INCREASING TAX COMPLIANCE THROUGH TRUST AND POWER*: EMPIRICAL STUDY OF SLIPPERY SLOPE FRAMEWORK IN ASEAN

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ABSTRACT

This paper contributes to the empirical literature regarding the assumptions of the Slippery Slope Framework using cross-country data in the regional economy. Some studies in this area have tested the assumptions of the framework using primary data collected through surveys with real taxpayers or students as subjects, and some studies have tested the framework using statistical data generated from an institutional database. This study tested these assumptions using statistical data generated from the institutional database i.e., Asian Development Bank and World Bank. Align with prior studies that confirm the effect of trust and power on tax compliance, this study hypothesizes that tax compliance can be explained by the existence of both trust and power. It further hypothesizes that tax compliance can be explained by the interaction between trust and power as well. This study is based on 10 ASEAN countries as the population, consisting Indonesia, Thailand, Malaysia, Singapore, Philippine, Brunei, Vietnam, Laos, Myanmar, and Cambodia. The empirical result from our sample represents that trust and power interact in explaining tax compliance.

Keywords: : trust, power, tax, compliance

INTRODUCTION

1.1 Background

The core functions of the government being limited to the defense of the nation, the enforcement of legal right (justice), and public works (Smith, 1776). In the effort to carry out its functions, the government needs a budget to finance the things that need to be done. Some countries have abundant natural resources, but some are limited so that each country has different preferences in exploring the potential revenue of the country (Nurmantu, 2005). According to United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), countries in the Association of Southeast Asian Nations (ASEAN) have a common interest to increase tax revenue for better education, healthcare, and infrastructure, especially in the context of the recently adopted 2030 Agenda for Sustainable Development by ASEAN (UNESCAP, 2016).
Behind its vital role, tax revenue is often overshadowed by the risk of non-optimal tax revenue. Indonesia’s actual tax revenue is approximately 4 to 5 percentage points lower than the potential level (UNESCAP, 2014). Total tax revenue in ASEAN as a share of Gross Domestic Product (GDP) ranges between 10 percent in Myanmar and 18.2 percent in Vietnam in 2014 (presented in the Appendix Table 1). The tax revenue in ASEAN is generally low compared to other parts of the world (UNESCAP, 2016). According to Bambang P.S. Brodjonegoro, Indonesian Minister of Finance at that time, in order to increase tax revenue, the government should emphasize the tax compliance aspect (Kemenkeu, 2014).

Tax compliance can be viewed as a problem of public finance, law enforcement, organizational design, labor supply, ethics, or the combination of all of these. In addition to those aspects, research on human behavior in tax compliance is a topic that attracts many researchers as well (Andreoni et al., 1998).

Allingham & Sandmo (1972) and Srinivasan (1973) propose deterrence models, i.e., tax audit and sanctions as variables that explain tax compliance. Although the models fail to fully explain why taxpayers pay tax, the variables remain significant. Feld & Frey (2007) and Torgler et al. (2008) introduce the concept of a psychological tax contract to provide more insight into why taxpayers pay tax without enforcement. Thus, Kirchler, Hoelzl, and Wahl (2008) introduce the Slippery Slope Framework to provide a robust explanation, the framework hypothesized that both trust and power interact in explaining tax compliance.

Mas’ud, Manaf, and Saad (2014) believe that since the emergence of the Slippery Slope Framework, many studies have been conducted to examine the effect of trust and power on tax compliance using either real taxpayers or students as subjects. Then they conduct a study using cross-country data of Sub-Saharan Africa that have never been done before by previous researchers in testing assumptions of the Slippery Slope Framework.

Increasing tax revenue became a common interest among ASEAN countries in the context of the adopted 2030 Agenda for Sustainable Development (UNESCAP, 2016). In order to increase tax revenue, ideally, there is a transnational tax administrative cooperation in ASEAN. A transnational tax administrative cooperation considering the trust aspect i.e., sharing of expertise (such as experience and knowledge sharing, and study visit) and power aspect i.e., joint audit for multinational companies and collection of tax debts (Stewart, 2014). In fact, the existing transnational tax administrative cooperation is still limited to exchange of information on the tax regime and instruments among ASEAN countries as well as to work on the issues of avoidance of double taxation and addressing withholding tax (ASEAN Tax Forum, 2012).

Since the desire to increase tax revenue among ASEAN countries, it is important to understand the aspects that can explain tax compliance such as trust and power. In other words, it is important to know whether trust and power
can explain tax compliance. However, there have been no studies on the Slippery Slope Framework using cross-country data in ASEAN. Therefore, this study aims to analyze the effect of trust and power using ASEAN cross-country data generated from the institutional database.

2. THEORETICAL BACKGROUND AND HYPOTHESES

2.1 Tax Compliance

Tax compliance is defined as reporting of all incomes and tax payments to the tax authorities in a timely manner using the applicable tax laws and regulations (Jackson and Milliron, 1986). Tax compliance can be divided into two forms: voluntary and enforced tax compliance. Voluntary tax compliance is defined as the correct self-assessment of taxes owed and the timely payment of those taxes without enforcement action, including timely filing and reporting of required tax information (Silvani & Baer, 1997). Enforced tax compliance is described as a situation in which taxpayers’ willingness to comply due to fear of detection (Mas’ud et al., 2014). Voluntary tax compliance is a result of commitment, whereas enforced tax compliance is a result of resistance (Braithwaite, 2003). Voluntary compliance is attained through trust, while enforced compliance is through power (Mas’ud et al., 2014). Therefore, this study examines how trust and power can explain tax compliance in both direct and interactive relationships.

2.2 The Concept of Slippery Slope Framework

Kirchler et al. (2008) suggest that there are two major aspects affecting tax compliance as described in the Slippery Slope Framework. Both dimensions are trust and power. In this theory, it is assumed that the higher level of trust and power, the higher level of tax compliance will be. Changes in the level of trust and power can interact with each other to give different results in some level variations.

The Slippery Slope Framework presents four assumptions of tax compliance that can be explained by: a) high trust and low power, increasing trust is likely to result in voluntary compliance; b) high power and low trust, increasing power is likely to result in enforced compliance; c) high power and high trust; and d) power and trust moderate each other (Mas’ud et al., 2014).

2.3 Trust

The importance of trust in social systems is widely recognized (Gangl, Hofmann, and Kirchler, 2015). According to Kirchler et al. (2008), trust is the general opinion of taxpayers that the authorities are benevolent and work beneficially for the common good. This means that authorities always act in a good manner, which free from corrupt practices (Mas’ud et al., 2014). Gangl et al. (2015) divide trust into two forms: reason based trust and implicit trust. Reason based trust correlates with concepts of calculative trust, rational trust, and knowledge based trust; implicit trust correlates with affective trust, habitus trust, and social trust (Gangl et al., 2015).
The first empirical analysis of the Slippery Slope Framework was conducted by Wahl, Kastlunger, and Kirchler (2010). They tested the hypotheses of the Slippery Slope Framework in two experiments using self-employed taxpayers and students. The result showed that trust and power positively influence tax compliance. The same result was attained by Muehlbacher et al. (2011) who also found the combined effect of trust and power on tax compliance.

Kogler et al. (2012) conducted a study testing the assumption of the Slippery Slope Framework in four European countries (Austria, Hungary, Romania, and Russia). The study tested the mediation effect of voluntary, enforced, and strategic tax compliance on the relationship between tax compliance and its determinant (trust, power, and country). The result showed that the assumption of the framework hold in those four countries. Additionally, the assumptions of the Slippery Slope Framework were tested using cross-country data in Sub-Saharan Africa (Mas’ud et al., 2014). The result showed that tax compliance can be explained by the existence of both trust and power, and the interaction between them. Therefore, this study intends to know whether trust and power can explain tax compliance in ASEAN countries.

Hence the following hypotheses are developed:

**H1** Trust is significantly related to tax compliance.

**H2** Power is significantly related to tax compliance.

2.5 Prior Research and Hypotheses

Power is a topic that received much attention in many scientific disciplines (Gangl et al., 2015). Besides many specific perspectives taken by different disciplines, there is an agreement on a general definition of power. Power is defined as the potential and perceived ability of a party to influence another party’s behavior (Molm, 1994). Power also can be defined as taxpayers’ perception of the potential ability of the authorities to detect illegal noncompliance, through a rigorous audit to detect evasion and fine the evaders (Mas’ud et al., 2014).

In research on human behavior, two competing theories of power are broadly recognized, the conceptions of coercive and legitimate power (Gangl et al., 2015). The perspective of coercive power is based on Becker’s (1968) economic approach which proposes rigorous control and punishment to influence individual’s behavior. The legitimate power is based on Tyler’s (2006) approach which proposes that legitimate power i.e., the power of accepted authorities, is more effective in shaping individual’s behavior than rigid controls and punishment.
H3 Trust and power have joint significant relationship with tax compliance.
H4 Trust and power moderate each other in the relationship with tax compliance

3. METHODOLOGY
3.1 Population and Data

The study aims to examine the assumptions of the Slippery Slope Framework using cross-country data in ASEAN. The population of the study comprises all members of ASEAN countries such as Indonesia, Thailand, Malaysia, Singapore, Philippine, Brunei, Vietnam, Laos, Myanmar dan Cambodia from 2002 to 2015 in a strongly balanced panel data. Years were selected based on the availability of data on the variables of the study. The data was sourced from two different databases. For tax compliance, tax percentage of GDP was used as a proxy and the data was sourced from the Asian Development Bank (ADB)’s Statistical Database System. Whereas Control of Corruption data, which was used as a proxy of trust, and Rule of Law data, which was used as a proxy of power, were both sourced from the World Bank.

3.2 Variables and Variable Measurement

For dependent variable, tax compliance was measured using tax as a percentage of GDP for all ASEAN countries. The data was sourced from the ADB’s Statistical Database System from 2002 to 2015. Scores of 1-10 were generated by dividing tax as a percentage of GDP by 100 and multiplying by 10. Thus, the scores range from 1-10, where 1 signified low compliance and 10 signified high compliance (Mas’ud et al., 2014).

For the first independent variable, trust was measured using Control of Corruption. The data was sourced from the World Bank. Torgler and Schneider (2009) used the same indicators as a proxy of trust in the similar study. World Bank measured Control of Corruption on class intervals (high corruption 0-10; 11-20; 21-30; 31-40; 41-50; 51-60; 61-70; 71-80; 81-90; 91-100 low corruption).

For the second independent variable, power was measured using Rule of Law which was sourced from the World Bank (Mas’ud et al., 2014). World Bank measure Rule of Law on class intervals (low power 0-10; 11-20; 21-30; 31-40; 41-50; 51-60; 61-70; 71-80; 81-90; 91-100 high power).

3.3 Research Models

Therefore, from the hypotheses which were built by the background and these three variables, the following models were formulated:

\[ TC_{i,t} = \alpha_{0,i,t} + \beta_1 TRUST_{i,t} + \epsilon_{it} \] (1)
\[ TC_{i,t} = \alpha_{0,i,t} + \beta_1 TRUST_{i,t} + \epsilon_{it} \] (2)
\[ TC_{it} = \alpha_{0,it} + \beta_1 TRUST_{it} + \beta_2 POWER_{it} + \epsilon_{it} \] (3)
\[ TC_{it} = \alpha_{0,it} + \beta_1 TRUST_{it} + \beta_2 POWER_{it} + \beta_3 POWER_{it} \times TRUST_{it} + \epsilon_{it} \] (4)

Where TC is tax compliance rating, \( \alpha(0) \) is constant, TRUST is trust score, POWER is power score, and \( \epsilon \) is the error term.
4. RESULT AND DISCUSSIONS

Table 1 depicts the descriptive statistics of the variables of the study. Table 2 presents the regression analysis. The results are depicted below.

Table 1 Descriptive Statistics
Source: Eviews 9 output

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC</td>
<td>140</td>
<td>1.4085</td>
<td>0.6238589</td>
<td>0.2</td>
<td>3.64</td>
</tr>
<tr>
<td>TRUST</td>
<td>140</td>
<td>39.72481</td>
<td>29.21435</td>
<td>0.4739336</td>
<td>98.57143</td>
</tr>
<tr>
<td>POWER</td>
<td>140</td>
<td>42.75765</td>
<td>26.59579</td>
<td>2.392344</td>
<td>96.63461</td>
</tr>
</tbody>
</table>

The TC scores range from 0.2 in Myanmar to 3.64 in Brunei. TC mean score of 1.4085 is considered low, since it is less than 50% of 3.64, meaning that TC among ASEAN countries is lower than average. The TRUST scores from 0.4739336 in Myanmar to 98.57143 in Singapore. TRUST mean score of 39.72481 is considered low, since it is less than 50% of 98.57143. The POWER scores range from 2.392344 in Myanmar to 96.63461 in Singapore. POWER mean score of 42.75765 is considered low as well, since it less than 50% of 96.63461. These imply that TRUST and POWER are less than average for ASEAN.

Table 2 Regression Analysis
Source: STATA 14 output

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUST</td>
<td>0.01</td>
<td>NIL</td>
<td>0.0020</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>(0.0069)</td>
<td></td>
<td>(0.0044)</td>
<td>(0.0096)</td>
</tr>
<tr>
<td>POWER</td>
<td>NIL</td>
<td>0.004</td>
<td>0.0020</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0096)</td>
<td>(0.0048)</td>
<td>(0.0331)</td>
</tr>
<tr>
<td>POWERxTRUST</td>
<td>NIL</td>
<td>NIL</td>
<td>NIL</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-0.0004)</td>
</tr>
<tr>
<td>R²</td>
<td>0.2554</td>
<td>0.3188</td>
<td>0.2893</td>
<td>0.6111</td>
</tr>
<tr>
<td>F test significance</td>
<td>0.0101</td>
<td>0.0040</td>
<td>0.0037</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

In Table 2, model 1 presents the relationship between TRUST and TC for testing hypotheses one. The result for H1 shows a significant relationship between TRUST and TC at 0.05 (t=0.0069 p=0.01). This supports our hypothesis that trust is significantly related to tax compliance. This is consistent with previous studies (Ali and Ahmad, 2014; Tsikas, 2017) which confirm the relation of trust and tax compliance.

In addition, for H2, model 2 presents the relationship between POWER and TC, which is significant at 0.05 (t=0.0096 p=0.004). The result supports the hypotheses that power is significantly related to tax compliance, consistent with the prior researches.
on the relation of power and tax compliance (Hofman, 2014; Wahl et al., 2010; Blackwell, 2007)

Furthermore, for H3, model 3 presents the relationship between TRUST, POWER, and TC which is significant at 0.05 \((t=0.0044\ p=0.0020)\) for TRUST and TC, and \((t=0.0048\ p=0.0020)\) for POWER and TC. This confirms the hypothesis that TRUST and POWER are significantly related to TC. This is consistent with the assumption of the slippery slope framework that aggregate of trust and power can explain tax compliance (Kirchler et al., 2008), similar with the previous studies (Mas’UD et al., 2014; Kastlunger et al., 2013; Muehlbacher et al., 2011; Kogler et al., 2012)

Finally, for H4, model 4 presents the interaction effect of TRUST and POWER in relation to TC, which is found to be significant at 0.05 \((t=-0.0004\ p=0.0000)\). The result confirms the hypotheses that TRUST and POWER moderate each other in the relationship with tax compliance, consistent with the assumption of the slippery slope framework (Kirchler et al., 2008). The relation is found to be negative, similar to some prior researches (Tsikas, 2017; Kogler, Muehlbacher, and Kirchler, 2015).

5. CONCLUSION

Base on the discussion in the prior chapter, the findings show that the assumptions of the slippery slope framework hold in empirical cross-country analysis in the regional economy. Trust individually has a significant relation with tax compliance in ASEAN countries, in other words, taxpayers’ motivations to comply with tax law is caused by the factor of trust in authorities. In ASEAN, trust may have been conveyed because people hope that the authorities so proffered can then make the object feel responsible to the trustee. People may proclaim a kind of collective hope that is empowering, action-oriented, and authentic through their engagement of the state. Authorities as the object of trust and hope need to prove worthy. Furthermore, authorities have a quest for trustworthiness (Cariño, 2013).

Power individually has a significant relation with tax compliance in ASEAN countries as well. According to the study by the International Tax Compact in 2010, causes of tax non-compliance in developing countries are including lack of tax laws and weak tax administration (Syadullah, 2015). Weak tax administration is a common thing in ASEAN countries (Chang-wŏn Sŏ, 1992).

Trust and power have joint significant relationship with tax compliance in ASEAN countries, consistent with assumptions of the slippery slope framework that a combination of trust and power can explain tax compliance (Kirchler et al., 2008). There is also a strong interaction effect between trust and power in explaining tax compliance. The differing from Mas’ud’s (2014) study, the interaction effect between power and trust in explaining tax compliance in ASEAN countries is found to be negative. In various studies, the theoretical conceptualization and the empirical evidence for the effect of power and trust are unsteady, which proposes that there is both a stimulating as well as a weakening influence of power on trust.
6. IMPLICATIONS AND LIMITATIONS

6.1. Implications

This study is based on observation limited from 2002 to 2015. The result might have been different if the time period is being extended. The proxy used in this study i.e., Control of Corruption and Rule of Law from Worldwide Governance Indicator for measuring trust and power. Using different or more proxies such as Corruption Perception Index from The Transparency and Corruption score from International Country Risk Guide for measuring trust, and Law and Order from International Country Risk Guide for measuring power may increase the accuracy of the result.

(Gangl et al., 2015; Adler, 2001; Bijlsma-Frankema & Costa, 2005; Das & Teng, 1998; Kumlin & Rothstein, 2005; Mollering, 2005).

Besides contributing to the empirical literature regarding the assumptions of the Slippery Slope Framework using cross-country data, this study also has implications for the authorities. For the Directorate General of Taxes (DGT), this study could be a consideration for increasing trust and power aspects in order to achieve the tax revenue target. The DGT should ensure the provision of high quality of services and free of corruption among tax officials which in essence will increase the level of trust taxpayers have for the authorities. And the DGT should also increase the level of power by increasing the probability of detection and penalty.

Another implication of this study is the need for increasing trust and power aspects among ASEAN countries. One of the opportunities which could enable governments to strengthen national tax systems is the initiation of transnational tax administrative cooperation. A transnational tax administrative cooperation considering trust aspect i.e., sharing of expertise (such as experience and knowledge sharing, and study visit) and power aspect i.e., joint audit for multinational companies and collection of tax debts (Stewart, 2014).

6.2. Limitations

This study is based on observation limited from 2002 to 2015. The result might have been different if the time period is being extended. The proxy used in this study i.e., Control of Corruption and Rule of Law from Worldwide Governance Indicator for measuring trust and power. Using different or more proxies such as Corruption Perception Index from The Transparency and Corruption score from International Country Risk Guide for measuring trust, and Law and Order from International Country Risk Guide for measuring power may increase the accuracy of the result.
7. REFERENCES


7. APPENDICE

Table 1. Tax Revenue as a share of GDP in ASEAN and other countries
Source: www.adb.org dan www.oecd.org