarding the allocation of tax revenues used to finance government projects for public facilities and infrastructure. Transparency, when associated with ethics, is the extent to which the information is relevant and reliable to influence decision making (Turilli & Floridi, 2009). Transparency may affect taxpayers’ motivation in doing aggressive tax avoidance, which tends to result in tax evasion. Hence, low transparency influences taxpayers’ ethical behavior. Sri Mulyani, as Indonesia Minister of Finance, has underlined that taxpayers’ ethical behavior is affected by transparent policies, the administrative capacity, and the ability to do an effective supervision (Jati, 2015).

When 1) taxpayers do not receive obvious information on how to achieve their taxation rights and duties in accordance with tax regulations, and 2) the government’s accountability in regards to state finance management is weak, this would cause distrust and contribute to the desire to avoid or even evade tax entirely (Finance & Reform, 2010). Ethics is related to a set of norms that control taxpayers’ behavior in doing tax obligations in accordance to law. Song and Yarbrough (1978) highlighted the ethical deterioration of taxpayers in doing their tax obligations; one of the causes is a weak transparency of tax information.

The necessity of this research stems from previous studies which focused mostly on partial testing to find out what variables affect tax compliance. Not many studies that examine the effect of variable transparency as part of financial govern-
ance towards tax compliance with ethics and trust as moderating variable. Further, it is seen as necessary to obtain comprehensive understanding of tax compliance behavior, by analyzing direct and indirect factors that may influence tax compliance using the variables of trust and ethics as mediators. Based on this explanation, this study aims to determine whether transparency can affect tax compliance, directly or indirectly, through the trust and ethics of taxpayers. The result of the study may contribute in creating tax regulations and tax compliance model.

The first part of this study describes the factors that influence taxpayer compliance. The second part describes the literature review and the development of hypotheses. In the third part describes the research method, population, sample selection method, analysis method, and operational definition of variables and measurements. The fourth part, explains the results of testing the hypothesis and its discussion. The final part of this study, outlines the conclusions, limitations and suggestions for future research.

**LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

Tax Transparency and Tax Compliance

Law No. 14 of 2008 concerning public information disclosure define transparency as the disclosure in doing decision-making process and in expressing material and relevant information about a company. Transparency focuses on the availability of must-know public information, so that society could contribute on the plan of determining public policy. Transparency in tax means the availability of access to information, as widely as possible, which can be useful for taxpayers in doing tax obligations. In their view, Yee, Moorthy and Soon (2017) explained that the government and tax authority need to increase the performance of socialization and education of taxation regulation and system, since wide information access as provided by tax collection authority is the taxpayers’ mainstay for tax compliance.

Tax compliance becomes a crucial issue when the tax collection system is self-assessment. Self-assessment gives full authority to taxpayers to complete their own tax obligations. When taxpayers feel that tax authority does not provide a favorable situation in doing tax obligations, taxpayers tend to act disobedient. Siahaan (2013) emphasized the importance of transparency, which is the availability of information to support tax compliance. The failure of government to act transparently in managing state finance is also an indicator that may affect tax compliance (Alasfour, Samy, & Bampton, 2017), and so is the efficiency in conducting tax administration system. Obeidat and Momani (2009) underlined taxpayers’ behavior that is sensitive to the high obedience cost. Thus, the lower the cost of obedience is, the higher their tax compliance would be. The implementation of good governance principles, among them transparency (information disclosure) and accountability, have a significant effect in encouraging tax compliance (Darussalam, Hutagaol, & Septriadi, 2010).

Transparency in tax compliance is also associated with the convenience for taxpayers to do tax obligation. This includes the ease of calculating tax payable, understanding tax regulations and taxpayers’ rights and obligations (Holtzman, 2007). Tax transparency will increase if the government can persuade taxpayers that the disclosed information is reliable to be used on decision-making, and if the information satisfies taxpayers’ expectation. Based on the above framework, the first hypothesis in this research is:

H1: Tax transparency affects tax compliance.

Tax Transparency and Taxpayers’ Trust

The slippery slope framework expresses two main dimensions that affect tax compliance: public trust toward tax authority and the competency of tax authority itself. The slippery slope theory, initiated by Kirchler, Hoelzl and Wahl (2008), explains that tax compliance can be achieved through increasing public trust and legitimate law enforcement from tax authority. Beside this theory, the fiscal psychology theory describes the lost of desire of the taxpayers to pay tax, since they do not re-
receive any advantage and merit from paying tax (Hasseldine & Bebbington, 1991). This lost of motivation is a sign of social gap between taxpayers and the government, that taxpayers become unresponsive to tax regulations. This gap will result in the lost of taxpayers’ trust. Thus, Gangl et al. (2015) expounded that the power of law enforcement cannot stand by itself without the trust of taxpayers. Taxpayers’ trust does not focus only on good governance, but also how far is the government capable of creating a taxation system that supports tax compliance.

Trust is the expectation that other individuals would not act opportunistically through words, actions, and policies (Robbins & Judge, 2008). Trust is to behave voluntarily in a way to accept vulnerability due to uncertain behavior of another (the trustee), based upon the expectation of a positive outcome (Özer & Zheng, 2017). Dwiyanto (2011) explains that public trust is relevant with citizens’ obedience. If citizens feel a sense of affinity with the government, either psychologically or physically, and can sense that the government is earnestly making pro-people policies, it will raise the trust of citizens and influence their behavior. Bannister and Connolly (2011) described the strong relation between government transparency and public trust. The public will not trust any ruling government which has low transparency, such as in the matter of decision-making, the implementation of public policy, and the effect of said public policy on public welfare. Trust can be built by good corporate governance, prioritizing the principles of accountability and transparency (Hermawan, 2008).

Transparency does not only emphasize the disclosure of information provided by the government, but also how well public officials exercise their power in a honest way, so the public may be assured in doing their duties and responsibilities as citizens. Rosid, Evans and Tran-Nam (2018) underline the corrupt behavior of public officials. They said that high levels of perceived corruption appear to have an adverse impact on taxpayers’ attitudes and norms towards actual reporting income. Thus, it is demanded that the government creates transparency and high standards in managing public finance, in order to earn the trust of taxpayers. In the context of this research, the government needs to build good relationships with taxpayers to generate taxpayers’ trust in any government actions and decisions related to taxes (Kirchler et al., 2008). The transparency of government and tax authority in managing tax revenue is the right way for government to maintain good relation with taxpayers and increase their trust. Based on this framework, the second hypothesis in the study is:

H2: Tax transparency affects taxpayers’ trust.

**Tax Transparency and Taxpayers’ Ethics**

Transparency is a part of business conduct that is being responsible to stakeholders. Transparency, in the view of Parris, Dapko, Arnold and Arnold (2016), is firm’s commitment to give relevant, timely, and reliable information to stakeholders for decision-making. Parris et al. (2016) stated that the practice of transparency does not only affect the creation of company’s competitive advantage, but also the ethical decision making.

Transparency is a form of information disclosure that prevents information asymmetry that can lead to unethical actions, namely aggressive tax avoidance (Gribnau & Jallai, 2017). The government needs to construct an environment favorable for tax compliance through transparency in good taxation governance, covering tax policies, tax regulations, and tax administration to support taxpayers’ moral ethics in doing tax obligations. Song and Yarbrough (1978) defined tax ethics as behavioral norms that set the conduct of citizens as taxpayers in their relation with government.

The results of Alm, Martinez-Vazquez and McClellanc (2016) research indicate that corruption of tax officials is a statistically and economically significant determinant of tax evasion. Therefore it is important for governments to implement good governance as a way of maintaining the transparency of the patterns of public
finance management in order to prevent non-compliance behavior of the taxpayer. Based on this framework, the third hypothesis in this research is:

**H3:** Tax transparency affects taxpayers’ ethics.

**Taxpayers’ Trust and Tax Compliance**

The slippery slope framework by Kirchler et al. (2008) explained that the trust toward the government provides a big influence on taxpayers’ voluntary compliance. The relation between taxpayers and the government produces an unwritten contract called the psychological contract.

This contract, based on the view of Feld and Frey (2002), involves an emotional tie and strong loyalty. Therefore, the psychological contract can only be maintained if each party in the contract acts to build each other’s trust.

Just relying on the traditional approach of law enforcement will not establish effective tax compliance. Consequently, the government needs to gain the trust of taxpayers to form tax compliance (Walsh, 2012). The trust of taxpayers can be influenced by, among other things, prime service quality by tax authority (Alm, Jones, Cherry, & McKee, 2011), a fair law enforcement (Kirchler et al., 2008), tax regulations favoring taxpayers (Chandarasorn, 2012), the implementation of good governance (Sitarjadi & Dwimulyani, 2016), and the government’s use of public monies (Lucio & Scartascini, 2013).

Olson (2013) owned a view where the relationship between taxpayers and the government is a contractual affair. Olson (2013) wanted to expound the existence of an unwritten contract, where taxpayers shall fulfill their obligations of paying payable taxes, while the government agrees to provide service and supervision so the taxpayers may freely do their obligations. The social contract describes voluntary commitment and the submission of trust to the government.

This emphasizes that trust is built when the government understands how to treat taxpayers with respect (Feld & Frey, 2002), along with the implementation of a conducive taxation system (Walsh, 2012), and by the transparency and accountability of the government, that is honest and responsible in managing tax system and state finance (Nkundabanyanga, Mvura, Nyamuyonjo, Opiso & Nakabuye, 2017). Based on this framework, the fourth hypothesis in this study is:

**H4a:** Taxpayers’ trust affects tax compliance.

**H4b:** Taxpayers’ trust has an effect on the relation between tax transparency and tax compliance.

**Taxpayers’ Ethics and Tax Compliance**

Cahyonowati’s (2011) research proved that taxpayers with high ethical standard have better tax compliance. Ethics show a significant effect in increasing tax compliance compared to fines and tax sanctions. Taxpayers’ choice to comply is also affected by the ethical dimension, and other aspects such as justice, an equivalent economic exchange, and trust (Alm & Torgler, 2012). Taxpayers, in Alm & Torgler’s (2012) study, see that tax compliance is part of the ethical issue. Taxpayers should not be selfish, e.g. doing tax avoidance to decrease personal tax payment. Performing tax compliance in accordance with tax regulations means taxpayers have a moral conviction which influences tax compliance (Reckers, Sanders & Roark, 1994). Personal moral conviction is seen as having a significant in the decision of tax compliance. When tax evasion is seen as an ethical problem, taxpayers tend to avoid non-compliance.

Tax compliance involves social norms that determine taxpayers’ moral behavior. Cummings, Martinez-Vazquez, McKee and Torgler (2008) explained that taxpayers are led by government’s treatment of taxpayers, which would create higher tax compliance. Further, according to Cummings et al. (2008), tax compliance is not formed through law enforcement and extreme audit. These actions instead can turn into a boomerang for the government with weak accountability and transparency of state finance management. Taxpayers’ ethics, from the view of Alm et al. (2011), depends on the implementation of tax system governance. Complicated tax regulations may open up the opportunity for tax avoidance.
and tax evasion, thus creating an appeal for taxpayers to behave non-compliantly. Moreover, the complicated tax system gives rise to speculative actions and provides uncertainty to taxpayers in carrying out their obligations. Based on the above framework, the fifth hypothesis in this research is:

H5a: Taxpayers' ethics affect tax compliance.

H5b: Taxpayers’ ethics has an effect on the relation between tax transparency and tax compliance.

RESEARCH METHODS

The sample of this study is individual taxpayers who run a business or freelances in the field of service, manufacture, and trade, located in the city of Surabaya, Indonesia. The instrument of data collection is a questionnaire, containing a number of questions which become indicators in measuring the variable tested. The study uses Likert scale to measure taxpayers’ attitude, opinion, and perception, with response levels of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. This study uses the structural equation model (SEM) using WarpPLS.

Operational Definition and Variable Measurement

This research uses four variables: transparency, trust, ethics, and tax compliance. Tax transparency indicator is based on Rawlins (2008), illustrated through three dimensions of transparency: 1) informational transparency, meaning the disclosure and availability of legal information for public, in an accurate, timely, balanced, and decisive manner; 2) participatory transparency, which relates with the quality of information provided for decision-making; and 3) accountability transparency, in that transparency makes a person capable of account for the decisions and policies made based on an information. The indicator of trust is based on Mayer, Davis, and Schoorman (1995), which are: 1) ability, the extent to which an organization can influence its members because of their competencies; 2) benevolence, related to an organization’s willingness to provide excellent service to its members; and 3) integri-ty, the effort of an organization to do its duties and tasks while upholding honesty. Tax transparency indicator is based on unethical behaviors done by taxpayers are for example: in the corporate income tax, firms can underreport income, overstate deductions, or fail to file tax returns, just as individuals do in the individual income tax. (Alm et al., 2016; Song & Yarbrough, 1978)

The indicator of taxpayers’ compliance uses the standard in Ministry of Finance Regulation (PMK) No. 192/PMK.03/2007, and from Rahayu and Lingga (2009), which are: 1) taxpayer registers his/herself to receive the Tax Identification Number (NPWP); 2) taxpayer calculates and pays taxes according to tax regulation; 3) taxpayer reports the Tax Return Notice on time; 4) taxpayer pays arrears on time; 5) taxpayer does not have any tax arrears; 6) taxpayer has never been convicted in the matter of taxation.

ANALYSIS AND DISCUSSION

Response Rate

The survey conducted in 2019. The total number of respondents is 113 respondents. The number of male respondents is higher than female respondents. This shows that more business in Surabaya is run by male individual taxpayers. Most respondents are in the productive age of 36 to 45 years old. The majority of the respondents' level of education is bachelor's degree (Diploma 4 / Strata 1), indicating that Surabaya respondents' education level is quite high. Most respondents are married and have an average annual income between 50 million and 250 million Rupiah.

Table 1
Sample Distribution and Returned Questionnaire

| Information | Total |
|-------------|-------|
| Distributed offline(hard copy) questionnaire | 70 |
| Distributed online (using Google Form) questionnaire | 80 |
| Accepted offline (hard copy) questionnaire | 54 |
| Accepted online (using Google Form) questionnaire | 67 |
| Not suitable for processing | 8 |
| Number of questionnaire that can be used for the study | 113 |
each year. The type of business run varies but is dominated by trade. Table 1 contains sample distribution and returned questionnaire.

Table 2.
Results of Validity and Reliability Test

| Variable         | Indicator     | AVE  | Loading | Cross Loading | P Value | Conclusion |
|------------------|---------------|------|---------|---------------|---------|------------|
| Transparency     | Transparency 1| 0.529| 0.689   | <0.689        | <0.001  | Valid      |
|                  | Transparency 2| 0.737| 0.737   | <0.737        | <0.001  | Valid      |
|                  | Transparency 3| 0.762| 0.762   | <0.762        | <0.001  | Valid      |
|                  | Transparency 4| 0.813| 0.813   | <0.813        | <0.001  | Valid      |
|                  | Transparency 5| 0.646| 0.646   | <0.646        | <0.001  | Valid      |
|                  | Transparency 6| 0.743| <0.743  | <0.001        | Valid   |
|                  | Transparency 7| 0.691| <0.691  | <0.001        | Valid   |
| Trust            | Trust1        | 0.560| 0.671   | <0.671        | <0.001  | Valid      |
|                  | Trust2        | 0.820| <0.820  | <0.001        | Valid   |
|                  | Trust3        | 0.838| <0.838  | <0.001        | Valid   |
|                  | Trust4        | 0.754| <0.754  | <0.001        | Valid   |
|                  | Trust5        | 0.694| <0.694  | <0.001        | Valid   |
|                  | Trust6        | 0.737| <0.737  | <0.001        | Valid   |
|                  | Trust7        | 0.706| <0.706  | <0.001        | Valid   |
| Ethics           | Ethics2       | 0.510| 0.677   | <0.677        | <0.001  | Valid      |
|                  | Ethics3       | 0.798| <0.798  | <0.001        | Valid   |
|                  | Ethics4       | 0.744| <0.744  | <0.001        | Valid   |
|                  | Ethics5       | 0.729| <0.729  | <0.001        | Valid   |
|                  | Ethics7       | 0.608| <0.608  | <0.001        | Valid   |
| Tax Compliance   | Tax Compliance 1| 0.513| 0.805   | <0.805        | <0.001  | Valid      |
|                  | Tax Compliance 2|       | 0.736   | <0.736        | <0.001  | Valid      |
|                  | Tax Compliance 3|       | 0.739   | <0.739        | <0.001  | Valid      |
|                  | Tax Compliance 4|       | 0.728   | <0.728        | <0.001  | Valid      |
|                  | Tax Compliance 5|       | 0.562   | <0.562        | <0.001  | Valid      |
|                  | Tax Compliance 6|       | 0.696   | <0.696        | <0.001  | Valid      |
|                  | Tax Compliance 7|       | 0.728   | <0.728        | <0.001  | Valid      |

| Variable      | Composite reliability | Cronbach's alpha | Conclusion |
|---------------|------------------------|------------------|------------|
| Transparency  | 0.887                  | 0.850            | Reliable   |
| Trust         | 0.898                  | 0.867            | Reliable   |
| Ethics        | 0.838                  | 0.757            | Reliable   |
| Tax Compliance| 0.880                  | 0.839            | Reliable   |
Outer Model Evaluation

Outer model evaluation is used to measure the validity and reliability of indicators. This analysis specifies the relation between a latent variable and its indicators. It can be said that an outer model defines how each indicator relates with its latent variable (Ghozali, 2011). An instrument is said to be valid if it can measure what it is supposed to be measured, while an instrument is reliable if it shows an accurate, consistent, and appropriate result. An outer model is assessed with the evaluation of variable's validity and reliability.

In WarpPLS, there are two methods of testing questionnaire’s validity, convergent validity and discriminant validity. Ghozali (2011) explained that the value of convergent validity can be seen from the correlation coefficient value between reflective indicator score and the score of its latent variable. Table 2 provides the results of both convergent validity and discriminant validity. One indicator of tax compliance and two indicators of ethics were removed to meet the convergent validity as the loading value were less than 0.50 and were not significant. Results presented in Table 2 conclude that all indicators have met the requirement of validity, as they have loading values above 0.50. An indicator is seen as meeting convergent validity if its loading value is more than 0.70. However, a loading value between 0.50 and 0.60 is still acceptable. The value of loading must be larger from the value of cross loading. From Table 2, it is inferred that all variables meet the requirement of being reliable. This is demonstrated from the composite reliability value being higher than 0.7, and Cronbach’s alpha score is higher than 0.6.

A variable indicator meets discriminant validity if the value of loading is greater than the value of cross loading. Based on Table 2, test results show that the loading value of all indicators are higher than those of cross loading, concluding that the discriminant validity for all indicators is valid. Meanwhile, the discriminant validity of the questionnaire can be seen by comparing the value of square root of average variance extracted (AVE) of each latent variable with the correlation of related latent variable with other latent variables. If the value of square root of average variance extracted (AVE) is larger than the related latent variable, then discriminant validity is fulfilled. Table 3 exhibits the test results that show discriminant validity for variables is also fulfilled, as the square root of AVE is greater than the value of other variable correlation coefficient.

Inner model illustrates the relation among each latent variable based on substantive theory. Inner model testing can be established from the value of R-squared, Q-Squared, and Model Fit and Quality Incies, a goodness-fit model test.

Based on Table 4, the R-squared value for the variable trust on the government is 0.529, meaning 52% of the transparency variable affects taxpayers' trust, while the rest of 47.1% is explained by other factors; 28.5% of transparency variable influences

| Table 4. R-squared and Q-squared |
|-----------------|-----------|----------|
| Trust           | Ethics    | Tax Compliance |
| R-squared       | 0.529     | 0.285    | 0.339 |
| Q-squared       | 0.528     | 0.284    | 0.345 |

| Table 3. Square Root of AVE and Correlation Coefficient |
|---------------------------------|-----------------|-----------|----------|
| Correlations among latent variables and errors |
| Correlations among latent variables with square root of AVE |
| Transparency | Trust | Ethics | Tax Compliance |
| Transparency | 0.727 | 0.712 | 0.522 | 0.478 |
| Trust | 0.712 | 0.748 | 0.501 | 0.459 |
| Ethics | 0.522 | 0.501 | 0.714 | 0.483 |
| Tax Compliance | 0.478 | 0.459 | 0.483 | 0.716 |
tax ethics, while the remaining 71.5% is caused by other factors; 33.9% of the variables transparency, ethics, and trust can affect tax compliance, the remaining 66.1% is explained by other factors. The value of Q-squared is used to assess the magnitude of the predictive validity of all endogenous constructs against exogenous constructs (Sholihin & Ratmono, 2013). The value of Q-squared shows a good model if it is greater than zero. Based on Table 4, the highest Q-squared is taxpayers’ trust on government, and the lowest one is ethics of 0.284. The predictive validity of this research model is thus determined as good.

Information based on Table 5, prove that the research model also have goodness of fit.

**Hypothesis Testing**

Hypothesis testing on WarpPLS result utilizes t-test. The determination of hypothesis testing is as follows: if p-value ≤ 0.10 (α = 10%), it is weakly significant; if p-value ≤ 0.05 (α = 5%), it is significant; and if p-value ≤ 0.01 (α=1%), it is highly significant.

**Tax Transparency and Taxpayers’ Compliance**

Hypothesis testing results in Table 6 demonstrate that transparency has a significant positive effect on taxpayers’ trust on government, with a p-value of <0.001. This study proves that government’s transparency in managing a good tax system will lead to an increased taxpayers’ compliance. Transparency represents a characteristics of a democratic nation which involves stakeholders (citizens) in public decision making, so as to be able to influence citizen compliance in accomplishing their obligations, including paying taxes. The results are in line with Siahaan (2013) and Darusalam et al. (2010), who emphasized the importance of transparency, meaning information disclosure to support taxpayers’ compliance, and transparency in terms of information disclosure and financial accountability as a factor that predicts tax-

**Table 5.**

| No. | Model Fit and quality indices | Criteria Fit | Result | Description |
|-----|--------------------------------|--------------|--------|-------------|
| 1.  | Average path coefficient (APC) | P < 0.05     | P<0.001| Fit         |
| 2.  | Average R-squared (ARS)       | P < 0.05     | P<0.001| Fit         |
| 3.  | Average Adjusted R-squared (AARS) | P < 0.05 | P<0.001| Fit         |
| 4.  | Average block VIF (AVIF)      | Acceptable if ≤ 5, ideally ≤ 3.3 | 1.684 | Ideal      |
| 5.  | Average full collinearity VIF (AFVIF) | Acceptable if ≤5, ideally ≤3.3 | 1.861 | Ideal      |
| 6.  | Tenenhaus GoF (GoF)           | Small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36 | 0.450 | Large      |
| 7.  | Sympson’s paradox ratio (SPR) | Acceptable if ≥ 0.7, ideally =1 | 1.000 | Ideal      |
| 8.  | R-squared contribution ratio (RSCR) | Acceptable if ≥ 0.9, ideally =1 | 1.000 | Accepted   |
| 9.  | Statistical suppression ratio (SSR) | Acceptable if ≥ 0.7 | 1.000 | Accepted   |
| 10. | Nonlinear bivariate causality direction ratio (NLBCDR) | Acceptable if ≥ 0.7 | 1.000 | Accepted   |
payers’ compliance. Another study with similar affirmation with the result is by Alm et al. (2011), who explained that government should not force itself to increase taxpayers' compliance through strict law enforcement. Compliance based on law enforcement gives the impression that the government forces its citizens to pay taxes. The study of Alm et al. (2011) highlighted the need for enough information disclosure to reduce the effect of uncertainty on taxpayers in doing their tax obligations.

Transparency is also capable of predicting taxpayers' ethical behavior with p-value of <0.001, as shown in Table 6. This signifies that government transparency is one of the considerations individual taxpayers take to behave ethically in doing their tax obligations as dictated by tax regulations. Transparency, in the study of Parris et al. (2016), affects ethical decision making. In the context of tax, transparency reduces taxpayers' uncertainty to fulfill their tax obligations.

Transparency is considered a form of corporate ethical action to provide sufficient and easily accessible information for stakeholders (Gribnau & Jallai, 2017). In the context of this research, the government needs to provide sufficient and easily accessible information about the performance of managing tax revenues as a form of accountability to taxpayers. This result is consistent with the study of (Alm et al., 2016) that taxpayers’ ethical behavior is influenced by irresponsible government behavior in making certain public decisions which influences are not felt.

Hypothesis testing results demonstrates that transparency positively affects taxpayers' compliance to government, with p-value of 0.022 being smaller than 0.05. This study confirms that government transparency has a positive effect on taxpayers’ trust toward the government. The indicator that provides the greatest influence is citizen’s participation in the making of government's program and policies. This means that when the public feels they have been involved in every formulation of government's policies and programs, taxpayers’ motivation to comply will also increase (Fagbemi, Uadiale & Noah, 2010). Thus, information transparency in the tax system enables taxpayers to behave compliantly, as taxpayers obtain complete information on how to carry out their rights and obligations according to applicable tax regulations (Alm et al., 2011).

**Taxpayers’ Trust and Tax Compliance**
The result of hypothesis testing shows that trust towards government positively influence taxpayers’ trust.

### Table 6.
Hypothesis Testing

| Relationship between variables | Path Coefficient | p-value | Explanation |
|-------------------------------|------------------|---------|-------------|
| Transparency → Trust          | 0.727            | <0.001  | Highly significant |
| Trust → Tax Compliance        | 0.230            | 0.005   | Highly Significant |
| Transparency → Tax Compliance | 0.184            | 0.022   | Significant |
| Transparency → Ethics         | 0.534            | <0.001  | Highly significant |
| Ethics → Tax Compliance       | 0.288            | <0.001  | Highly significant |

Where TP = Transparency, KEP = Trust, ET = Ethics, KP = Tax Compliance

### Table 7.
Mediating Variable Testing 2 Segments

| Relationship between variables | Path Coefficient, indirect | p-value | Explanation |
|-------------------------------|-----------------------------|---------|-------------|
| Transparency → Trust, Ethics  | 0.321                       | <0.001  | Mediating   |
ences tax compliance. Based on p-value, it can be seen that the effect of both variables are significant, with p-values or 0.005 which is lower than 0.05. It can be inferred that higher taxpayers’ trust on the government will increase tax compliance. This research attests to the slippery slope framework that underlies tax compliance through taxpayers’ trust on the government (Kirchler et al., 2008). Similarly, this research supports the framework of social psychology theory which explains that trust is the fundamental factor for a strong relation between taxpayers and government or tax authority. Each party will maintain the trust by behaving in accordance with their rights and obligations as taxpayers, and collector and managers of tax revenues, respectively (Feld & Frey, 2002).

Several studies demonstrated how taxpayers’ trust affects taxpayers' compliance. For example, taxpayers believe that the government can provide a good tax service (Alm et al., 2011), the government is capable of upholding law enforcement (Kirchler et al., 2008), the government creates tax policies that are adaptive, provide solutions, and favor taxpayers (Chandarasorn, 2012). Those studies concluded that there are at least three dimensions can be improved upon to increase the trust of taxpayers, namely the issue of law enforcement, service to taxpayers, and the usefulness of tax payments.

**Taxpayers’ Ethics and Tax Compliance**

Based on the testing done, results were obtained that ethics significantly affect taxpayers’ compliance on paying taxes, with p-value of <0.001 being smaller than 0.05. In his study, Wenzel (2005) stated that taxpayers are no longer economically rational actors who maximize tax avoidance to earn the benefit of tax savings, as long as the sanctions for the act of avoidance are not greater than the benefit of tax savings. Taxpayers are starting to involve social norms and ethical thought which influence tax compliance, and they are seeing tax avoidance or evasion as behaviors which are against moral and ethics (Reckers et al., 1994).

A number of studies that tested the effect of ethics on tax compliance also showed similar results with this study. Cummings et al. (2008) explained that taxpayers’ ethics are influenced by government’s treatment toward taxpayers, which could create higher tax compliance. Bobek, Roberts and Sweeney (2007) identified personal moral belief as a factor involved in taxpayers’ compliant behavior. Likewise, Kirchler et al. (2012) described the changing moral values of taxpayers, such that they no longer prioritize selfish attitude, leading to tax-compliant behavior.

**The Effect of Tax Transparency on Tax Compliance, using Taxpayers’ Trust and Taxpayers’ Ethics as Mediating Variables**

Table 7 shows that the indirect effect of transparency on tax compliance is 0.321 with p-value <0.001. Since p-value is less than 0.05, this means ethics and trust are capable of mediating the effect of transparency on tax compliance.

This result provides evidence that after adding the variables of trust and ethics, the effect of transparency on tax compliance increases. Trust and ethics in this research are capable of being strong mediators in the relation between transparency and taxpayers’ compliance. Based on this result, it can be concluded that trust and ethics play an important role in forming transparency which affects tax compliance. In the context of this study, government needs to strive to create trust and taxpayers’ ethical behavior through compliance affecting tax transparency. Feld and Frey (2002) mentioned that the government should provide a positive treatment to taxpayers. Walsh (2012) also explained the importance for government to organize a conducive tax system. Meanwhile, Nkundabanyanga et al. (2017) provide recommendation for the government to implement a good state financial management.

Alm et al. (2011) explained that complex tax regulations will open the opportunity for tax avoidance and evasion, thus creating an appeal for taxpayers to behave non-compliantly. Referring to their research, this study concludes that when government does not create tax regulations that are simple, easy-to-understand, and
advantageous for taxpayers, they instead eliminate taxpayers' trust and tend to give rise to unethical behaviors.

CONCLUSION
Based on the above background, this study aims to discover if transparency can affect tax compliance, whether directly or indirectly, through taxpayers' trust and ethics. The sample of the study is 113 individual taxpayers who run a form of business. Data is analyzed using structural equation model (SEM) with WarpPLS. The results of the research provide empirical evidence that transparency, ethics, and trust affect taxpayers' compliance. Including taxpayers in public decision making is part of government transparency demanded by taxpayers. The ability of tax authority to provide an excellent service to taxpayers will build the trust of taxpayers. From the viewpoint of ethics, taxpayers basically no longer think economically rational. The result shows that payment of taxes is done voluntarily, without demanding for benefits that can be directly perceived.

An interesting part of this research is the result of mediating test for the variables of trust and ethics. The largest dimension of tax compliance, based on loading factor, is taxpayer's voluntary registering to receive a Tax Identification Number (NPWP). That is, government’s effort to build transparency in tax system governance is quite effective, as it manages to form the trust and ethical behavior of taxpayers that has an impact on increasing awareness for taxpayers to have a NPWP.

The results of this study indicate that policy-makers who want to support taxpayers' compliance in Indonesia should develop strategies not only emphasizes in the combination of law enforcement and trust, but involve ethics and transparency. So this study develops a different voluntary compliance model compared to previous voluntary models, which combines taxpayers' trust and ethics to increase the effectiveness of transparency, resulting in taxpayers' compliance.

Therefore, further research can increase the number of samples so that the generality of the research results in the field of tax compliance can have high generalizability. Furthermore the self report questionnaire with likert scale tend to have many limitations. One of them is refer to ‘hallo effect' that can lead to bias error. Moreover, longitudinal studies should be conducted to observe changes in taxpayers’ perspectives on tax compliance over time.

REFERENCES
Alasfour, F., Samy, M., & Bampton, R. (2017). The determinants of tax morale and tax compliance: Evidence from Jordan. Advances in Taxation, 23, 125-171. doi:10.1108/S1058749720160000023005
Alm, J., Cherry, T., Jones, M., & McKee, M. (2010). Taxpayer information assistance services and tax compliance behavior. Journal of Economic Psychology, 31, 577–586.
Alm, J., Jones, M., Cherry, T., & McKee, M. (2011). Taxpayer information assistance services and tax compliance behavior. Working Paper 1101. Retrieved from http://citeseerx.ist.psu.edu/
Alm, J., Martinez-Vazquez, J., & McClellanc, C. (2016). Corruption and firm tax evasion. Journal of Economic Behavior & Organization, 124 146-163.
Alm, J., & Torgler, B. (2012). Do ethics matter? Tax compliance and morality. Los Angeles: Department of Economics Tulane University New Orleans. doi: 10.1007/s10551-011-0761-9
Bannister, F., & Connolly, R. (2011). The trouble with transparency: A critical review of openness in E-Government. Polity and Internet, 3(1). doi: 10.2202/1944-2866.1076
Bobek, D.D., Roberts, R.W., & Sweeney, J. T. (2007). The social norms of tax compliance: Evidence from Australia, Singapore, and the United States. Journal of Business & Ethics, 74(1), 49-64. doi: 10.1007/s10551-006-9219-x
Cahyonowati, N. (2011). Model moral dan kepatuhan perpajakan: wajib pajak orang pribadi. Jurnal akuntansi dan Auditing Indonesia, 15(2), 161-177. Retrieved from https://journal.uii.ac.id/JAAI/
Chandarasorn, M. (2012). Public management as citizen compliance: A case study of income tax compliance behavior in Thailand. Dissertation. Retrieved from https://kuscholarworks.ku.edu/
Chittenden, F., & Foster, H. (2008). Perspectives on fair tax. London: The association of chartered certified accountants. Retrieved from https://www.accaglobal.com/

Cummings, R. G., Martinez-Vazquez, J., McKee, M., & Torgler, B. (2008). Tax morale affects tax compliance: Evidence from surveys and an artefactual field experiment. *Journal of Economic Behavior & Organization*, 1-30. https://doi.org/10.1016/j.jebo.2008.02.010

Darussalam, Hutagaol, J., & Septiadi, D. (2010). *Konsep dan aplikasi perpajakan internasional*. Jakarta: Danny Darussalam Tax Centre.

Dutta, N., & Roy, S. (2016). State fragility and transparency. *International Journal of Development Issues*, 15(3), 202-223. https://doi.org/10.1108/IJDI-06-2016-0034

Dwiyanto, A. (2011). *Mengembalikan kepercayaan publik melalui reformasi birokrasi*. Jakarta: PT Gramedia Pustaka Utama.

Fagbemi, T.O., Uadiale, O.M., & Noah, A.O. (2010). The ethics of tax evasion: Perceptual evidence from Nigeria. *European Journal of Social Sciences*, 17(3), 360-371. Retrieved from https://www.researchgate.net/

Feld, L.P., & Frey, B.S. (2002). Trust breeds trust: How taxpayers are treated. *Economics of Governance*, 3, 87-99. https://doi.org/10.1007/s101010100032

Finance, G.S.P.P., & Reform, A. (2010). *Addressing tax evasion and tax avoidance in developing countries: Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH*. Retrieved from https://www.taxcompact.net/

Gangl, K., Hofmann, E., & Kirchler, E. (2015). Tax authorities’ interaction with taxpayers: A conception of compliance in social dilemmas by power and trust. *Journal of New Ideas in Psychology*, 37. https://doi.org/10.1016/j.newideapsych.2014.12.001

Ghozali, I. (2011). *Structural equation modelling: Metode alternatif dengan partial least square*. Semarang: Badan Penerbit Universitas Diponegoro.

Gribnau, H.J.L.M., & Jallai, A.G. (2017). Good tax governance: A matter of moral responsibility and transparency. *Nordic Tax Journal*, 1, 70-88. Retrieved from https://ssrn.com/

Hasseldine, D.J., & Bebbington, K.J. (1991). Blending economic deterrence and fiscal psychology models in the design of responses to tax evasion: The New Zealand experience. *Journal of Economic Psychology* 12, 299-324. https://doi.org/10.1016/0167-4870(91)90018-0

Hermawan, D. (2008). Trust dan network governance yang transparan dan akuntabel. *Jurnal Ilmiah Administrasi Publik dan Pembangunan*, 2(5), 428-436.

Hofmann, E., Gangl, K., Kirchler, E., & Stark, J. (2014). Enhancing tax compliance through coercive and legitimate power of tax authorities by concurrently diminishing or facilitating trust in tax authorities. *Law & Policy*, 292-313. DOI: 10.1111/lapo.12021

Holtzman, Y. (2007). Challenges in achieving transparency, simplicity and administering of the United States. *Journal of Management Development*, 26(5), 418-427. https://doi.org/10.1108/02621710710748257

Isa, K. (2014). Tax complexities in the Malaysian corporate tax system: Minimise to maximise. *International Journal of Law and Management*, 56(1), 50-65. https://doi.org/10.1108/IJLMA-08-2013-0036

Kastlunger, B., Lozza, E., Kirchler, E., & Schabmann, A. (2013). Powerful authorities and trusting citizens: The slippery slope framework and tax compliance in Italy. *Journal of Economic Psychology*, 34, 36-45. https://doi.org/10.1016/j.joep.2012.11.007

Undang-Undang Republik Indonesia Nomor 14 Tahun 2008 Keterbukaan Informasi Publik, Kementrian Komunikasi dan Informatika Republik Indonesia

Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The “slippery slope” framework. *Journal of Economic Psychology* 29(2), 210-225. https://doi.org/10.1016/j.joep.2007.05.004

Kirchler, E., Muehlbacher, S., Gangl, K., Hofmann, E., Kogler, C., Pollai, M., & Alm, J. (2012). Combining psychology and economics in the analysis of compliance: From enforcement to cooperation. *Tulane Economics Working Paper Series*, 1-34. https://doi.org/10.1016/S0313-5926(12)50016-0
Lucio, C., & Scartascini, C. (2013). Tax compliance and enforcement in the Pampas: Evidence from a field experiment. *IDB Working Paper Series* 1-53.

Mayer, R.C., Davis, J.H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709-734. DOI: 10.2307/258792

Peraturan Menteri Keuangan Nomor 192/PMK.03/2007 Tata Cara Penetapan Wajib Pajak dengan Kriteria Tertentu dalam Rangka Pengembalian Pendahuluan Kebijakan Pembayaran Pajak

Mkundabanyanga, S.K., Mvura, P., Nyamuyonjo, D., Opiso, J., & Nakabuye, Z. (2017). Tax compliance in a developing countries: Understanding taxpayer's compliance. *Journal of Economics Studies 44*(6), 931-957. https://doi.org/10/1108/JES-03-2016-0061

Obeidat, M.I.S., & Momani, M.A.A. (2009). How taxpayers perceived the efficiency of Jordanian tax systems according to the Keynesian perspective of tax efficiency. *Journal of Economic and Administrative Sciences, 25*(2), 1-23.

Olson, N.E. (2013). Toward a more perfect tax system: A taxpayer Bill of Right as a framework for effective tax administration, recommendations to raise taxpayer and employee awareness of taxpayer rights. http://www.tax.ny.gov/

Osborne, D. (2004). Transparency and accountability reconsidered. *Journal of Financial Crime, 11*(3), 292-300. https://doi.org/10.1108/13590790410809239

Özer, Ö., & Zheng, Y. (2017). Trust and trustworthiness. In E.K.K. Donohue, S. Leider (Ed.), *The Handbook of Behavioral Operations*. Wiley. doi:10.1007/978-3-319-32441-8_14

Palil, M.R., & Mustapha, A.F. (2011). Factors affecting tax compliance behaviour in self assessment system. *African Journal of Business Management, 5*(33), 12864-12872. doi: 10.5897/AJBM11.1742

Parris, D.L., Dapko, J.L., Arnold, R.W., & Arnold, D. (2016). Exploring transparency: A new framework for responsible business management. *Management Decision, 54*(1), 222-247. https://doi.org/10.1108/MD-07-2015-0279

Rahayu, S., & Lingga, I.S. (2009). Pengaruh modernisasi sistem administrasi perpajakan terhadap kepatuhan wajib pajak. *Jurnal Akuntansi, 1*(2), 119-138. Retrieved from https://www.neliti.com/

Razak, A.A., & Adafula, C.J. (2013). Evaluating taxpayers' attitude and its influence on tax compliance decisions in Tamale, Ghana. *Journal of Accounting and Taxation, 5*(3), 45-87. doi: 10.5897/JAT2013.0120

Rawlins, B.R. (2008). Measuring the relationship between organizational transparency and employee trust. *Public Relations Journal, 2*(2), 1-21. Retrieved from https://www.researchgate.net/

Reckers, P.M.J., Sanders, D.L., & Roark, S. J. (1994). The influence of ethical attitudes on taxpayer compliance. *National Tax Journal, 47*(4), 825-836. Retrieved from http://citeseerx.ist.psu.edu/

Robbins, S.P., & Judge, T.A. (2008). *Perilaku organisasi* (Vol. 12th). Jakarta: Salemba Empat.

Rosid, A., Evans, C., & Tran-Nam, B. (2018). Tax non-compliance and perceptions of corruption: Policy implications for developing countries. *Bulletin of Indonesian Economic Studies, 54*(1), 25-59. http://dx.doi.org/10.2139/ssrn.3317994

Rothstein, B. (2000). Trust, social dilemmas and collective memories. *Journal of Theoretical Politics, 12* (4), 477-501. doi:10.1177/0951692800012004007

Serim, N., Inam, B., & Murat, D. (2014). Factors affecting tax compliance of taxpayers: The role of tax officer the case of Istanbul and Canakkale. *Business and Economics Research Journal, 5*(2), 19-31. Retrieved from http://www.berjournal.com/

Siahaan, F.O.P. (2013). The effect of tax transparency and trust on taxpayers' voluntary compliance. *GSTF Journal and Business Review, 2*(3), 4-8. doi:10.5176/2010-4804_2.3.213

Sitardja, M., & Dwimulyani, S. (2016). Analysis about the influences of good public governance, trust toward tax compliance on public companies that listed in Indonesian Stock Exchange. *International Journal of Sustainable Development 9*(9), 35-42. Retrieved
from https://ssrn.com/
Song, Y.D., & Yarbrough, T.E. (1978). Tax ethics and taxpayer attitudes: A survey. *American Society for Public Administration, 38*(5), 442-452. doi: 10.2307/975503
Turilli, M., & Floridi, L. (2009). The ethics of information transparency. *Ethics and Information Technology, 11*, 105-112. doi: 10.1007/s10676-009-9187-9
Wadesango, N., A, M., C, M., & VO, W. (2018). Tax compliance of small and medium enterprises through the self-assessment system: issues and challenges. *Academy of Accounting and Financial Studies Journal, 22*(3), 1-15.
Walsh, K. (2012). Understanding taxpayer behaviour new opportunities for tax administration. *Policy Paper, 43*(3), 451-475. Retrieved from https://www.revenue.ie/
Wenzel, M. (2005). Motivation or rationalisation causal relation between ethics, norms and tax compliance. *Working Paper No 63 Centre for Tax System Integrity Research School of Social Sciences Australian National University: https://doi.org/10.1016/j.joep.2004.03.003*
Yee, C.P., Moorthy, K., & Soon, W.C.K. (2017). Taxpayers’ perceptions on tax evasion behaviour: An empirical study in Malaysia. *International Journal of Law and Management, 59*(3). https://doi.org/10.1108/IJLMA-02-2016-0022