

BETWEEN POWER AND TRUST: MINIMIZING LOCAL TAX EVASION THROUGH THE SLIPPERY SLOPE FRAMEWORK APPROACH

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Abstract

The tax evasion is global phenomenon experienced by different countries, either Local Government in Indonesia. This research present the Slippery Slope Framework to built a model that integrate power and trust to explain how they impact on tax evasion in the context of local tax in West Lombok Regency. The research model estimation uses the Partial Least Squares (PLS) approach and applies Finite Mixture PLS Path Modeling (FIMIX-PLS) method to uncover unobserved heterogeneity by segmenting the sample, thus applies PLS Multi-group Analysis (PLS-MGA) to identifies difference within segment and finally PLS Importance-Performance Map Analysis (PLS-IPMA) which in turn can lead managerial actions of tax authority to achieve lower tax evasion. The research finding show that the main difference characterizing the two uncovered heterogeneity taxpayer segment that lies in the government tax of hotel, restaurant and entertainment services as a local tax in the city/regency. The major segment represented tax payer that are fairly voluntary compliance while the other smallest segment are more compliance voluntarily. Thus, the power of authorities has a small negative impact on tax evasion for the first segment but positive impact for second segment. Conversely, the trust in authorities has a negative impact on tax evasion in both segment by stronger effect for the second segment. An Importance-Performance Map Analysis (IPMA) illustrated substantial differences across these segment and provides supportive multiple strategies for tax authorities regarding the effort to minimize tax evasion. Finally, our study underlines the need to revealed unobserved heterogeneity among taxpayer population and the need to reconsider reporting in future academic research on taxpayer compliance.

Keywords: Tax Evasion, Slippery Slope Framework, FIMIX-PLS, Unobserved Heterogeneity, Multi-group Analysis, Importance-Performance Map.

1. Introduction

Minimizing Tax evasion is one of the most complex activities in Tax Administration experienced by different countries, either Local Government in Indonesia. This is because tax evasion takes many forms and facets. Tax evasion usually entails taxpayers deliberately misrepresenting or concealing the true state of their affairs to the tax authorities to reduce their tax liability. It also includes, in particular, dishonest tax reporting such as declaring less income, profits or gains than actually earned; or overstating deductions. One of the major keys to successfully carry out such activities is to first and foremost understand the behavior of taxpayers and the reasons that cause such specific behavior (Chiumya, 2009).

Research on tax evasion has quite a long tradition in the field of economics, pioneered by seminal study of Allingham and Sandmo (1972) that used the economic approach from the economic of crime perspective in the context of a person's decision to tax evasion. Taxpayer's decision is influenced by four things; the amount of income, tax rate, the risk of audits and sanctions. The greater the risk of the audits, the taxpayer will consider tax evasion as being at high risk for undetected, so they tend to be more obedient. Other is the more severe sanctions, then the tax evasion becomes a high-risk decision. Therefore, policies that can be implemented by the government to minimize tax evasion belong to Allingham and Sandmo (1972) are to apply severe sanctions and do more audits.

Unfortunately, taking into account the rather low probability that a taxpayer may be audited in almost any country around the world, as well as the relatively low level of fines for evasion, the assumption that solely economic factors determine whether citizens evade taxes must be seriously doubted. An overview of the inconsistent empirical findings in the literature with regard to the economic factors income, tax rate, audit probability and severity of fines is reported in Kirchler, et al. (2008).

Kirchler et al. (2008) then offers a possibility to integrate these puzzling effects of economic and psychological factors namely the slippery slope framework of tax compliance. In this framework different motivations for paying taxes are differentiated: enforced and voluntary compliance. It is assumed that mainly economic factors such as audit probability and fines determine the perceived power of authorities to enforce compliance, whereas the psychological factors such as the perception of a fair

tax system affect trust in authorities resulting in voluntary cooperation. Thus, the slippery slope framework introduces two major dimensions which both influence the level of tax compliance: trust in the authorities and power of the authorities. Tax honesty can be achieved either by taking measures that increase trust or by measures to enhance power, but the resulting compliance differs in quality. For instance, whereas trust in authorities could be enhanced by a government that makes decisions in a fair and transparent way, power may depend mainly on frequency and efficiency of audits. In a nutshell, trust is said to be the main factor in explaining voluntary tax cooperation, whereas enforced compliance is influenced primarily by the perceived power of authorities, and both factors contribute to tax compliance in general. These basic assumptions of the slippery slope framework were also formalized for an economic model (Prinz et al., 2013) and were supported by empirical research in recent years (Wahl et al., 2010; Muehlbacher et al., 2011; Kogler et al., 2013, Kastlungler et al., 2013, Basri, 2013).

Furthermore, in the slippery slope framework Kirchler et al. (2008) argue that the classical tools of deterrence (frequent tax audits and reasonably high fines for tax evaders) work best in an antagonistic climate between tax authorities and taxpayers, but in a synergistic tax climate psychological factors, such as the perceived justice of the tax system or social and societal norms are more important to increase and stabilize tax compliance. The proposed mechanism for this differentiation is that audits and fines are expected to influence perceptions of authorities' power, while the psychological factors should affect taxpayers' trust in authorities.

In the present study, the assumptions of the slippery slope framework are tested within a representative sample of local taxpayers of Hotel, Restaurant and entertainment business as local taxes that are managed by the Office of Regional Revenue Agency (BAPENDA) in West Lombok Regency, West Nusa Tenggara Province. In a first step, we test if (i) trust in the authorities serves as a significant predictor tax evasion, (ii) perceived power of the authorities serves as a significant predictor of tax evasion, (iii) power of the authorities serves as a significant predictor of trust in the authorities, and (iv) the relation between perceived power of the authorities and tax evasion tax evasion is mediated by trust in authorities. In addition, we assumed that enforced compliance and voluntary compliance of taxpayers are finite mixture in the population.

The purpose of this study is to examine the impact of power of the authorities and trust in the authorities on tax evasion, using the integrated advantages of Partial Least Square (PLS) approach with the advantages of a finite mixture approach to taxpayer segmentation. In accordance with Ringle et al. (2015) this research uses the Finite Mixture Partial Least Square (FIMIX-PLS) module to further examine differences across observations by segmenting the taxpayers based on the estimated group-specific construct scores. Finite Mixture PLS approach is applied to capture heterogeneity in structural equation models that link power of the authorities and trust in authorities to tax evasion. It empirically derives segments and directly estimates model relationships. The approach calculates segment proportions, or the degree to which taxpayers belong to particular segments, and the results can be statistically tested with goodness of fit measures. The integration is unique because it leverages the advantages of a least-squared procedure when operationalizing a tax evasion model and the advantages of a maximum likelihood based approach when deriving taxpayer segments.

Segmentation of the differences across taxpayers is a key element for the tax authorities to develop and enhance taxpayer compliance management based on their responses to power of authorities and trust in tax authorities. An understanding of the motives and conditions that accompany the tax evasion behavior could lead the policy makers to find solutions to overcome the problems. Thus, research on the reasons that encourage tax evasion is basically as important as the research on the formulation of appropriate policies to increase revenue (PAD) from local taxes in a region.

2. Theoretical Framework and Hypothesis Development

2.1. Slippery Slope Framework

The Slippery Slope Framework for tax compliance behavior was developed by Kirchler, et al. (2008) states that tax compliance can be fostered through increased public confidence in the tax authorities and an increase in power of the tax authorities in detecting the evasion and sanction any violations. The efforts of tax authorities to increase taxpayer confidence lead to voluntary compliance, which means that the taxpayer would be more likely to cooperate and more honest in reporting and paying the tax due. On the other hand government power can cause enforced compliance, mean that taxpayer compliance to avoid the risk of discovery of fraud and severity of sanctions.

Kirchler et al. (2008) proposed a number of assumptions in the Slippery Slope Framework are: (1) Tax compliance depends on two main dimensions, namely the power of authorities and trust in authorities. It is assumed that the taxpayer is likely to be obedient when there is a trust in the authorities to the tax authorities or also the power of authority to regulate and prevent tax evasion. Briefly it can be stated that the combination trust in authorities and power of authorities in implementing law enforcement can effectively lower the tax evasion, (2) Compliance reasons can be divided into forced compliance and voluntary compliance. The increasing power of authority will improve forced compliance, while voluntary compliance increased with increasing confidence to taxpayers, (3) Dimensions of power and trust moderated each other.

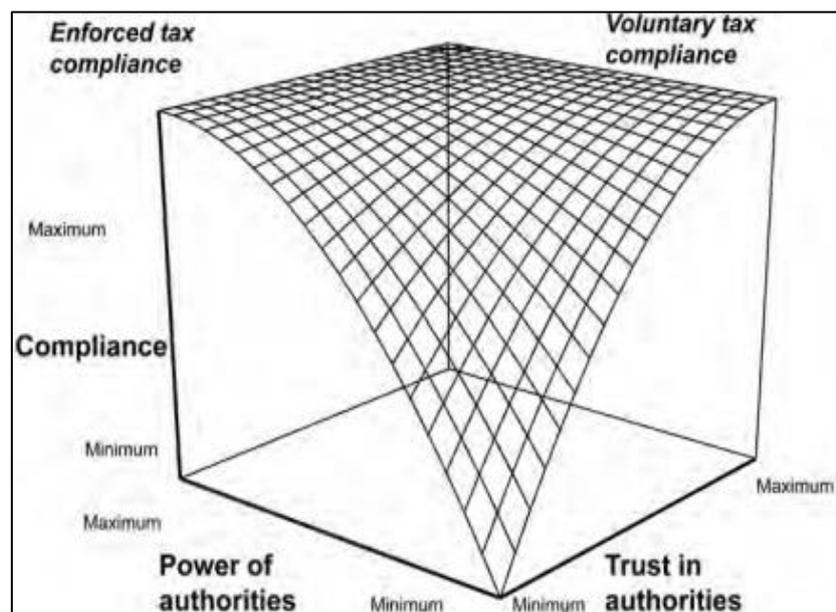


Figure 1
Slippery Slope Framework (Kirchler et al., 2008)

The framework presented in Fig. 1 can be used as a conceptual tool and as an operational tool (Kirchler et al., 2008). As a conceptual tool it may serve to understand the importance of determinants of tax behavior and the ambiguous effects reported in empirical research.

2.2. The Relationship Between Power, Trust and Tax Evasion

To confirm the assumptions of the slippery slope framework, the first empirical analysis was conducted two years after its introduction (Wahl et al., 2010). The authors tested the main hypotheses of the slippery slope framework in two experiments using students and self-employed taxpayers. The

results showed that voluntary tax compliance is high when the authorities are trustworthy. Similarly, Kastlunger et al. (2013) tested the assumptions of the slippery slope framework through model testing. Their work improved the existing evidence about the framework by distinguishing coercive power from legitimate power. Their study correlated tax evasion as a dependent variable with five independent variables: enforced tax compliance, voluntary tax compliance, legitimate power, coercive power and trust. The result showed that trust in authorities improves voluntary compliance, and voluntary tax compliance has a strong negative relationship with tax evasion. A similar result was obtained by Muehlbacher et al. (2011) who also found the combined effect of trust and power on tax compliance.

Additionally, assumptions of the slippery slope framework were tested in four European countries (Kogler, et al., 2012). The study tested the mediation effect of voluntary tax compliance, enforced tax compliance and strategic tax compliance on the relationship between tax compliance behavior and its three determinants: trust, power and country. Results indicated that the assumptions of the framework hold in those four countries. In a similar study, Pellizzari & Rizzi (2013) presented a more robust model with heterogeneous agents who maximized their individual utility based on after-tax income and the conjectured level of per capita public expenditure. The study extended the slippery slope framework by using more improved measures of voluntary compliance called citizenship. The model depicted the relationship between tax compliance as a dependent variable and citizenship (perception of public expenditure, peer influence, risk aversion, morality) and power as independent variables. The result showed that the independent variables have an effect on tax compliance. However, citizenship had more influence on compliance than power of authorities.

Using PLS-SEM Basri (2013) found that the power of positive influence on trust, confidence positive effect on voluntary compliance, but the trust has no effect on tax evasion. Power has positive effect on compliance and negative effect on tax evasion, while the negative effect on the voluntary compliance of tax evasion and enforced compliance had no effect on tax evasion. Therefore, we hypothesize:

H1. *Power of authorities is significantly related to tax evasion*

H2. *Trust in authorities is significantly related to tax evasion*

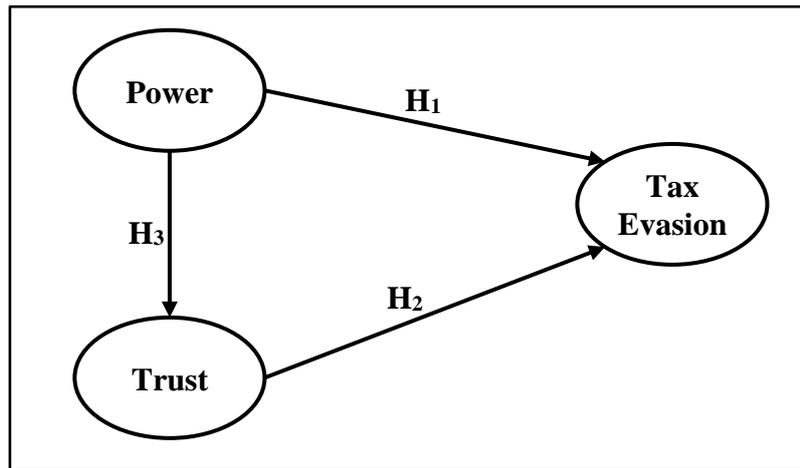


Figure 2
Basic Structural Model

Trust and power are two factors that are not independent one of the other, a change of one also has an influence on the other (Kirchler et al., 2008; Walh et al., 2010). Change in power of the authorities may result in an increase, or a decrease, of trust; it depends on the way it is perceived. A raise of power may be perceived by some, as a mistrustful toward taxpayers, and by others, as a voluntary act of equity of taxpayers towards the law, while a decrease of power may be perceived by some, as a sign of trust toward taxpayer, and by others, as a sign of not serving well the collective goal, and as a sign of cooperation toward evading taxpayers (Wahl et al., 2010). In representative sample of self-employed taxpayers (Korgler et al., 2013) also found that trust mediates the relation between deterrence and tax compliance. These findings are completely in line with the assumptions of the slippery slope framework of tax compliance (Kirchler et al., 2008). Therefore, we hypothesize:

H3. power of authorities is significantly related trust in authorities

H4. Trust in authorities mediated the effect of power of authorities to tax evasion

The structural equation model visualizing these relationships is shown in Figure 2.

3. Research Method

3.1. Population and Sample

Drawing from literature review, a research model was constructed for this study to explain the relationship among power of authorities, trust of authorities and tax evasion. The respondents in this study were taxpayer on local taxes including the taxpayer of hotel, restaurant and entertainment business

in West Lombok Regency. We collected data using questionnaires by including the items of the latent variables and a section with the taxpayer socio-demographic variables. In order to guarantee that the questionnaire communicated similar information to all respondents, first a pilot sample of twenty-nine revenue officer and tax auditor (personally interviewed) was used to ensure that the wording of the questionnaire were clear. Finally, to improve the response rate respondents were reassured about the confidentiality and anonymity of their responses and that their personal information would not be disclosed.

The questionnaire distribute to 154 samples consist of 74 hotel, 49 restaurant and 32 entertainment business tax payer that stratified randomly chosen from 253 population of taxpayer. At the of the process, we obtained 129 questionnaire responses, of which 3 were incomplete questionnaires, so the number of questionnaires that were valid and could be used in this study was 126 with a 81,82 percent response rate.

The summary of the respondent's demographic profile can be described as follows. Of the 126 respondents, 55.56 percent were male and 44.44 percent were female, with 43.65 percent were age between 31-40 years, 42.86 percent with an average age of between 41-50 years. In terms of education, 55,56 percent of respondent were junior and senior high school, 13.49 percent were diploma and 30.95 percent were bachelor graduated.

3.2. Variables and Variable Measurement

This research consists of three variables that are classified into exogenous and endogenous variables. All types of the variables are latent variables that are unobservable and can not be measured directly, so as to perform quantitative analysis required indicators or manifest variables represent observables that can be measured directly.

PWR constructs are measured using a three-item questionnaire adopted from Hofmann et al. (2014). Respondents will be asked about the extent of frequency audit that are held by tax authorities to the their business, probability of evade detection, and the severe of sanction by selecting one of the five (5) options using a Likert scale from 1 = Strongly disagree to 5 = Strongly agree.

TRUST constructs are measured using a five-item questionnaire adopted from Morreale and Shockley-Zalabak (2014). Respondents will be asked about their confidence on the tax authorities in item of (1) competence relates to the overall efficiency of the tax authorities as well as to the quality of services to satisfy tax payer, (2) The openness and honesty is reflected in how tax authorities communicate about the taxpayer affairs, (3) The concern for stakeholder is about communication and employment policies, processes, and practices. Trust is higher when tax authorities bring full information to taxpayer who affected by decisions, (4) The reliability is about tax authorities try keeping commitments and basic follow-through the rule of law in their duty, and (5) The identification is the connection between the tax authorities and all those involved in it, most often based on core values. Identification is high when taxpayer believe their values are reflected in the values the tax authorities as well as tax for public goods.

Construct of Tax evasion (TE) in this research are measured using a five-item questionnaire adopted from Keen and Smith (2007) dan *World Value Survey* (WVS) questionnaire adopted by Abdixhiku (2013). Given the difficulty in gaining access to the object in order to observe the real unlawful behavior, a scenario approach is commonly used in research in the field of accounting and ethics (Latan *et al.*2016). Respondents will be asked about their agrees about the intentional activities to underreporting of taxable liabilities to tax authorities. If respondent agree to do not issued an invoice, use unvalidated invoice, underreported sales, tax collected but not remitted, then they are assumed to be evaders and if respondent agree that bribery to the tax authorities is a common activities, then they are assumed to be evaders.

3.3. Data Analysis Method

The Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach was employed to estimate structural paths coefficients, Coefficient of Determinant (R^2), Stone-geisser's (Q^2), and the Bootstrap technique. PLS is based on an iterative combination of principal components analysis and regression, and aims to explain the variance of the constructs in the model (Hair *et al.*, 2014). Other advantageous of PLS is simultaneously estimates all path coefficients and individual item loadings in

the context of a specified model and, as a result, enables researchers to avoid biased and inconsistent parameter estimates.

The PLS model is analyzed and interpreted in two stages. First, the adequacy of the measures is assessed by evaluating the reliability of the individual measures and the discriminant validity of the constructs (Hair *et al.*, 2014). Then, the structural model is appraised. The adequacy of the measures is assessed by evaluating the reliability of the individual items and the discriminant validity of the constructs. Item reliability is assessed by examining the loading of the measures on their corresponding construct. Composite reliability was used to analyze the reliability of the constructs since this has been regarded as a more exacting measurement than Cronbach's alpha (Hair *et al.*, 2014)

The measures demonstrated convergent validity as the average variance of manifest variables extracted by constructs (AVE) was at least 0.5, indicate that more variance was explained than unexplained in the variables associated with a given construct (Hair *et al.*, 2014). The criterion used to assess discriminant validity was the square root of AVE that called Fornell-Larckell Criterion, which should be greater than the correlation between the construct and other constructs in the model.

The significance of the path coefficient in the algorithm result, SmartPLS 3.26 run a nonparametric approach, called Bootstrap, to estimate the precision of the PLS estimates. Thus, through the process of bootstrapping (bias-corrected and accelerated) by 500 samples sets were created in order to obtain 500 estimates for each parameter in the PLS model. Each sample was obtained by sampling with replacement of the original data set (Hair *et al.*, 2014; Ringle *et al.*, 2015; Garson, 2016). The Blindfolding technique was used to calculate the Q^2 and as all values of Q^2 are positive, the relations in the model have predictive relevance.

Following the analysis of the structural model, we applied the finite mixture partial least squares (FIMIX-PLS) to identify and treat unobserved heterogeneity by segmented the sample based on the estimated scores for latent variables (Ringle *et al.*, 2015). Thus, we applied PLS Multi-group Analysis (PLS-MGA) through a t-test, a parametric analysis was employed to determine if the segments were statistically different.

4. Results and Discussion

4.1. Measurement Model

Table 1 below shows the indicators and outcome measurement model for variables in the model. PWR constructs are measured using a three-item questionnaire has the values obtained validity and reliability of the analytical result measurement model for both the loading factors so that rho_A is > 0.70 and the value of AVE is > 0.50. PWR3 considerate to retain nevertheless the indicator didn't exceed the threshold. (Hair et al. 2017; Latan and Ghozali 2015).

Tabel 1. :
Construct indicators and measurement

Construct/ Indicators	Code	FL	Cr. α	rho_A	CR	AVE
Power of authorities	PWR		0.737	0.705	0.803	0.584
Frequency of audit	PWR1	0.927				
Probability of detection	PWR2	0.750				
Severity of sanction	PWR3	0.574				
Trust in authorities	TRUST		0.842	0.877	0.888	0.617
Competence	TRUST1	0.729				
Openness and Honesty	TRUST2	0.676				
Concern for stakeholder	TRUST3	0.756				
Reliability	TRUST4	0.689				
Identification	TRUST5	0.734				
Tax Evasion	TE		0.770	0.785	0.841	0.515
not issued an invoice	TE1	0.909				
use unvalidated invoice	TE2	0.691				
underreported sales	TE3	0.704				
tax collected but not remitted	TE4	0.731				
Bribery to the tax authorities	TE5	0.867				

FL = Factor Loading; Cr. α = Cronbach's Alpha; CR = Composite Reliability

Item TRUST2 and TRUST4 considerate to retain even though didn't pass the threshold, because as seen on Table 1, the values obtained validity and reliability of the analytical result measurement model for both the loading factors so that rho_A is > 0.70, Composite reliability > 0,7 and the value of AVE is > 0.50 (Hair et al. 2017; Latan and Ghazali 2015)

Construct TE has the values obtained validity and reliability of the analytical result measurement model for both the loading factors so that rho_A is > 0.70, Composite reliability > 0,7 and the value of AVE is > 0.50. Nevertheless, the value of factor loading for indicator PWR3 has obtained 0,574 below the threshold 0,7 the indicator considerate to retain as long as the Composite reliability and AVE exceed the threshold (Hair et al. 2017; Latan and Ghazali 2015).

Finally, we tested the discriminant validity for all variables in the model. Table 2 below shows the results of testing discriminant validity (divergent) using Fornell–Larcker criterion and heterotrait–monotrait ratio (HTMT). From the analysis above, it can be seen that the square root of the AVE on diagonal lines is greater than the correlation between the constructs in the model, which means that it can be concluded that all variables in this research model meet the discriminant validity. We also tested the discriminant validity using HTMT, and the results of the analysis in the table above show that the value of HTMT was smaller than 0.90, which means that it meets the recommended requirements (Hair et al. 2014; Henseler et al. 2015; Latan and Ghazali 2015).

Table 2
Results of Testing Discriminant Validity

		PWR	TE	TRUST
Fornell-Larckell Criterion	PWR	0.764		
	TE	-0.021	0.718	
	TRUST	0.100	-0.651	0.786
Heterotrait-Monotrait Ratio (HTMT)	PWR			
	TE	0.119		
	TRUST	0.141	0.758	

4.2. Structural Relationship

In a second step, when the construct measures are reliability and validity have confirmed, we addresses the assessment of the structural model results. This involves examining the model's predictive capabilities and the relationships between the constructs. The key criteria for assessing the structural

model in PLS-SEM are the significance of the path coefficients, the level of the R² values, the f² effect size, the predictive relevance (Q²), and the q² effect size

For the estimation of our modified tax evasion model with empirical data, we use the PLS path modeling method (Hair et al., 2014) and the SmartPLS 3.0 software application (Ringle et al., 2015). Table 1 presents the results on the aggregate data level for all observation in the tax evasion data. To analyze and evaluate the PLS path modeling results, we follow recommendations by Henseler et al. (2013) and Hair et al. (2014). Measurement model parameter estimates and diagnostics provide evidence for the reliability and validity of the reflective construct measures that result on previous section.

Evaluation of the prediction-oriented PLS path modeling method's results for the structural model centered on the R² values. The key target construct, Tax Evasion, exhibits a relatively moderate R² value of above 0.426 which is mean that the tax evasion model explains overall taxpayer by more than 42,6 percent, whereas constructs TRUST show low levels of resulting R² values. The standardized path coefficients provide the basis for assessing the relative importance of relationships in the tax evasion model. To test whether path coefficients differ significantly from zero, we calculated t-values using a bootstrapping routine (Hair et al., 2014; Henseler et al., 2016). The analysis substantiates that relationships of trust in authorities to tax evasion in the structural model have statistically significant estimates. With a path coefficient of 0.655, trust in authorities is the most important construct to explain tax evasion behavior, therefore support hypothesis H1. In contrast, power of authorities has the weakest effect (path coefficient of 0.044) on tax evasion behavior. The relationship between power of authorities and trust in authorities also has the weak coefficient (0.100) for the PLS path model estimation on the aggregate data level. Both of relationship haven't significant and didn't support hypothesis H2 and H3, hence, hypothesis H4 also didn't supported in aggregate data level

The results presented in this study are consistent with the results and findings on the overall set of data in the original tax evasion study by Basri (2013). However, we assume that these results on the aggregate data level are affected unobserved heterogeneity (Ringle et al., 2010, Becker et al., 2013). Based on Becker et al. (2013), unobserved heterogeneity can influence path coefficients in the structural

model because the parameter estimates are determined based on the overall sample, which pools observations across the underlying (unobserved) groups. As a result, researchers may encounter the following biases: (1) biased parameter estimates of structural paths, (2) nonsignificant estimates at the group level becoming significant at the overall sample level that combines (unobserved) groups, (3) sign differences in the parameter estimates across (unobserved) groups being masked as non-significant results at the overall sample level that combines (unobserved) groups, and (4) decreased predictive power of the model (R^2 of the endogenous variables). These biases can lead to Type I and Type II errors and invalid inferences.

4.3. Modeling Unobserved Heterogeneity

In the next analytical step, the FIMIX-PLS module of Smart PLS 3.26 (Ringle *et al.*, 2015) was applied to segment the sample based on the estimated scores for latent variables. FIMIX-PLS results were computed for two, three, until six classes. The results reveal that the option of two segments is appropriate for tax payer segmentation purposes. All relevant evaluation criteria considerably decrease in the ensuing numbers of segments (see Table 4) and each additional segment has only a small size, which explains a marginal portion of heterogeneity in the overall set of data. Over two thirds of all our observations are well assigned to one of the two classes with a probability of more than 0.508.

Tabel 4. : FIMIX-PLS Result for Segment Retention Criteria

Kriteria	K=2	K=3	K=4	K=5	K=6
AIC (Akaike's Information Criterion)	650.553	659.459	643.935	645.046	646.371
AIC3 (Modified AIC with Factor 3)	661.553	676.459	666.935	674.046	681.371
AIC4 (Modified AIC with Factor 4)	672.553	693.459	689.935	703.046	716.371
BIC (Bayesian Information Criteria)	681.752	707.676	709.170	727.299	745.641
CAIC (Consistent AIC)	692.752	724.676	732.170	756.299	780.641
HQ (Hannan Quinn Criterion)	663.228	679.048	670.438	678.463	686.702
EN (Entropy Statistic (Normed))	0.508	0.432	0.698	0.701	0.730
NFI (Non-Fuzzy Index)	0.562	0.454	0.650	0.636	0.654
NEC (Normalized Entropy Criterion)	61.979	71.533	38.029	37.682	34.009

K = Number of pre specified segment

Tabel 5. : FIMIX-PLS Result for the Relative Segment Sizes

K	ρ_1	ρ_2	ρ_3	ρ_4	ρ_5	ρ_6	Jumlah
K=2	0.622	0.378					1,000
K=3	0.549	0.273	0.178				1,000
K=4	0.580	0.269	0.093	0.058			1,000
K=5	0.516	0.240	0.093	0.088	0.064		1,000
K=6	0.486	0.225	0.092	0.084	0.068	0.045	1,000

Next, observations are assigned to each segment according to the segment membership's maximum a posteriori probability. The first segment represents 62.2 percent of the sample and the second segment 37.8 percent. Table 6 shows the global model and FIMIX-PLS results for two latent segments. Before evaluating goodness-of-fit measures and inner model relationships, all outcomes for segment-specific path model estimations were tested with regard to reliability and discriminant validity. The analysis showed that all measures satisfy the relevant criteria for model evaluation.

To determine whether heterogeneity significantly affects the results in the global model, the substantial segments from the previous step (FIMIX-PLS) need to be tested to determine the significance of group differences, assessing if a given segment is differentiable from others. Therefore, we perform multi-group structural equation modeling or multi-group PLS analysis (PLS-MGA) and assess (1) the measurement invariance/equivalence and (2) the significance of differences in path coefficients between segments. If no significant differences are detected among any of the segments, researchers should conclude they have a homogenous population and low validity threats due to unobserved heterogeneity. The result on Table 6 showed that there were significant differences between path coefficients of power of authorities to tax evasion and power of authorities to trust in authorities. Thus, the model interpretation and hypothesis testing could generate from both segment to enhances the likelihood of obtaining valid results as well as valid parameter estimates, increasing the R^2 , and decrease the risk of Type I and Type II errors (Becker et al., 2013).

When evaluating the path coefficients of the global model, however, the strength of the relationship between power of tax authorities to tax evasion behavior is weak with path coefficient is 0.044 and therefor isn't significant at a level of 0.05. So, the H1 hypothesis is not supported. The strength of the

relationship between trust in tax authorities to tax evasion behavior is relatively moderate with path coefficient is -0.655 and therefore is significant at a level of 0.05. So, the H2 hypothesis is supported. As shown in Table 6, the relationship between power of tax authorities and trust in tax authorities is also not significant for the global model, hence, the H3 hypothesis is not supported. The trust in tax authorities to tax evasion behavior (-0.655) which may be expected to strong mediation of power of tax authorities to tax evasion behavior, showed the relationship have particularly low values (0.044). Unfortunately the relationship of power of tax authorities to trust in tax authorities is weak and isn't significant, in accordance with Preacher and Hayes (2008); Cheung and Lau (2008); Hair et al. (2014) there is no mediation effect of trust in tax authorities on power of tax authorities to tax evasion behavior, so, the H4 hypothesis is not supported in the global model.

Looking at first segment with a relative segment size 62.2 percent, the strongest relationship in the structural model exist between power of authorities to trust in authorities with path coefficient is 0.718 and therefore significant at a level of 0.05. So, the H3 hypothesis is supported. The relationship between trust in authorities and tax evasion behavior is also significant for this segment, with path coefficient is -0.598 hence, the H2 hypothesis is supported. The relationship between power of tax authorities and tax evasion behavior isn't significant for the global model with path coefficient is -0.045, So, the H1 hypothesis is not supported. Indirect effect of power of authorities to tax evasion behavior with path coefficient is -0.429 and significant at a level of 0.10, subjected trust in authorities to be strong mediation with Variance Accounted For (VAF) value is 0,905 (-0.429/-0.474) which is mean that 90.5 percent total effect of power of authorities to tax evasion behavior is mediated by trust in authorities. In according with Hair et al. (2014) the VAF value greater than 80 percent could assess as total mediation, hence, H4 hypothesis is supported.

There are differences when examining the second segment with a relative segment size 37.8 percent, represented of voluntarily compliance of tax payer. The relationship between trust in authorities to tax evasion is significant at a level of 0.05 with path coefficient is -0.404, so, the H2 hypothesis is supported. Unfortunately the effect of power of authorities to tax evasion showed a positive impact with path coefficient is 0.470 and significant at a level of 0.05. The relationship mean that if (*ceteris paribus*) tax

authorities increasing the mean value of power 1 standard deviation, the mean value of tax evasion increase 0.470 standard deviation unit. The effect of power of authorities to trust in authorities showed a negative impact with path coefficient is -0.783 and significant at a level of 0.05. However, both H1 and H3 hypothesis in this segment were supported in spite of the result were unexpected from the tax authorities' perspective.

Tabel 6.
Global Model and FIMIX-PLS Result for two latent segment

Structural Path		Global	FIMIX-PLS		PLS-MGA		
			Segment 1	Segment 2	Δ_{12}	T-Value	P-Value
Segment size		1.000	0.622	0.378			
Path Coefisien	PWR → TE	0.044 ^{NS}	-0.045 ^{NS}	0.470*	0.515	2.540	0.012*
	PWR → TRUST	0.100 ^{NS}	0.718*	-0.783*	1.501	26.973	0.000*
	TRUST → TE	-0.655*	-0.598*	-0.404*	0.194	0.996	0.321 ^{NS}
Indirect Effect	PWR → TE	-0.065 ^{NS}	-0.429**	0.317**			
Total Effect	PWR → TE	-0.021 ^{NS}	-0.474*	0.787*			
R ²	TE	0.426	0.398	0.683			
	TRUST	0.010	0.515	0.613			
Average Variance Extracted (AVE)	PWR	0.584	0.614	0.720			
	TE	0.515	0.567	0.658			
	TRUST	0.617	0.550	0.730			
Composite Reliability	PWR	0.803	0.826	0.885			
	TE	0.841	0.796	0.851			
	TRUST	0.888	0.854	0.931			
Cronbach's Alpha	PWR	0.737	0.700	0.809			
	TE	0.770	0.622	0.746			
	TRUST	0.842	0.784	0.906			

Notes:

Δ_{12} Absolute differences between path coefisien between segment 1 dan 2

* Significat at .05

** Significant at .10

NS : Not Significant

Relationship in the structural model in second segment support the assumption of the slippery slope framework that that taxpayer in a synergistic climate consider their tax share as a fair contribution to the public good. If tax authorities have legitimate power and treat taxpayers as equal partners, taxpayers

perceive treatment as fair and consequently respond with reciprocity and compliance. Conversely, a regular audit and severe sanction would be interpreted as a deliberate action and a sign of mistrust, which in turn makes it legitimate to seek opportunities to reduce payments and to reduce support for the authorities (Kirchler et al., 2008, wahl et al., 2010, korgler et al., 2013). Seeing other honest taxpayers audited and punished also would decrease trust on behalf of the honest taxpayers.

An interesting relationship occur when evaluation mediation effect trust in authorities on relationship between power of authorities on tax evasion in second segment, increasing tax evasion as a consequences of power of authorities also decreasing trust in authorities. So, power of authorities has double effect on tax evasion and trust in authorities. This special mediation effect is called suppression effect (Cheung and Lau, 2008) or competitive mediation (Zhao et al., 2010). Summary of hypothesis testing result as shown in the Table 7 below:

Tabel 7.
Hypothesis summary on Relation between variables

Structural Path			Conclusion	Notes
Global Model	PWR → TE	0.044 ^{NS}	H ₁ Not Supported	
	TRUST → TE	-0.655*	H ₂ Supported	
	PWR → TRUST	0.100 ^{NS}	H ₃ Not Supported	
Indirect Effect	PWR → TE	-0.065 ^{NS}	H ₄ Not Supported	No Mediation Effect
Total Effect	PWR → TE	-0.021 ^{NS}		
Segment 1	PWR → TE	-0.045 ^{NS}	H ₁ Not Supported	
	TRUST → TE	-0.598*	H ₂ Supported	
	PWR → TRUST	0.718*	H ₃ Supported	
Indirect Effect	PWR → TE	-0.429**	H ₄ Supported	Fully Mediation Effect (VAF = -0,429/-0,474 = 0.905)
Total Effect	PWR → TE	-0.474*		
Segment 2	PWR → TE	0.470*	H ₁ Supported	
	TRUST → TE	-0.404*	H ₂ Supported	
	PWR → TRUST	-0.783*	H ₃ Supported	
Indirect Effect	PWR → TE	0.317**	H ₄ Supported	Suppressor effect/ Competitive Mediation Effect (VAF = 0,317/0,787 = 0.402)
Total Effect	PWR → TE	0.787*		

Notes:

Δ_{12} Absolute differences between path coefisien between segment 1 dan 2

* Significat at .05

** Significat at .10

NS : Not Significant

4.4. Minimizing Local Tax Evasion

We utilize the importance-performance map representation of PLS path modeling to summarize and interpret the findings for the group-specific model estimation for each subsample. This kind of analysis uses the total effects of the PLS estimates (importance) and the construct index values (performance) as the axes of a grid. The PLS Importance-Performance Map Analysis (PLS-IPMA) applied to analyze the importance-performance map for the target construct tax evasion and trust to tax authorities. Output PLS-IPMA as seen on Figure 3 could lead managerial actions of the tax authorities to address exogenous variable levers that have not only an impact on tax evasion but also have a relatively high importance. Moreover, tax authorities may achieve greater efficiency if they focus improvement efforts in those areas where performance is currently low – that is, where there appears to be room for improvement.

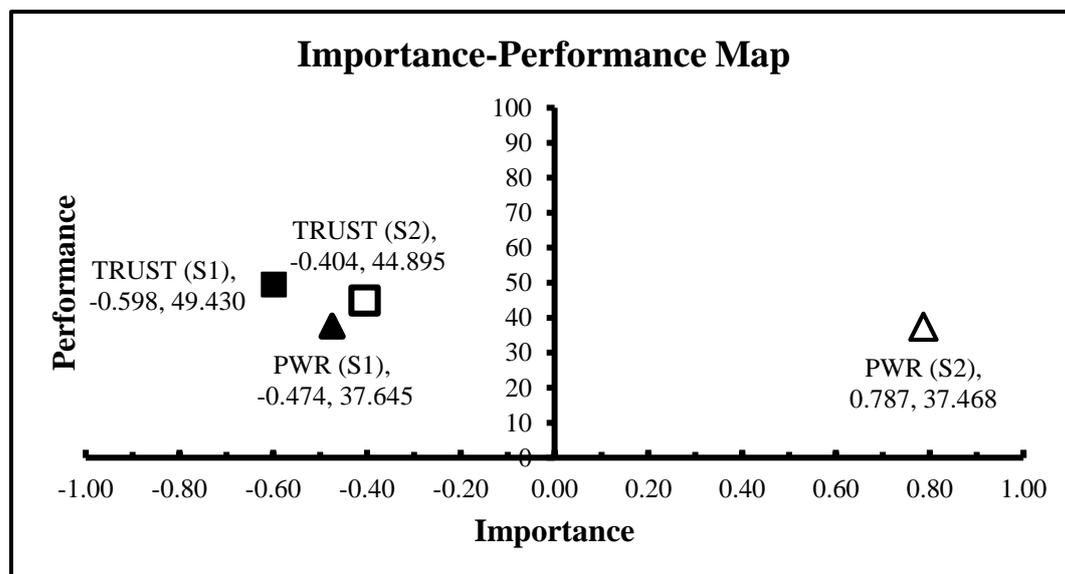


Figure 3.
Importance-Performance Map Analysis for Target Construct Tax Evasion
Notes : S1= Segment 1, S2= Segment 2

Looking at segment 1, for example, the performance level of power of authorities is relatively moderate (37,645 of 100 points), it is mean that the power of authorities offers sufficient potential for investment for future improvements, which in turn can lead to lower tax evasion. The trust in authorities appear to be the key concepts for decreasing tax evasion. This concepts have a relatively higher impact on tax evasion behavior with total effects: -0.598. The performance of trust in authorities is at a relatively higher level than performance of power of authorities with value 49.430 of 100 points.

However, while relatively moderate level of trust in authorities in this segment, offer somewhat more headroom for future improvements. In nutshell, both of trust in tax authorities and power of tax authorities plays an important role in decreasing tax evasion then tax authorities could justify specific managerial attention in this segment by increasing both of the concept.

When analyzing the smaller segments 2 (relative segment size of 37.8 percent), we find that segment 2 has lower performance levels of the trust in tax authorities constructs on tax evasion behavior with index values of 44.895 of 100 points. The performance level of trust in tax authorities represents an adequate opportunity for improvements, which in turn can lead to lower tax evasion behavior. Unfortunately, the power of tax authorities has unexpected impact on tax evasion behavior, increasing level of power of tax authorities conversely has a positive impact on tax evasion behavior with total effect 0.708 even though the performance relative low with index values of 37.468 of 100 points. The positive impact mean that in order to decreasing level of tax evasion behavior in segment 2 is associated with substantially lower level construct index values for power of tax authorities, hence, tax authorities may not justify specific managerial attention.

Common across the two segments within the local taxpayer is that managing trust in tax authorities plays an important role in minimizing tax evasion behavior. There are, however, differences in how to decrease tax evasion behavior by means of influencing antecedent constructs. Notably, the role of power of tax authorities differs across segments. These result tend to affirm a characterization of segment 1 as enforced compliance taxpayer and segment 2 as voluntary compliance taxpayer.

5. Conclusion, Implication and Limitation

This study contributes by providing new insight into the relationship between power of tax authorities and trust in tax authorities to tax evasion behavior by uncover the substantial unobserved taxpayer heterogeneity. We answered the suggestion of Kirchler et al. (2008;2010) to test their tax compliance model namely the slippery slope framework in the context of tax evasion on local taxes. In this study, we argue that the differences of enforced compliance and voluntary compliance as assumed in slippery slope framework are finite mixture in the population.

In this study, the PLS path modeling estimations for the tax evasion model on the aggregate data level didn't support the effect of power of tax authorities to tax evasion and power of tax authorities to trust in tax authorities. Thus, modeling unobserved heterogeneity by FIMIX-PLS analysis suggests that this taxpayer dataset could be meaningfully conceptualized as reflecting the influence of two subpopulations or segments. The first segment as major segment represented tax payer that are fairly voluntary compliance characterized trust in tax authorities has greater negative impact on tax evasion than power of tax authorities. In addition, the results also show that more than half of the effect of power on tax evasion on this segment is mediated by trust in tax authorities. In the absence of trust, even the best power lacks most of its effect on tax evasion. Therefore, tax authorities need to create both, a good confidence and high power rates.

While the other smallest segment are represented more compliance voluntarily that characterized has negative . Thus, the power of authorities has a small negative impact on tax evasion for the first segment but positive impact for second segment. Conversely, the trust in authorities has a negative impact on tax evasion in both segment by stronger effect for the second segment.

These results suggest that unobserved heterogeneity, defined by latent classes, may indeed be more important than the aggregate analysis result. Uncovering unobserved heterogeneity and assessing this phenomenon through segment-specific importance-performance map analyses may inspire further insights. This, in turn, can lead to more specific and effective managerial response to taxpayer evasion behavior. Finally, Segmentation is therefore a key element for tax authorities in developing and improving their targeted compliance management strategies.

There are several limitation to this study that should be noted. First, variable of tax evasion in this study were measure using self response on the questionnaire. The extent of tax evasion actually maybe higher than in this survey. This results in part due to the limits of the measurement and in part due to the subjects' predictable concerns that disclosing information about illegal activity like tax evasion may lead to potential financial or even criminal liability. Secondly, sample size is relatively low for research that applied segmentation approach.

However, this study didn't turn the unobservable heterogeneity into observed heterogeneity by making the segments accessible. Future study could elaborate on the theoretical meaning of the plausible segments by identifying additional variables (e.g., demographic, psychographic, contextual, etc.) beyond the original model. Furthermore, a comparative and replication studies on the other subjects on other local government in term with higher sample size will also allow access to generalize the finding of this study.

Reference

- Basri, Y. M. 2013. Kepercayaan dan Kekuasaan Dalam Otoritas Pemerintah Sebagai Determinan Tingkat Kepatuhan Pajak dan Penggelapan Pajak : Pengujian Assumsi Kerangka *Slippery Slope*. Simposium Nasional Akuntansi 16 Manado.
- Becker, J.-M., Rai, A., Ringle, C. M., and Völckner, F. 2013. Discovering Unobserved Heterogeneity in Structural Equation Models to Avert Validity Threats. *MIS Quarterly*, 37(3): 665-694.
- W. Cheung, G. W. and R. S. Lau. 2008. Testing Mediation and Suppression Effects of Latent Variables : Bootstrapping With Structural Equation Models. *Organizational Research Methods*. 11(2), 296-325
- Chiyumya, Chiza. 2006. *Counteracting Tax Evasion in Malawi : An Analysis of The Methods and A Quest for Improvement*. MRA paper No. 9892 International Graduate School of Social Sciences
- Gangl, K., Hofmann, E., Pollai, M., and E. Kirchler. 2012. *Managing tax climates: The interaction of power and trust in the "Slippery Slope Framework"* Paper presented at the IAREP/SABE/ICABEEP conference, Exeter, UK.
- Gangl, K., Hofmann, E.B., Hartl, B. and Kirchler, E., 2016. The Double-Edged Relationship between Coercive Power and Compliance with Public Authority: Evidence from a Representative Sample of Austrian Self-Employed Taxpayers. File tersedia di SSRN: <https://ssrn.com/abstract=2667630> atau <http://dx.doi.org/10.2139/ssrn.2667630>
- 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(0), 36-45.
- Kirchler, E., S. Muehlbacher, B Kastlunger and I. Wahl (2007). *Why Pay Taxes? A Review of Tax Compliance Decisions*. International Studies Program Working Paper 07-30
- Kirchler, E., Hoelzl, E., and Wahl, I. 2008. Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, 29, 210–225.
- Kirchler, E., E. Hofmann, and K. Gangl. 2012. From Mistrusting Taxpayers To Trusting Citizens : Empirical Evidence And Further Development Of The Slippery Slope Framework. *Economic psychology in the modern world: collected papers / Editor Doctor of Science A.N. Lebedev. – Moscow: Ekon-inform*, 125–146.
- Kogler C, Batrancea L, Nichita A, Pantya J, Belianin A, Kirchler E (2013) Trust and Power as Determinants of Tax Compliance: Testing the Assumptions of the Slippery Slope Framework in Austria, Hungary, Romania and Russia. *Journal of Economic Psychology* 34, 169-180.
- Latan, H., & Ghozali, I. (2015). *Partial least squares: Concepts, techniques and application using program SmartPLS 3.0 (2nd ed.)*. Semarang: Diponegoro University Press.
- Latan, H., C. M. Ringle, C.J.C. Jabbour. 2016. Whistle blowing Intention Among Public Accountants I Indonesia : Testing for the Moderation Effects. *Journal of Bussiness Ethics*.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy Marketing Science*, 43(1), 115–135.
- Muehlbacher, S., Kirchler, E., and Schwarzenberger, H. 2011. *Voluntary versus enforced tax compliance: Empirical evidence for the “slippery slope” framework*. *European Journal of Law and Economics*, 32(1), 89-97
- Pellizzari, P., & Rizzi, D. (2014). Citizenship and power in an agent-based model of tax compliance with public expenditure. *Journal of Economic Psychology*, 40, 35-48.
- Ringle, C. M., M. Sarstedt and E. A. Mooi. 2010. ResponseBased Segmentation Using Finite Mixture Partial Least Squares: Theoretical Foundations and an Application to American Customer Satisfaction Index Data, *Annals of Information Systems* (8), pp. 19-49
- Ringle, C. M., Sarstedt, M., Schlittgen, R., and Taylor, C. R. 2013. PLS Path Modeling and Evolutionary Segmentation, *Journal of Business Research*, 66 (2013) 1318–1324.
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH. <http://www.smartpls.com>
- Wahl, I., Kastlunger, B., and Kirchler, E. 2010. Trust in authorities and power to enforce tax compliance: An empirical analysis of the “Slippery Slope Framework”. *Law & Policy*, 32, 383–406.
- Zhao, X. J. G. Lynch JR and Q. Chen. 2010. Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *The Journal of Consumer Research*, 37(2), 197-206