Determinant of Tax Compliance Intention in Java-Indonesia: Theory of reasoned action approach

Latifah Hanum*, Dessanti Putri Sekti Ari, Heru Susilo
Department of Business Administration
University of Brawijaya
Malang, Indonesia
*latifahhanum@ub.ac.id, dessantiputrisa@ub.ac.id, heru_fia@ub.ac.id

Abstract—Tax reform in Indonesia changed the taxation system from an official assessment system to a self-assessment system. This means that taxpayers are required to calculate, pay and report their own taxes. However, that the self-assessment system, many taxpayers are not transparent in their tax reporting. This shows that low awareness of the taxpayers to pay taxes so the tax compliance in Indonesia is still low. This study purpose to examine the factors that influence intention in tax compliance from psychology perspective. This study is a replication and models development of Theory of Reasoned Action (TRA) from previous studies. The study model is validated using the data collected from 136 respondents which is individual tax payers in Java who have got tax registration number (NPWP) and who have report the annual tax return or SPT in Java - Indonesia. The data is analysed using Smart Partial Least Square (PLS). The result of analysis for this study shows that the construct attitude and tax system influence the intention in tax compliance. However, that subjective norms did not influence the intention in tax compliance. The implication for this study is relevant to the Directorate General of Tax to consider factor of attitude and tax system to increase tax compliance intension in Indonesia.

Keywords—theory of reasoned action, tax compliance, intention

I. INTRODUCTION

Tax is the biggest revenue for a country, especially Indonesia. Nearly 75% of Indonesia's state revenue comes from taxes. The dominance of tax as a source of revenue is one of the main things to improve the welfare of all people through the development and addition of public services.

Based on data from the Ministry of Finance of the Republic of Indonesia, the realization of tax revenue in 2018 reached IDR 1,315.9 trillion or grew by 14.3% from 2017 [1]. This shows that the largest state budget revenue is from the tax sector. This will continue to increase, given the increasing number of Indonesia's population.

In order to optimize domestic revenue from tax revenue on an ongoing basis, the government has carried out tax reforms since 1983. The tax reform is changing the tax collection system that was originally from an official assessment system to a self-assessment system. Self-assessment system is a tax collection system that is applied on the basis of the trust of the tax authority that gives taxpayers freedom in carrying out their tax obligations [2].

Although the tax collection system applied in Indonesia uses a self-assessment system, in reality there are still many taxpayers who don't want to pay taxes. This is what makes Indonesia's state tax ratio still far compared to other countries which is 11.5% [3]. Because according to the world bank, the ideal tax ratio of a country is 15% [4]. The low tax ratio that Indonesia currently has shown the low level of public awareness in paying taxes [5].

The theory used to analyze behavior in this study is Theory of Reasoned Action. Theory of Reasoned Action states that a person will engage in behavior if he has an interest in doing so. There are two basic determinants that can influence one's behavioral interest, namely attitudes and subjective norms [6]. Ajzen [7] argues that the behavior model can be extended to obtain additional predictor variables. Therefore, this study adds one external variable, the tax system.

This research aims to explain about the tax compliance intention. It focuses to address the following research questions. First, does attitude relate to tax compliance intention? Second, do subjective norms relate to tax compliance intention? and Third, do tax system relate to tax compliance intention.

II. RELATED WORK

A. Theory of Reasoned Action

Theory of Reasoned Action (TRA) was formulated by Ajzen and Fishbein [8]. The formula tries to estimate the difference between attitude and behavior. The basics of TRA itself come from the field of social psychology. Social psychologists seek, among other things, to explain how and
why attitudes influence behavior, which is just as important in reflecting on this research [9]. It can be seen on figure 1.

\[\text{Atitudes} \rightarrow \text{Behavioral Intention} \rightarrow \text{Behavior} \]

Fig. 1. Theory of Reasoned Action (TRA) [8].

In order to understand the behavior of a particular taxpayer, it is important to identify the determinants of behavior intentions [10]. TRA consists of two determinants that affect intention, including attitudes and subjective norms. Attitude is influenced by belief in an outcome whose degree is measured by evaluation of the results [11]. Subjective norms refer to the social pressure felt on individuals to act or not act [7]. Besides the two variables, behavior intentions can be influenced by tax system. The tax system is the respondent's general perception of the tax system in terms of fairness, compliance costs, and system simplicity [12].

B. Tax Compliance

Taxpayer Compliance according to Kirchler [2] and Kichler, Hoelzle. & Wahl [13] is an act of taxpayers for their tax obligations governed by applicable legislation. Tax Compliance interpreted as an ideal condition for taxpayers who meet tax regulations and report their income accurately and honestly. From these ideal conditions, tax compliance is defined as a condition of taxpayers who fulfill all tax obligations and carry out their tax rights in the form of formal and material compliance [11].

Next, tax compliance is divided into two, namely formal tax compliance and material tax compliance. Formal tax compliance is compliance that is regulated in accordance with the provisions of the tax law, for example having an NPWP for those who already have income, on time in reporting the annual tax return, on time in paying off tax debts according to a specified deadline. Meanwhile, material tax compliance is a condition in which the taxpayer fulfills substantially all material tax provisions in accordance with the contents of taxation regulations. For example, taxpayers who have filled in the SPT correctly according to actual conditions [14].

Many researchers have used Theory of Reasoned Action (TRA) in their research. Hidayat and Nugroho conducted a study that tested the variable attitudes and subjective norms of tax compliance intentions, the results explained that the attitudes of subjective norms had a significant effect on tax compliance intentions. Furthomer, Biddin et al [11] conducted a tax compliance study by examining variable attitudes and subjective norms on the tax compliance intentions. The results showed that attitudes and subjective norms had a significant effect on tax compliance intention. Estiningish [15] also tested the influence of attitudes and subjective norms, the results explained that attitudes and subjective norms influenced tax compliance intention. Other studies in tax compliance examining the tax system variable were conducted by Smart [12] which showed that the tax system had a significant effect on tax compliance intention.

The purpose of this study is to identify the determinants of tax compliance intentions on taxpayers in Java Indonesia. This research was conducted through the development of a theoretical framework that examines the literature on the determinants of tax compliance intentions. In addition, this theoretical framework is also supported by empirical evidence obtained through a survey-based questionnaire filled out by a sample of taxpayers in Java.

This study contributes to the understanding of taxpayer compliance intentions on the Indonesian island of Java. Where the area has not been used as the object of research in the past. Practically, the results of this study can be used by the Directorate General of Taxes to consider the determinants of the implementation of tax compliance in Indonesia. Directorate General of Taxes to improve the current system or look for ways to attract new users to improve tax compliance. By understanding that factors, The Directorate General of Taxes can expand and improve its knowledge of taxpayer decision making in Indonesia, which in turn can lead to improved strategic planning. In addition, this study will later be able to help policy makers, in this case the government, to improve the taxpayer database and tax revenue in Indonesia in the future.

III. METHODOLGY

Quantitative method was used in this study. This study uses an exploratory empirical study in which new data is collected relating to the problem statement and research objectives through survey research. This kind of study involves the willingness of the taxpayer's behavioral intention to assist the researcher by providing responses to questions by testing the developed hypothesis.

To test this model, this study was conducted through a survey of the wide diversity of citizens in Java-Indonesia. The questionnaire items were adapted from previous research: Attitudes [16]; Subjective Norms [17]; and tax system [12].

This study was conducted with a snowball sample and judgment sample. Snowball sampling is done by utilizing the alumni network. In addition, respondents taken in this study must have the criteria, which have worked at least 2 years, have an income, and have a NPWP.

The sample in the study follows the recommendations of Rescoe in Sekaran and Bougie [18], which ranges from above 30 to 500 samples and the minimum number of samples several times (preferably 10 times or more) is greater than number of variables in the study, therefore, the number of samples in this study were 136 samples. PLS regression was used to analyse the data.
IV. RESULTS

A. Respondents' Profile

The background information of the participants in this study that slightly more than half (45.3%) are a female and (55.7%) are a male. Most respondents were mostly from the East Java region, followed by Jakarta, West Java, Central Java, Yogyakarta and Banten. The average age of respondents is in the range of 30-39 years. With the most jobs are government employees (ASN), then employees of BUMN / BUMD, and private employees.

B. Validity Evaluation

Evaluation of construct validity with smartPLS consists of two types, namely convergent validity and discriminant validity. The following results are convergent validity and discriminant validity in this study.

1) Convergent validity: The parameters used to determine convergent validity are loading factors, AVE, and communality. The results of AVE and communality in this study are presented in Table 1.

| Construct | AVE  | Communality |
|-----------|------|-------------|
| X1        | 0.545| 0.545       |
| X2        | 0.563| 0.563       |
| X3        | 0.557| 0.557       |
| Y1        | 0.689| 0.689       |

Note: X1 = Attitude, X2 = Subjective Norms, X3 = Tax System, Y1 = Tax Compliance Intention

Based on table 1, that the AVE values and communality values are more than 0.5. This explains that the construct in this study was in accordance with the provisions of the convergent validity parameter. Therefore, all variables used in this study are valid. Whereas to determine the convergent validity of the other requirements is the variable loading factor. The following results of factor loading are presented in Table 2.

| Construct | Original Sample (O) | T Statistics (O/STERR) |
|-----------|---------------------|------------------------|
| X11 < X1  | 0.692               | 9.538                  |
| X12 < X1  | 0.761               | 13.607                 |
| X14 < X1  | 0.705               | 11.593                 |
| X19 < X1  | 0.786               | 17.296                 |
| X21 < X2  | 0.888               | 17.296                 |
| X22 < X2  | 0.758               | 9.744                  |
| X36 < X2  | 0.571               | 4.403                  |
| X31 < X3  | 0.767               | 11.564                 |
| X32 < X3  | 0.641               | 5.442                  |
| X33 < X3  | 0.821               | 17.945                 |
| Y11 < Y1  | 0.625               | 7.476                  |
| Y12 < Y1  | 0.877               | 28.284                 |
| Y13 < Y1  | 0.906               | 43.287                 |
| Y14 < Y1  | 0.877               | 18.835                 |
| Y15 < Y1  | 0.835               | 14.139                 |

Note: X1 = Attitude, X2 = Subjective Norms, X3 = Tax System, Y1 = Tax Compliance Intention

Based on table 2, shows factor loading values above 0.5 for all indicators. This shows that the model in this study passed the convergent validity test.

2) Discriminant validity: The parameter used to assess the validity of discrimination is cross loading or making comparisons between the AVE root value and the correlation of latent variables. Result of AVE root and correlation of latent variables are presented in Table 3, while the results of cross loading are presented in Table 4.

| Construct | Root AVE | X1 | X2 | X3 | Y1 |
|-----------|----------|----|----|----|----|
| X1        | 0.738086038 | 1.000 | 0.264 | 0.344 |
| X2        | 0.750231298  | 0.480 | 1.000 | 0.512 |
| X3        | 0.746573506  | 0.325 | 0.101 | 1.000 |
| Y1        | 0.830127099  | 0.640 | 0.401 | 0.421 | 1.000 |

Note: X1 = Attitude, X2 = Subjective Norms, X3 = Tax System, Y1 = Tax Compliance Intention

Based on table 3, it appears that the root AVE value is higher than the correlation between latent variables. This shows that all variables in this study are declared valid. Furthermore, the results of cross loading in this research are presented in Table 4.

| Construct | X1 | X2 | X3 | Y1 |
|-----------|----|----|----|----|
| X11       | 0.692 | 0.429 | 0.264 | 0.344 |
| X12       | 0.767 | 0.325 | 0.192 | 0.484 |
| X14       | 0.703 | 0.297 | 0.204 | 0.514 |
| X19       | 0.786 | 0.395 | 0.310 | 0.512 |
| X21       | 0.438 | 0.808 | 0.094 | 0.388 |
| X22       | 0.361 | 0.758 | 0.087 | 0.252 |
| X26       | 0.258 | 0.571 | 0.039 | 0.232 |
| X31       | 0.215 | 0.085 | 0.767 | 0.383 |
| X32       | 0.227 | 0.156 | 0.641 | 0.199 |
| X33       | 0.297 | 0.017 | 0.821 | 0.317 |
| Y11       | 0.361 | 0.309 | 0.271 | 0.625 |
| Y12       | 0.641 | 0.351 | 0.370 | 0.877 |
| Y13       | 0.641 | 0.276 | 0.437 | 0.906 |
| Y14       | 0.440 | 0.331 | 0.369 | 0.877 |
| Y15       | 0.535 | 0.413 | 0.278 | 0.835 |

Note: X1 = Attitude, X2 = Subjective Norms, X3 = Tax System, Y1 = Tax Compliance Intention
Based on the table 4, that the root values of AVE and communality are all more than 0.5. This shows that indicators measuring attitudes, subjective norms and tax system in the study are valid. C. Evaluation of Reliability The parameters for measuring reliability in this study were Cronbach’s alpha values and composite reliability. Cronbach’s alpha values and composite reliability are presented in Table 5.

| Construct | Composite Reliability | Cronbach’s Alpha |
|-----------|-----------------------|------------------|
| X1        | 0.827                 | 0.724            |
| X2        | 0.789                 | 0.600            |
| X3        | 0.789                 | 0.621            |
| Y1        | 0.916                 | 0.883            |

Note: 
X1 = Attitude
X2 = Subjective Norm
X3 = Tax System
Y1 = Tax Compliance Intention

Based on the table 6, that the value of composite reliability and Cronbach’s alpha in this study is more than 0.6. It can be concluded that all variables used in this study are reliable.

D. Inner Model Evaluation

After the validity and reliability pass the test, then an inner model evaluation will be conducted. The parameters used to evaluate the inner model using smartPLS are the coefficient of determination and the path coefficient. The coefficient of determination describes how much the dependent latent variable can be affected by the independent latent variable. The coefficient of determination of the construct of interest for tax compliance intention is 55.288%, meaning that the construct of interest for tax compliance intentions is influenced by 55.288% by attitudes, subjective norms, and the tax system. The coefficient of determination of the construct of tax compliance intention is 22.955%, meaning that the construct of tax compliance intention is influenced by 22.955% by the interest of tax compliance intention.

The path coefficient is a coefficient that indicates the level of significance in testing the hypothesis. The hypothesis used in this study is a two-tailed hypothesis. Therefore, the hypothesis will be accepted if it has a statistical t value of more than 1.96. Below, the results of the path coefficient values are presented in Table 6. and the structural model of the study used in Figure 2.

| Construct   | Original Sample (O) | T Statistics (|O/STERR|) | Decision |
|-------------|---------------------|----------------|----------|
| X1 -> Y1    | 0.494               | 6.200          | Received (H1) |
| X2 -> Y1    | 0.139               | 1.853          | Rejected (H2) |
| X3 -> Y1    | 0.246               | 2.352          | Received (H3) |

Note: 
X1 = Attitude
X2 = Subjective Norm
X3 = Tax System
Y1 = Tax Compliance Intention

Based on table 6 and figure 2, it can be concluded that the results of this research include:
- Hypothesis 1 (H1) is accepted, with a statistical value of 6.200 which is greater than the t-table value of 1.96 (6.200 > 1.96), it can be explained that attitude have a significant effect on the interest of compliant personal taxpayers on the island Java, Indonesia.
- Hypothesis 2 (H2) is rejected, with a statistical value of 1.853 which is smaller than the t-table value of 1.96 (1.853 < 1.96), so it can be concluded that subjective norms do not significantly influence interest in compliant personal taxpayers' behavior on the island Java, Indonesia.
- Hypothesis 3 (H3) is accepted, with a statistical value of 6.200 which is greater than the t-table value of 1.96 (6.200 > 1.96), so it can be explained that the perception of behavioral control has a significant effect on the compliant behavior of individual taxpayers on the island of Java, Indonesia.

V. DISCUSSION AND CONCLUSION

A. Discussion

This study focused on tax compliance intention in Java Indonesia. The model explained that attitude and tax system had significant influence on the tax compliance intention in Java, Indonesia. Furthermore, this model showed that subjective norms had not significant influence on the tax compliance intention in Java, Indonesia.
Hypothesis 1. The results of this study indicate that the attitude influences the tax compliance intention in Java, Indonesia. This study explains that Attitudes towards taxpayer compliance are shaped by the belief of taxpayers towards taxpayer compliance. Taxpayer beliefs about the behavior of taxpayer compliance will produce positive and negative attitudes which will then form an intention of taxpayers to behave obediently or not comply with the provisions of the applicable laws [19]. The results of this study indicate that the higher a person believes that an interest in complying with tax is a positive attitude, the person will be more interested in behaving obediently. So it can be explained from the results that taxpayers in the Indonesian island of Java feel confident to be interested in behaving obediently by knowing everything about the implementation of tax obligations based on the provisions of tax legislation in Indonesia. The results of this study are consistent with the research of Hastuti and Nugroho [20]; Biddin et al [11]; Estiningtih [15] and Damayanti et al [21].

Hypothesis 2. The results of this study indicate that subjective norms do not affect the tax compliance intention in the Java, Indonesia. This study explains that individuals who tend to feel social pressure to perform a behavior are caused by the influence of their social environment in recommending doing a behavior. On the other hand, individuals who tend to feel social pressure not to carry out a behavior are caused by the behavior of social environments that do not recommend not to do a behavior [21]. The results indicate that the higher a person does not believe the influence of the social environment does not affect the interest in behaving obediently, the person will be less interested in behaving obediently. The results are consistent with the research of [22]. However, it is not consistent with the research of Bidin et al., [11], Estiningtih [15] and Saputra [19]. According to Hidayat and Nugroho [22] who support this research stated that social pressure from people around strong will not affect if the individual ignores it. Therefore, it can be summarized from the results of this research’s that taxpayers in the Indonesian island of Java, ignoring social environmental pressures around taxpayers, so that it makes them not interested in behaving obediently.

Hypothesis 3. The results of this study indicate the results that the tax system influences the interest of taxpayer compliance in the island of Java, Indonesia. This study explains that, an easy tax system will increase tax compliance [23]. Conversely an overly complicated tax system will reduce the level of tax compliance [24]. The results can be explaining that the higher a people believes that the interest in tax compliance is a positive attitude, the more interested the person will behave obediently. Therefore, it can be concluded from this study, that taxpayers in the Indonesian island of Java feel that an easy tax system for implementing tax obligations in Indonesia makes them interested in behaving obediently. The results of this study are consistent with Smart’s research [12].

B. Conclusion

This study replication constructs from the Theory of Reasoned Action [7] and develop variable from Smart [12]. This study concludes that the attitude and tax system influence on the intention tax compliance. Meanwhile, subjective norms do not affect the intention tax compliance.

REFERENCES

[1] Anonim, “Ini Capaian APBN 2018,” [online]. Retrieved from https://kemenkeu.go.id
[2] E. Kirchler, The economic psychology of tax behaviour. Cambridge University Press, 2007.
[3] Anonim, “Mengenal Rasio Pajak Indonesia,” [Online]. Retrieved from https://kemenkeu.go.id
[4] G.G. Quddus, “Rasio Pajak di Bawah Standar Bank Dunia, Sri Mulyani Malu,” [Online]. Retrieved from https://ekonomi.kompas.com
[5] L. Fahrami, “Alasan Mengapa Tax Ratio Indonesia Tergolong Rendah,” [Online]. Retrieved from https://www.kompasiana.com
[6] J. Hartono, Sistem Informasi Keperilakuan. Edisi Revisi. Yogyakarta: Andi Offset, 2007.
[7] I. Ajzen, “The theory of planned behavior,” Organizational Behavior and Human Decision Processes, vol. 50, no. 2, pp. 179-211, 1991.
[8] I. Ajzen and M. Fishbein, Understanding Attitudes and Predicting Social Behavior, Englewood Cliffs, NJ, Prentice-Hall Inc., 1980.
[9] O.C. Oteulu, S.O. Lijaya, C. Benson, and S. Abeka, “Theory of Reasoned Action as an Underpinning to Technological Innovation Adoption Studies,” World Journal of Computer Application and Technology, vol. 4, no. 1, pp. 1-7, 2016.
[10] D. Hanno and G.R. Violette, “An Analysis of Moral and Social Influences on Taxpayer Behaviour,” Behavioural Research in Accounting, vol. 8, pp. 57-75, 1996.
[11] Z. Bidin, F.M. Shamsudin, and Z. Othman, “Using Theory of Reasoned Action to Explain Taxpayer Intention to Comply with Goods and Service Tax,” International Journal of Business and Social Science, vol. 5, no. 1, 2014.
[12] M. Smart, “The Application Of The Theory Of Planned Behaviour And Structural Equation Modelling In Tax Compliance Behaviour: A New Zealand Study,” Thesis. Department of Accounting and Information Systems at the University of Canterbury, 2012.
[13] E. Kichler, Hoelzelte and I. Wahl, “Enforced versus voluntary tax compliance: the „slippery slope’’ framework,” Journal of Economic Psychology, vol. 29, no. 2, pp. 210-225, 2018.
[14] Y. Mangoting and A. Sadijaarto, “Pengaruh Postur Motivasi Terhadap Kepatuhan Wajib Pajak Orang Pribadi,” Jurnal Akuntansi dan Kehuangan, vol. 15, no. 2, 2013.
[15] W. Estiningtih, “Faktor-faktor yang Mempengaruhi Kepatuhan Pajak Usaha Kecil Menengah (UKM),” Jurnal Sosio e-Kons, vol. 6, no. 1, 2014.
[16] N. Saad, “Fairness Perceptions and Compliance Behaviour : The Case of Salaried Taxpayers in Malaysia after Implementation of the Self Assessment System,” E-Journal of Tax Research, vol. 8, no. 1, pp. 32-63, 2010.
[17] S. Taylor and P.A. Todd, “Understanding information technology usage: a test of competing models,” Information System research, vol. 6, pp. 144-176, 1995.
[18] U. Sekaran and R. Bougie, Research Method for Business (5ed). USA: John Wiley and Sons Inc, 2010.
[19] H. Saputra, “Analisa Kepatuhan Pajak dengan Pendekatan Teori Perilaku Terncana (Theory of Palmed Behaviour) (Terhadap Wajib
Pajak Orang Pribadi di Provinsi DKI Jakarta),” Jurnal Muara Ilmu Ekonomi dan Bisnis, vol. 3, no. 1, pp. 47-56, 2019.

[20] W. Hidayat and A.A. Nugroho, “Studi Empiris Theory of Planned Behavior dan Pengaruh Kewajiban Moral pada Perilaku Ketidakpatuhan Pajak Wajib Pajak Orang Pribadi,” Jurnal AKuntansi dan Keuangan, vol. 12, no. 2, 2010.

[21] T. Damayanti, Sutrisno, Subekti, and Z. Baridwan, “Trust and Uncertainty Orientation : An Efforts to Create Tax Compliance in Social Psychology Framework,” Social and Behavioral Science, vol. 211, pp. 938-944, 2015.

[22] D.N. Anjani and M.D. Restuti, “Berkala Akuntansi dan Keuangan Indonesia,” vol. 1, no. 2, pp. 125-144, 2015.

[23] A.A. Razak and C.J. Adafula, Academics Journals, vol. 5, no. 3, pp. 48-57, 2013.

[24] D.S. Jayawardane and K. Low, “Exploring Key Determinants of Tax Compliance Decision Among Individual Taxpayers in Sri Lanka,” European Journal of Business and Management, vol. 9, no. 3, 2017.