The Effect of Government Effectiveness, Rule of Law and Control of Corruption on Tax Obedience

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This study examined the effect of government procedure, rule of law and control of corruption on tax obedience. Tax obedience will increase when society trusts in government The trust in good governance affects variable on tax revenue. In recent years, quality governance has been the main reason and measurement for society to pay tax. The purpose of this paper is to investigate the relationship between government effectiveness, rule of law and control of corruption as a set of good governance and tax obedience procedures. The study uses data from 30 countries between the years 2002-2014. The empirical analysis applies panel data methodology to investigate the relationship. Using fixed effect model, evidence was found that rule of law and control of corruption significantly affect tax obedience. However, government effectiveness does not significantly effect tax obedience.

Key words: Government effectiveness, rule of law, corruption, tax obedience

Introduction

Taxation has become a crucial economic tools for any country, but most tax research focus is on a macro-economic perspective such as income , rate of tax, the number of tax objections, inflation and economic potential (Koch, SF, Schoeman, and Tonder (2005), Greenidge (2009), Karras, G (2009), Romer, et all (2010), Takumah (2014), Dackehag, M (2012). A few tax studies of investigate a governance perspective. Good governance is necessary to gain people's trust. Good government governance is implemented by enforcing transparency and accountability in managing public funds. This commitment has a positive impact on the level of people's trust, including tax paying obedience. Good government governance is required for many countries through provisoin of funding and facilities (Santiso, 2001. Good governance is a requirement for economic development in a country (Riddell, 2009) and as a reflection of the government's performance to build democracy through transparency, accountability, openness and public participation (Kosac and Fung, 2014; AyukAko, 2017). It is interesting to investigate the influence of the governance government practice on tax

obedience. If people believe in and are satisfied with government in terms of provision of infrastructure and other quality goods, fair law enforcement and efforts to respect the action against corruption, people will be encouraged to pay tax.

This study aims to provide empirical evidence of the effect of government effectiveness, the rule of law and control of corruption on tax payments in some countries. Tax obedience is reflected in increased tax revenues. In the concept of state finance, the effectiveness of tax revenue can be measured by tax ratio, that is share of tax revenue to GDP.

Good Governance Government

According to UNDP (2016), good governance has six principles, namely legitimacy, rights of opinion, transparency and accountability, performance and fairness. This is a framework whereby all agents, both private, NGO and all citizens can play an active role in development then encourage the growth of business and public trust. According to Kaufmann , Kraay and Matruzzi (2009) good government governance has some key dimensions: government effectiveness, rule of law and control of corruption.

Government Effectiveness

Government effectiveness is reflected in perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (world bank). According to the Australian Taxation Office (1997), the heart of the tax reform strategies was in educating tax officials to ensure that they are professional, responsive, fair, open, and accountable. These attributes help to increase public trust, respect and support for government programs. Efficient government that promotes and maintens peace, provides public goods and tranquility iscostly and taxes are the customary means by which the public pay to obtain these services.

The Rule of Law

The Rule of Law reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence (world bank). Rule of Law will provide positive energy for the climate of business, it will encourage investors to continue investing (Dickinson (2010) .

Control of Corruption

Control of corruption reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests (world bank). Corruption becomes a threat to the state and prohibitive of the efficient operation of the market yet institutional corruption is not unique to developing countries and this phenomenon is widespread in tax and customs administration. The government's commitment to eradicate corruption is expected to affect tax payers' obedience and is reflected in various policies and efforts made to overcome tax leaks. Commitment to eradicate corruption becomes a major motivator for investment, especially foreign investment. The aspects of corruption influence on tax revenues are examined by Ahsan and Wu (2005), Imam and Jacobs (2007), Gupta (2007), Bird, Vaquez and Torgler (2008), Mukhlis, Sugeng and Yuli (2014) to Syadulah and Wibowo 2015), Aziz, Manab and Othman, (2016) who found that corruption control efforts had a positive effect on tax revenues. Corruption reduces tax revenues (Abed and Gupta: 2002).

Methodology
Data Collection

Kaufmann, Kraay and Mastruzzi (2009) state that Worldwide Governance Indicators (WGI) and World Development Indicators (WDI) provide comprehensive index data on governance processes, ranging from government capacity to implement effective policies, citizenship and institutions to government rules, as well as state control over acts of corruption such as using power for private concerns through elite and private roles. Arndt and Oman (2006), WDI and WGI set comprehensive measurement tools to measure the implementation of good corporate governance in countries. WGI and WDI published by World Bank covers many countries. Some of the indexes presented by WGI and WDI are the government effectiveness index, the rule of law index, and the control of corruption index. As a sample, this research study uses 30 countries surveyed by WDI and WGI between 2002 and 2014.

Hypotheses Development
Effect Government Effectiveness on Tax Obedience

According to Kaufmann, Krayy and Mastruzzi (2009), government effectiveness is the ability of government to provide public goods and also its ability to apply policy well. Good governance is also supported by a consistently run system. If the public appreciates the public goods provided by the government from the taxes its pays, it increases their trust and reinforces the public belief that taxes are needed to finance the provision of these public goods (Fjeldsad, 2001).

$H_{0\,(1)}$ = The higher the index of government effectiveness, the higher the obedience of paying taxes, where tax compliance is proxied with tax effort

Effect Rule of Law on Tax Obidience

Benno (2003) found that trust and legal certainty have positive effect on tax moral. The higher the rule of law index, the higher tax revenue. The Spanish Government approved the Royal Decree-Law that introduces rules and announced the start of the parliamentary process to aim at increasing tax revenues.

$H_{0\,(2)}$ = The higher the index of rule of law, the higher the obedience of paying taxes, where tax compliance is proxied with tax effort

Effect of Control of Corruption on Tax Obedience

Control of corruption is the government's reward for eradicating corruption. In tax matters, because there is a fairly intense interaction between taxpayers and tax tax officials, the chances for corruption will be high (Imam P and Devina: 2007). The interaction was quite intensive, starting from the calculation of the tax burden to the tax payments. Corruption will degrade the motivation to pay taxes and impede investment, business barriers, high-cost production processes. Therefore, the extent to which governments can control corruption, will be a reflection of the people paying taxes.

$H_{0\,(3)}$ = The higher the index of control of corruption, the higher the obedience of paying taxes, where tax compliance is proxied with tax ratio

Structural Model::

$$TR_{it} = \alpha + \beta_1\,GE_{it} + \beta_2\,CC_{it} + \beta_3\,RL_{it} + e_{it}$$

in which, TR = Tax Ratio, GE = government effectiveness, CC = control of corruption, RL = rule of law, β_i = coefficients determination, α= intercept, i = period , t = country sample (i).

This study used panel data analysis, in which panel data is used to combine cross sectional data and time series data (Verbeck, 2004), and is able to control the heterogeneity of the individual (Firdaus, M: 2012). Nachrowi and Usman (2006) stated that in estimating panel data, some regression techniques can be used, namely Fixed Effect Model and Random Effect Model (REM).

Fixed Effect Model (FEM)

FEM arises when there is a correlation between individual effects and explanatory variables with X_{it} or error component (e_{it}) containing individual effects and explanatory variables being part of the intercept.The FEM estimator can be calculated by 3 approaches: Pooled Least Square (PLS), Within Group and Least Square Duy Variable (LSDV) or using pooled so that there are N x T observations, with the following model:

$$\bar{y}_{it} = \alpha_i + X_{it}\beta + \mu_{it}$$

The weakness of this PLS model is that the parameters can be biased because this approach cannot distinguish different observations over the same period, or cannot distinguish the same observations at different periods. Because of the weakness of this PLS approach, this method is less appropriate if used.

Random Effects Model (REM)

The REM model is chosen when there is no correlation between individual effects and regressors. This assumption makes the error component of the individual effects and the time effects included in the error or the expected value of x_{it} for each t = 0 or $E(t_i, x_{it}) = 0$ (Firdaus, 2012) There are three approaches for calculating REM estimators: (1) Generalized Least Square (GLS), (2) Between Estimator, (3) Hausmann Test, but the most widely used is the Hausmaan Test. According to Nacrowi and Usman (2006), to obtain the best model of the two alternative models can be used the test stages, namely Chow Test and Hausmann Test.

Chow Test

Chow test is used to identify the best model between FEM and Common Effect with compare value of F test. If cross section F- value > 0,05 we select common effect, but if cross section F- value < 0,05 , Fixed Effect Model (FEM) is the best model and we used it . In this study we used FEM because cross section F –value 0000 < 0.05.
Hypothesis:
H$_o$: *Common Effect*
H$_a$: *Fixed Effect*
Criteria:
Chi-square calculate < Chi-square critical = Accept H$_o$, If Chi-square calculate > Chi-square critical = Reject H$_o$, Accept H$_a$

Hausmann Test

To determine whether a suitable FEM or REM model is performed Hausmann Test. This test is adminstered to find out whether or not there is correlation between regressors with individual effects, by the formula:

$H_0 : E\ (\tau_i\ x_{it}) = 0$ or REM is the right model

$H_1 : E\ (\tau_i\ x_{it}) = 0$ or FEM is the right model

Basic rejection of the hypothesis by comparing Hausmann stat (H) with Chi Square (X^2). H_0 is rejected if H test $> X^2$ table, means the exact model is FEM, and vice versa. From Chow Test and Hausman Test, on Chow Test, it was found that the FEM model is more appropriate to use than the CEM (Chow Test) model. While Hausmann Test and REM models are more appropriate to use than the FEM model. So the conclusion is that the FEM is the most appropriate model to be used in this research.

Result
Chow Test

Based on Table 1 below, Chow-test, H$_o$ is rejected. This means Fixed Effect Model (FEM) is the best model that can be used in other regression on the next panel data.

Table 1: Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	201.802990	(29,117)	0.0000
Cross-section Chi-square	589.831318	29	0.0000

Hausman Test

Based on Table 2 below, Hausman Test, it shows that p-value = 1.0000 so Cross section test variance is invalid, Hausman statistic set to zero. This indicates that the Random Effect Model (REM) is not appropriately used in this model. Thus, the appropriate model to be used in the next experiment is FEM.

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	3	1.0000
*Cross-section test variance is invalid.Hausman statistic set to zero.			

Assuming that Fixed Effect Model (FEM) model is a model that can be used to process the next regression, then based on the analysis results obtained the following results.

FEM Model

Table 3. FEM Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.46913	0.221977	83.20290	0.0000
LAW	2.415303	0.693429	3.483131	0.0007
GOV	0.577942	0.584640	0.988544	0.3249
CORUPT	0.295427	0.037254	7.930089	0.0000

$$TR = 18,46 + 2,41\ Law + 0,57\ Gov + 0,29\ Corruption$$

The study shows that government effectiveness, rule of law and control of corruption together, have an effect on tax obedience This result is also supported by Bird, Vasquez (2008). However, as this is a partial analysis, only rule of law and control of corruption have an effect on tax compliance. However, government effectiveness, partially, has no effect on tax obedience.

Discussion

The role of government effectiveness no longer has much influence when the system in a country already exists and runs well. The function and role of government is only to regulate and coordinate the activities and interests that exist. Governance effectiveness is needed for developing countries, but for developed countries, where the system runs well including legal sanctions, it is not as important. Taxes should still be paid as a liability. The existence of sanctions and the nature of tax binding is, then the tax attenuation still increases any form of government effectiveness. Syadullah and Wibowo (2015) support this study when they state that the public is sure that providing public goods is the main task of government, so the observance of paying taxes is not influenced by the effectiveness of government, but is obligatory.

The rule of law effects tax obedience. Taxes are the obligation of citizens who have clear legal sanctions. The better the rules of law in a country, including their practice, the clearer the sanctions and the higher the increase of tax payer obedience. This result is also supported by Benno (2003), in that trust and legal certainty have positive effect on tax moral. The higher the rule of law index, the higher the ax revenue. In Spain the Royal Decree-Law is also practiced in an aim to increase tax revenue.

Corruption raises people's disbelief. Public obedience in paying taxes decreases when the public feels the tax is being misappropriated. Control of corruption has significantly positive effect on tax ratio. This result, is also supported by Ahsan dan Wu (2005), Faslan (2017). The opportunity of corruption is quite large in a country where the system is not running well. Tax payers require frequent interaction with the tax authority. Imam and Davina (2007) suggest building a system which reduces face-to-face contact between tax payers and tax officials. Reducing the interaction through online payments, strengthening the internal control system of the tax office, makes the standard operational procedure (SOP) of calculation, payment and complaint clear and transparant.

Cross Section Effect

Based on Table 4, from 30 countries samples, there are 19 countries that have tax ratio above the average if government effectiveness, rule of law and control of corruption remain constant. These are developed countries such as Denmark, Argentina, Finland, Australia, Sweden, Norway, Portugal but except Brazil which is a developing country. 11 countries, have tax ratio under the tax ratio on average. Surprisingly, Singapore has the highest downturn in tax ratio if good governance government is not implemented well. Most of the countries are from the ASEAN.

Table 3. Cross Section Effect

ARGENTINA	11.95736
AUSTRALIA	2.859097
BELANDA	-2.301787
BRAZIL	12.74347
CAMBODIA	-4.463325
CANADA	1.774508
CENTRALAFRICA	-6.961895
CHINA	0.247519
COLOMBIA	1.111281
DENMARK	22.45246
EGYP	-3.751353
FINLANDIA	5.154351
GHANA	-4.189950
INDIA	-2.171554
INDONESIA	-5.486718
KAMERUN	-3.138235
MALAYSIA	-6.058440
MEXICO	-1.830503

NIGERIA	-1.227471
NORWEGIA	6.576019
PHILIPINA	-3.915144
POLANDIA	-1.032845
PORTUGAL	1.836368
SINGAPORE	-10.95169
SLOWAKIA	-3.995694
SPAIN	-1.304415
SUDAN	-9.038916
SURINAME	-1.154777
SWEDIA	7.784390
THAILAND	-1.522116

Conclusion

Rule of law and control of corruption have an effect on tax obedience which is measured by tax ratio but government effectiveness is not a significant effect . Rule of Law has the biggest effect on tax obedience. There are 19 countries that have tax ratio above the average, there are 11 countries under the average, if all the independent variables (good governance government) remain constant and where the rule of law and control of corruption is consistent kept in order to encourage public trust, especially in tax payment.

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