How Can Reward and Punishment Affect Tax Morale in Increasing Tax Compliance

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Abstract

Proper rewards as tax benefit are more effectively in increasing tax compliance than more heavily punishments. Studies toward the role of reward (positive) and punishment (negative) as the dimension of tax sanction in increasing tax compliance have been conducted toward taxpayers of both private and public sectors by three steps of study, namely on-line survey, in-depth face to face interviews, and a simulation game respectively. Three major findings are underscored. Firstly, reward and punishment as dimensions constructing tax sanction affect tax morale in order to increase tax compliance. Secondly, expectations toward the implementation of reward and punishment in the form of ease and unease (social sanction) respectively in getting public services are highlighted. Finally, reward for honest taxpayers is found to be the most critical part to reduce the potency of cheating in annual tax return. Referring these insights, I recommend a developed project promoting reward and punishment as a policy implication and as a form of innovation.

Keywords: tax sanction, tax morale, reward, punishment, increasing tax compliance

1. INTRODUCTION

Many countries imposed taxation for their societies implement tax sanction to secure that the applicable rules could be obeyed. And to obey, it is required an intrinsic motivation in fulfilling the tax obligations. Kircher and Whal (2008) reminds the important of combination of tax sanction, as a part of the power of tax authorities and manifestation of law enforcement, and tax morale, as manifestation of intrinsic motivation and trust on tax authorities to increase tax compliance in their model named “slippery slope framework”.

This model is described by the three-dimensional graphics. The dimension are the power of authorities, trust on authorities, and tax compliance, which can be interpreted as follows: 1) if the power and confidence to the tax authorities are in the minimum point, then tax compliance will be at the lowest point; 2) if the tax authorities have the power to enforce the law (for example by increasing the audit risk and increase sanctions), then enforced compliance is high; 3) voluntary compliance will be high if the trust of taxpayers against government is high (for example, because the taxpayer believes that the government has run a good psychological contract); 4) slope on the image is resulted from reducing enforced compliance or voluntary compliance.

The word 'slippery' is selected to illustrate that the level of compliance is easy to slip to lower level as a result of the interaction between enforced compliance and voluntary compliance. Thus a high level of compliance can be maintained if both types of compliance are relatively high. At the time both were at normal levels (in the midst), reduction of compliance is vulnerable to occur. This can be explained as follows: 1) when the taxpayer confidence on the government was not optimal and the existence of law enforcement by increasing audit risks and sanctions, this condition make taxpayers assume that the formed relationship is similar with 'the police and the robbers'. This condition will facilitate the reduction of tax compliance (Gangl, Katharina,
et.al, 2012); 2) during the power of tax authorities reflect a fairness to taxpayers, it will not be considered as a negative thing by the taxpayer. When tax authorities use their power in a fair way, it will increase voluntary compliance (Lavoie, 2008).

Referring this framework, a person will tend to be obedient if there is a trust to the tax authorities (tax morale) and the strength of the authority to regulate and prevent tax evasion in term of tax sanction (Kircher and Whal, 2008). Therefore, the proper combination between tax sanction and tax morale is needed to achieve a voluntary tax compliance. This combination also can effectively diminish the non-compliance (Richardson, 2008).

From a research perspective, tax sanction and tax morale still remain a challenge and an interesting subject to explore. Especially, studies focus on the effect of tax sanction on tax morale. In this study, I introduce the concept of reward and punishment as dimensions of tax sanction derived from notion of sanction, subscribing to conventional sanction theory, in which sanction cover positive and negative sanction (Combie et.al, 1984; Budihardjo, 1991; Tunggal, 1997). I also introduce the concept of individual intrinsic motivation in tax morale derived from ‘a behavioral view of performance' theory from Walker. In this theory, the motivation is affected by knowledge, understanding of rules designing behavior, and expectations affecting direction of actions and magnitude of the energy released by an individual (Handoko, 2007).

The purpose of this study is to measure the effect of reward and punishment toward tax morale. I believe that the improvement of tax morale can increase tax compliance to answer the following research question:

**How does the role of reward and punishment on tax morale in practice in order to increase tax compliance?**

Therefore, the study comprises four parts. In the second part, I discuss theoretical foundation about reward and punishment. Next, I describe the research method and strategy. Furthermore, I present the results of study. Finally, I discuss the findings and conclude my study.

1.1 Theoretical Foundation
1.1.1 Reward

Reward is a positive sanction in the form of incentives, prizes, benefit programs, appreciation, convenient, and others. Kartono (1994) interpreted the reward as an objective means that able to provide satisfaction toward the needs, encouragements or interests of human. Reward is good things received by individuals as a result of their performance (Susan, 2002). Reward given selectively and specifically to those who deserve it. In the concept of management, reward is one tool to increase motivation (Nurmayati, 2011). In accordance with the theory of motivation raised by McClelland, there are three basic human motivations, as follow: 1) the need for power; 2) need for affiliation; and 3) need for achievement. The need for power and affiliated encourage people to be more developed because basically humans want more powerful, respected and feel important in front of others. While the need for achievement will encourage someone to develop creativity and actualize its ability to achieve maximum performance (Hayati and Suhendra, 2006).

In addition, rewards are also intended that people can improve and increase their achievements. The concept above is in line with Najati (2000) which states that rewards have an important position to motivate people in conducting positive responses. In addition, rewards can
form a high work ethic on another occasion and make people constantly correcting their work productivities. Thus, the reward given directly can bring positive effects in the evocative someone to do a better behavior than before (Rasimin, 2002). On the contrary, if the reward is not given directly, then its influence to inspire someone to do better behavior weakened. But not always the case, the reward is given some time later also still memorable for the recipients, so that it can still stimulate a person to behave better. Furthermore, Shculer (1987) states that the reward is divided into extrinsic and intrinsic reward. Extrinsic reward is a positive sanction received by a person or entity, directly or indirectly, in the form of money or something that can be refunded (financial reward) as a result of performance, such as incentives, prizes, and meaningful programs (Tambubolon, 2013). Furthermore, intrinsic reward is a positive sanction received by a person or entity as a consequence of performance that is not in the form of money (non-financial reward, such as a sense of security in employment, status symbol, the public appreciation and self-esteem (Shculer and Huber, 1993). In general, the reward is given by considering the contributions, skills and competencies of individuals/groups to the organization (Retnowati, 2001).

1.1.2 Punishment
Punishment is given to those who violate the rules. Punishment, according to Tunggal (1997), is an unpleasant consequences as a response to certain behaviors or actions. Meanwhile, according to Anoraga and Widiyanti (1993), punishment is an negative sanction that is expected to prevent someone taking irregularities. Gibson, et al (1994) states that the punishment will reduce the tendency to repeat the subsequent behavior, namely unwanted behavior organization. Punishment in the field of taxation is called the tax sanction. Tax sanction is formed in order that tax laws be obeyed. Definition of tax sanction, according to Mardiasmo (2008), is a guarantee that the provision of the tax laws (taxation norms) will be followed. In other words, tax sanction is regulated to prevent that the taxpayer does not violate the norms of taxation.

The same thing is also stated by Zain (2007), in which feelings of fear because of the tax penalties become a powerful deterrent to reduce the tax evasion or tax negligence. If this condition occurs among the taxpayers, it will have an impact on compliance and awareness to meet their tax obligations. Tax sanctions are implemented based on the principles, namely: 1) the criminal sanctions are imposed on violators with the quite heavy cases; 2) the administrative sanctions are provided for violators with very light cases; 3) the severe sanctions are applied as a tool in educating the taxpayer; 4) tax penalties should be imposed on violators without tolerance; and 5) the imposition of tax sanctions for violations can be negotiated (Yadnyana, 2009).

2. RESEARCH METHOD AND STRATEGY
The study is carried out to examine the effect of tax sanction on tax morale in increasing tax compliance. The tax sanction construct is derived from the reward and punishment and tax morale are extracted from knowledge, understanding rules, and expectations [see figure 1].

Figure 1 Analytical framework
Figure 1 depicts the relationship of tax sanction and tax morale in order to improve the behavior of tax compliance. To examine this relationship, I conducted this study in three parts. In the first part, the online survey is undertaken to obtain the insight regarding the perception of respondents of both taxpayers employed in public and private sectors toward reward and punishment as dimensions of tax sanction and tax morale with dimension of knowledge, understanding rules, and expectation. Furthermore, I test each dimension as a factor forming variable and effect of tax sanction on tax morale. This study is undertaken in Indonesia, in 2015. Data are collected by questionnaire delivered via online with specific site. Respondents in this study involve individual taxpayers employed in public and private sectors. Then, to test the measurement model and to analyze the effect of relationship and dimensions constructing variables, I utilize PLS analysis which is well suited for theory building and prediction (Ringle et.al. 2012). SmartPLS version 2.0 (M3) is used to run the PLS analysis (Ringle et al. 2005).

In the second part, I carry out the in-depth interviews as the process of clarification regarding reward and punishment. The population in this study is the individual taxpayer for the personal income tax in Indonesia. Sampling is conducted by the purposive sampling technique, with the following criteria: 1) the individual taxpayer as an employee in the public sector, and 2) the individual taxpayer as an employee in the private sector. The data required in this research is the primary data. Respondents as a unit of analysis are government employee, state enterprise employee, and private sector employee. In this study, I undertake the semi-structured interview, in which I arrange questions and prepare the predicted answers. Furthermore, data resulted are then analyzed by descriptive approach according to the table of predicted answers.

Lastly, I perform a simulation or a game to obtain the insight about reward and punishment in practice. The population in this study is the individual taxpayer for the personal income tax in Indonesia. Sampling is conducted by the purposive sampling technique, with the following criteria: 1) individual taxpayer as a government employee and 2) individual taxpayer as a state enterprise employee. This simulation or game is tested on the public sector employees who are continuing their education at the School of Public Administration Bandung, West Java, Indonesia in 2015. In this context, the game is applied to three classes where the number of students is at least 25. There are three treatments given in this game consisting comfortable
treatment (actual condition), reward treatment, and punishment treatment. I then distribute simple questionnaires containing these treatments. Finally, I analyze the result of this simulation or game by frequency analysis.

3. FINDINGS
3.1 Characteristics of respondents
The online survey was undertaken within the period of April 15 until May 15, 2015. See annex 3 for background information. In total 244 respondents joined the survey. After checking for completeness, there were 189 respondents left which had completed the whole survey. According to their answers, the characteristics of these respondents that almost 70 percent of respondents are male. Then, around 46 percent of the respondents have a Master Degree as the last education. Next, almost 60 percent of the respondents are civil servants, from either central or local government, 14 percent are employed by state enterprises, and 28 percent are from the private sector. They come from 15 different Indonesian provinces.

3.2 Descriptive analysis
In this section I present the findings on the various blocks of statements of the on-line survey. I first look at the three dimensions of tax morale (knowledge of taxation, understanding of tax rules, and expectations regarding implementation of taxation), and then at the two dimensions of tax sanction (reward and punishment).

In the side of tax morale, I highlight that, with an average (Likert) score, respondents largely agree with the statements on knowledge regarding taxation (3.9); respondents are rather neutral in their understanding of tax rules (3.4); and respondents seem to agree with the statements on expectations regarding the implementation of taxation (3.6). Overall, the average (Likert) score on the three dimensions of tax morale (knowledge of taxation, understanding of tax rules, expectations regarding implementation) is 3.6.

Furthermore, in the side of tax sanction, I underline that, with an average (Likert) score, respondents seem to agree on the statements regarding the use of rewards in taxation (3.6); respondents seem to have a fairly neutral position towards the use of punishment as tax sanctions (3.3). It is clear from the answers on the individual statements that respondents generally agree with the punishment instrument as such, and with financial sanctions, but they seem to have hesitations when it comes to (some) social sanctions, especially the more explicit and far-reaching “naming and shaming” sanctions. Overall, the average (Likert) score on the two dimensions of tax sanction (reward and punishment) is 3.5.

3.3 Verification Analysis
In this sub section, I present results of verification analysis based on three kinds of studies, namely 1) on-line survey; 2) in-depth face-to-face interviews; and 3) simulation game that can be shown as following:

3.3.1 On-line survey
As explained in the sub section of research method and strategy, SmartPLS version 2.0 was to assess the overall validity of the framework with the two variables and their dimensions. I start by showing the result of the assessment of the outer model or measurement model (looking at
the convergent validity, discriminant validity and composite reliability of the variables and dimensions), and then turn to the inner or structural model (and look at the relationship among the two variables).

Assessing the outer model (measurement model)
The measurement model or outer model is evaluated by looking at the convergent validity, discriminant validity, and composite reliability of the dimensions.

Convergent validity
Convergent validity is assessed based on the correlation between the variables and their dimensions, based on PLS. The validity of a dimension as constructing a variable is considered to be high when the level of correlation (i.e. the loading factor) is more than 0.70. However, if the value of correlation is between 0.50 and 0.60, it is considered to be sufficient.

The test result of the outer model is shown in the figure and table below.

Figure 2 The result of algorithm PLS (loading factors)

![Figure 2: The result of algorithm PLS (loading factors)]

Table 1 Outer Loadings

<table>
<thead>
<tr>
<th></th>
<th>Tax Morale</th>
<th>Tax Sanction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>0.804</td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td>0.699</td>
<td></td>
</tr>
<tr>
<td>Expectation</td>
<td>0.651</td>
<td></td>
</tr>
<tr>
<td>Reward</td>
<td></td>
<td>0.694</td>
</tr>
<tr>
<td>Punishment</td>
<td></td>
<td>0.788</td>
</tr>
</tbody>
</table>

Figure 2 and table 1 show that all dimensions have a factor loading of more than 0.50 so it can be said that all dimensions show convergent validity.

Discriminant Validity
Discriminant validity is assessed by comparing the value of the loading factor of the dimensions of the variables with the value of the loading factor of these dimensions regarding the other variable (cross loadings).

Table 2 Cross Loadings

<table>
<thead>
<tr>
<th></th>
<th>Tax Morale</th>
<th>Tax Sanction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</table>

![Table 2: Cross Loadings](image)
Table 2 shows that the value of the loading factors of the dimensions of tax morale is higher than the value of the loading factors of these dimensions within the other variable, tax sanction, and vice versa. It means that the dimensions of both tax morale and tax sanction have sufficient discriminant validity.

**Composite Reliability**

A variable can be said to be reliable if the value of composite reliability is more than 0.60. As table 6.3 shows this is indeed the case for the two variables involved.

**Table 3 Composite Reliability**

<table>
<thead>
<tr>
<th></th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Morale</td>
<td>0.7629</td>
</tr>
<tr>
<td>Tax Sanction</td>
<td>0.7101</td>
</tr>
</tbody>
</table>

Referring to the result of testing the outer model, in terms of convergent validity, discriminant validity, and composite reliability, I can say that the dimensions of reward and punishment adequately construct the variable of tax sanction. The same is true for the dimensions of knowledge of taxation, understanding rules, and tax expectation for the variable of tax morale.

**Assessing the inner model (structural model)**

The test of the inner model is conducted by examining the relationship between tax sanction (dependent variable) and tax morale (independent variable). By using SmartPLS version 2.0, I obtain t-statistics that can be presented in the following figure and table.

**Figure 3** The result of algorithm PLS (t-values)

<table>
<thead>
<tr>
<th></th>
<th>t-table (critical point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-statistics</td>
<td></td>
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</tbody>
</table>

**Table 4 Value of t-table and t-statistics**

<table>
<thead>
<tr>
<th></th>
<th>t-table (critical point)</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-statistics</td>
<td></td>
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</tbody>
</table>
Figure 3 and table 4 indicate that the t-value for the relationship between tax sanction and tax morale is 2.013. This value is higher than the value of t-table at 1.972. This result clarifies that tax sanction (by dimensions of reward and punishment) is positively associated with tax morale (by dimensions of knowledge of taxation, understanding rules, and tax expectation).

The value of the effect of tax sanction on tax morale is demonstrated in the following table.

<table>
<thead>
<tr>
<th>Table 5 R Square</th>
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</thead>
<tbody>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Tax Sanction</td>
</tr>
<tr>
<td>Tax Morale</td>
</tr>
</tbody>
</table>

Table 5 demonstrates that the effect of tax sanction on tax morale is 0.0642, or 6.4 percent, while 93.6 percent is explained by other variables outside the model.

3.3.2 In-depth face-to-face interviews
In-depth face-to-face interviews are a process to collect information deeply, openly, and freely associated with the problem and research focus. In this case, the in-depth interviews were conducted with a list of questions that had been prepared in advance (Moleong, 2005), i.e. a semi-structured questionnaire. In total 15 respondents were involved, with various professional backgrounds (five government employees, five state enterprise employees, and five employees from the private sector). The interviews were conducted in the period March-May 2015. The data collected are analyzed by frequency analysis.

I conducted in-depth face-to-face interviews with 15 respondents: five respondents were government employees, five were state enterprise employees, and five people worked in the private sector. The interviews were carried out in the period of March until May, 2015.

Below, I give an overview of the main findings, following (but not literally reproducing) the format of the (semi-structured) questionnaire. The consensus among the respondents in answers was very large; that is why I cannot and will not split up the answers for the three groups: government employees, state enterprise employees, and workers in the private sector.

Tax compliance in Indonesia
The respondents stated that in their views, tax compliance in Indonesia is stagnant or even decreasing; no respondent indicated an improvement. The main reasons for this development are the lack of proper dissemination of information on taxation, and the low level of openness regarding the use of tax revenues.

Factors that affect tax morale
Most respondents agreed that the following factors affect tax morale (as the intrinsic motivation to pay taxes): knowledge of taxation, understanding of income tax rules, the proper
implementation of the tax system, the exemplary behavior of tax officials, and the easiness by which taxes can be paid. Some respondents added and emphasized that tax morale can be positively influenced by government if it clearly explains the benefits of paying taxes and the exact use of tax revenues, in addition to outlining more clearly to taxpayers the balance between their rights and obligations.

**Tax knowledge**

All respondents stated that their tax knowledge tended to be stagnant. The main reason given for this development was lack of tax socialization by government. Although this question did refer to tax knowledge specifically, some respondents again emphasized the negative role on tax morale and tax compliance, of lack of openness about the use of tax revenues, and of the misuse of tax revenue due to corruption.

**Expectations of respondents regarding the tax system**

Asked for their main expectations regarding the tax system, some respondents again focused on the proper use of tax revenue, without corruption, transparency in the use and management of taxes, and appropriate (and equitable) law enforcement in taxation. Some respondents indicated that government should provide regular overviews of how tax money is spend. Others mentioned aspects of tax services, such as simple and efficient procedures to pay and report taxes, including feedback mechanisms; higher quality of tax services; cooperative and honest tax officials; clear information about rights and obligations as a taxpayer; and equitable and respectful treatment of taxpayers by tax officials.

**The possible role of reward and punishment**

Asked if they think it is feasible that instruments of reward and punishment can (externally) raise tax morale, the respondents were positive. Rewards were seen as some sort of appreciation of (compliant) taxpayers by government, and can have an important feedback element. Punishment could work as a deterrent of non-compliant behavior, but it is important that punishment is implemented without discrimination.

**Rewards**

Generally, the respondents emphasized the possible role of rewards in maintaining and raising the motivation of taxpayers to comply. The purpose of rewards was seen as bringing out reciprocity: compliant behavior is beneficial for government, and government could reward such behavior by means of rewards for compliant taxpayers. In that regard, respondents indicated that the magnitude of the reward should be in line with the taxpayer’s achievement; this could vary between various types of taxes and taxpayers. Accuracy and neatness of tax administration by taxpayers, discipline in submitting the annual tax return, and discipline in paying taxes were mentioned as criteria to base rewards upon. Asked for possible rewards for –voluntarily-compliant taxpayers the respondents came up with various options. Almost all mentioned the possibility of a financial incentive linked to payable taxes (such as a reduction in payable taxes, a “discount”, or tax refund). Others thought of financial incentives in non-tax areas, such as a subsidy for housing, a subsidy for insurance, or a subsidy for education. Some respondents mentioned various “prizes” (such as a domestic vacation or a vacation abroad) to be allotted.
under compliant taxpayers, or special certificates for compliant taxpayers. Non-financial awards by government relating to the ease of handling affairs such as obtaining a business license, a passport, a building permit, a loan application et cetera, were also mentioned. Asked whether they think that currently certain rewards are already used in the Indonesian tax system for compliant taxpayers, respondents answered that they did not know of such rewards. Some respondents indicated that such rewards might exist for large companies and/or rich people.

**Punishment**
Almost all respondents agreed about the main purposes of punishment: maintaining and increasing the motivation to comply, to enhance the discipline of taxpayers, to educate taxpayers, to give a sense of shame to non-compliant taxpayers, to give a deterrent effect, and to prevent offences and violations of tax laws, and of the recurrence of such offences and violations. The respondents agreed that imposing a punishment should be appropriate to the size and kind of the offences, to the magnitude of the loss suffered by the state, and should differentiate between various types of tax offenders. Asked for suitable options in terms of punishment/sanctions, almost all respondents first referred to the tax sanctions that are currently in place in the Indonesia tax system (fine sanction; interest sanction; increment sanction; confinement sanction; and imprisonment sanction).

Regarding these currently used sanctions, all respondents indicated that the current administrative sanctions do not really provide a deterrent effect, because the amount of the fines is simply too small. Some respondents therefore argued in favor of a cumulative and progressive system, in which repetition of non-compliant behavior is met with increasing fines. Such a system may have a greater deterrent effect than the current one. The respondents also think there is frequent discrimination in the way the administrative sanctions are applied. They feel that many taxpayers, who do not (timely) submit their annual tax return, are not hit with administrative sanctions.

The respondents were equally negative about the criminal sanctions, which according to them have also not provided a deterrent effect. Frequently violations are made to tax laws resulting in a loss to the state, without proper criminal sanctions, or even without any criminal sanction at all. Respondents indicated they have little information on how the criminal sanctions are actually applied.

Even though according to some respondents the current administrative and criminal sanctions should suffice (if implemented properly), most respondents argued for social sanctions to be added to the already existing administrative and criminal sanctions. Regarding the sort of social sanctions that could be used, respondents indicated to agree upon a broad range of possibilities, such as (unpleasant types of) social work, public naming-and-shaming of tax offenders, creating barriers to offenders for work in and with government, abnegation of certain rights, and unease in handling matters relating to public services.

From the results of the interviews, I conclude that the respondents, as taxpayers, agree upon applying rewards and punishments in the field of taxation. Furthermore, they show a preference for the use of certain types of rewards and punishment: reduction in payable taxes (financial reward), and easiness in handling matters relating to public services (non-financial reward), for compliant taxpayers; social sanctions, and un-ease in handling matters relating to public services, for non-compliant taxpayers. Sanctions should be proportionate to the offense. In addition, the
proper and equitable implementation of the current sanctions is advocated. More generally, the respondents repeatedly emphasize the importance for tax compliance of non-corrupt and transparent spending of tax revenues.

3.3.3 Simulation game
Simulation is a methodology for conducting experiments using a model of the real system (Siagian, 1987; Hassan, 2002). The simulation game was conducted to establish the effect of 'reward' and ‘punishment' on the tax compliance of public officials. The game was tested on public sector employees who are continuing their education at the School of Public Administration Bandung, West Java, Indonesia. This game is applied to three classes, each consisting of 45 participants. In the game, all participants enjoy a basic salary from their government, in addition to which they have (considerable) income from other sources. Participants have to indicate which income they will include in their annual tax return, given a set of conditions. These conditions vary for the three classes. The three ‘treatments’ given in this game are described below.

Treatment 1:
I call this the 'Comfortable Treatment' and it is applied to the first class. Conditions for this treatment are as follows:
• Examination of the annual tax return is carried out routinely by tax officials;
• The examination of annual tax returns of employees in the public sectors is not a priority for review;
• The annual tax returns of employees in the public sector are not a priority to be audited by tax officials because employees working in the public sector might not have huge salaries and generally the tax payable is already paid by the government (i.e. withheld from the salary).

Treatment 2:
I call this the 'Reward Treatment' which is applied to the second class. For this treatment, the conditions are the same as for the ‘Comfortable Treatment’, in addition to which the following condition applies:
• If the incomes and the amount of tax payable are reported honestly then the government (i.e. the Directorate General of Taxes) will provide rewards to compliant taxpayers and these rewards could include:
  1. Cash money
  2. Money for having holidays abroad
  3. Money for having domestic travelling
  4. Tax refunds
  5. Tax discount for the next month
  6. Shopping vouchers
  7. Certificates of appreciation, given directly by the president & receipt of the eagle gold pin
  8. Subsidy for housing
  9. Subsidy for health
  10. Subsidy for education
11. Subsidy for health insurance

**Treatment 3:**
I call this the 'Punishment Treatment' and it is applied to the third class. For this treatment, the conditions are the same as for the ‘Comfortable Treatment’, in addition to which the following condition applies:

- If the incomes and the amount of tax payable are **reported dishonestly** then the government (i.e. the Directorate General of Taxes) will punish non-compliant taxpayers and these punishments could include:
  1. Paying payable amount of tax plus interest.
  2. Paying tax payable plus a fine of amount, which would be four times the tax payable.
  3. For mild cases, confinement sanction for around one year.
  4. For severe cases, imprisonment sanction for at least 30 years.
  5. Social sanction by conducting ‘rough work’ as a “tax offender” in the offender’s office within a certain period of time
  6. Social sanction by carrying out social works as a “tax offender” in social homes, nursing homes, and others within a certain period of time
  7. Getting simultaneous imprisonment and social sanction. Such as undertaking social works in the morning until late afternoon as a “tax offender”, after that in the night, the offender stays in the prison.

In this study, I involved 135 respondents from the School of Public Administration Bandung, West Java, Indonesia. I divided respondents into three groups (“classes”) by 45 respondents each. I conducted the simulation game in March 2015. The results can be presented as follows.

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**Results for the First Class (“Comfortable Treatment”)**

**Question:** With the tax collection conditions as explained, how much income will you report on your annual tax return?

**Answers:**

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDR 200 million (S) a year</td>
<td>28 (62.22 percent)</td>
</tr>
<tr>
<td>IDR 700 million [200 (S)+500 (B) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 500 million [200 (S)+300 (C) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 300 million [200 (S)+100 (L) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 400 million [200 (S)+200 (SP) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 1 billion [200 (S)+500 (B)+300 (C) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 800 million [200 (S)+500 (B)+100 (L) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 900 million [200 (S)+500 (B)+200 (SP) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 600 million [200 (S)+300 (C)+100 (L) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 700 million [200 (S)+300 (C)+200 (SP) million] a year</td>
<td>0 (0.00 percent)</td>
</tr>
<tr>
<td>IDR 500 million [200 (S)+100 (L)+200 (SP) million] a year</td>
<td>0 (0.00 percent)</td>
</tr>
<tr>
<td>IDR 1.1 billion [200 (S)+500 (B)+300 (C)+100 (L) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 1.2 billion [200 (S)+500 (B)+300 (C)+200 (SP) million] a year</td>
<td>1 (2.22 percent)</td>
</tr>
<tr>
<td>IDR 1.3 billion [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year</td>
<td>7 (15.56 percent)</td>
</tr>
</tbody>
</table>
Based on the result above, I can conclude that under the given conditions- 62 percent of the respondents tend to cheat in reporting their incomes in their annual tax returns. Only 16 percent of the respondents tend to be honest.

**Results for the Second Class (“Reward Treatment”)**

**Question:** With the tax collection conditions as explained, how much income will you report on your annual tax return?

**Answers:**

1. IDR 200 million (S) a year = 25 (55.56 percent)
2. IDR 700 million [200 (S)+500 (B) million] a year = 1 (2.22 percent)
3. IDR 500 million [200 (S)+300 (C) million] a year = 2 (4.44 percent)
4. IDR 300 million [200 (S)+100 (L) million] a year = 2 (4.44 percent)
5. IDR 400 million [200 (S)+200 (SP) million] a year = 2 (4.44 percent)
6. IDR 1 billion [200 (S)+500 (B)+300 (C) million] a year = 0 (0.00 percent)
7. IDR 800 million [200 (S)+500 (B)+100 (L) million] a year = 0 (0.00 percent)
8. IDR 900 million [200 (S)+500 (B)+200 (SP) million] a year = 1 (2.22 percent)
9. IDR 600 million [200 (S)+300 (C)+100 (L) million] a year = 1 (2.22 percent)
10. IDR 700 million [200 (S)+300 (C)+200 (SP) million] a year = 0 (0.00 percent)
11. IDR 500 million [200 (S)+100 (L)+200 (SP) million] a year = 1 (2.22 percent)
12. IDR 1.1 billion [200 (S)+500 (B)+300 (C)+100 (L) million] a year = 1 (2.22 percent)
13. IDR 1.2 billion [200 (S)+500 (B)+300 (C)+200 (SP) million] a year = 0 (0.00 percent)
14. IDR 1.3 billion [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year = 9 (20.00 percent) 45 (100 percent)

Based on the result above, I conclude that 56 percent of the respondents tend to cheat in reporting their incomes in their annual tax returns, when the government provides rewards for honest respondents. Only 20 percent of respondents tend to be honest. The important thing is that the comparison between the two treatments reveals that the use of rewards decreases at around 6 percentage points the occurrence of cheating in the annual tax return.

In addition, respondents that got the “Reward treatment” were asked for their preferences regarding the kind of reward; Out of a list with 11 possible rewards, they had to pick five. In order of decreasing popularity, the rewards were favored as follows by the respondents:

1) Subsidy for education worth almost 50 percent of tax payable (15.56 percent)
2) Subsidy for health insurance worth almost 50 percent of tax payable (14.67 percent)
3) Subsidy for health worth almost 50 percent of tax payable (14.67 percent)
4) Subsidy for housing worth almost 50 percent of tax payable (14.22 percent)
5) Cash money worth almost 50 percent of tax payable (10.67 percent)
6) Tax refund worth almost 50 percent of tax payable (8.00 percent)
7) Tax discount for the next month worth almost 50 percent of tax payable (5.78 percent)
8) Government would bear expenses of holidays abroad worth almost 50 percent of tax payable (5.78 percent)
9) Presidential certificate of appreciation & the eagle gold pin (4.00 percent)
10) Government would bear expenses of domestic tourism worth almost 50 percent of tax payable (3.56 percent)
11) Shopping voucher worth almost 50 percent of tax payable (3.11 percent)

It is interesting to see that respondents, in their choice of rewards, make a clear link between paying taxes, and (rewards to cover) expenditure for public services. Tax discounts (e.g. cash back, tax refund, tax discount) are the second popular category, followed by financial rewards for purely private purposes.

Results for the Third Class (“Punishment Treatment”)

**Question:** With the tax collection conditions as explained, how much income will you report on your annual tax return?

**Answers:**

- IDR 200 million (S) a year = 30 (66.67 percent)
- IDR 700 million [200 (S)+500 (B) million] a year = 1 (2.22 percent)
- IDR 500 million [200 (S)+300 (C) million] a year = 1 (2.22 percent)
- IDR 300 million [200 (S)+100 (L) million] a year = 1 (2.22 percent)
- IDR 400 million [200 (S)+200 (SP) million] a year = 1 (2.22 percent)
- IDR 1 billion [200 (S)+500 (B)+ 300 (C) million] a year = 0 (0.00 percent)
- IDR 800 million [200 (S)+500 (B)+100 (L) million] a year = 0 (0.00 percent)
- IDR 900 million [200 (S)+500 (B)+200 (SP) million] a year = 1 (2.22 percent)
- IDR 600 million [200 (S)+300 (C)+100 (L) million] a year = 0 (0.00 percent)
- IDR 700 million [200 (S)+300 (C)+200 (SP) million] a year = 1 (2.22 percent)
- IDR 500 million [200 (S)+ 100 (L)+200 (SP) million] a year = 0 (0.00 percent)
- IDR 1.1 billion [200 (S)+500 (B)+300 (C)+100 (L) million] a year = 1 (2.22 percent)
- IDR 1.2 billion [200 (S)+500 (B)+300 (C)+200 (SP) million] a year = 0 (0.00 percent)
- IDR 1.3 billion [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year = 8 (17.78 percent)

Based on the result above, I conclude that 67 percent of the respondents tend to cheat in reporting their incomes in their annual tax returns, when government provides punishment for dishonest respondents. If I compare this with the result from the first treatment, the percentage of cheating remains high (and actually is a bit higher). With this treatment, only 18 percent of the respondents tend to be honest (compared to 18 percent under the first treatment). These results indicate that the existence of punishment does not decrease the occurrence of cheating in annual tax return.

In addition, respondents that got the “Punishment treatment” were asked for their preferences regarding the kind of punishment that they think should be imposed on tax offenders. Out of a list with 7 possible punishments, they had to pick three. In order of decreasing popularity, the following punishments were favored by the respondents:

1) Getting simultaneous imprisonment and social sanction. Such as undertaking social works in the morning until late afternoon as a “tax offender”, after that in the night, the offender stays in the prison (18.52 percent)
2) Paying payable amount of tax plus interest (17.04 percent)
3) For severe cases, imprisonment sanction for at least 30 years (14.07 percent)
4) Paying tax payable plus a fine of amount, which would be four times the tax payable (13.33 percent)
5. Social sanction by conducting ‘rough work’ as a “tax offender” in the offender’s office within a certain period of time (13.33 percent)
6. Social sanction by carrying out social works as a “tax offender” in social homes, nursing homes, and others within a certain period of time (12.59 percent)
7. For mild cases, confinement sanction for around one year (11.11 percent)

According to this result, 94 percent of respondents favor tax sanctions in the form of non-financial sanctions such as confinement sanctions, imprisonment sanctions, social sanctions and mixes between social sanctions and imprisonment sanctions. From this ratio, social sanction seems to be a main preference (around 37 percent). Other sanctions (confinement/imprisonment) score about 36 percent, and mixed sanctions core about 26 percent.

4 DISCUSSION AND CONCLUSIONS
The objective of this chapter was to introduce the empirical research design and to present the results of the follow-up research, consisting of the on-line survey, the in-depth face-to-face interviews, and the simulation game. Based on literature review, I first developed a conceptual framework regarding sanctions, rewards, punishment, morale, knowledge, understanding of rules, and expectations. I subsequently developed the analytical framework for the empirical research and formulated hypotheses. I elaborated on each part of the follow-up research, i.e. the on-line survey, the in-depth face-to-face interviews, and the simulation game, and discussed methodological issues as well as the findings.

Below, I first briefly summarize the main findings from the three parts of the follow-up research. Subsequently, I will discuss and conclude these findings.

**Results of the on-line survey**
The online survey involved 189 respondents, of which 28 percent were employees in the private sector, 60 percent were government employees, and 14 percent were state enterprise employees. This enabled us to differentiate between these three groups in the analysis. Almost 70 percent of the respondents were male, and around 46 percent of the respondents had a Master’s Degree as the highest level of education. Respondents came from 15 provinces in Indonesia. All in all, the group of respondents was well-balanced and of acceptable size. For the total group of respondents, I found the following average Likert scores on the three dimensions of tax morale: tax knowledge: 3.9; understanding of tax rules: 3.4; and expectations: 3.6. For these three dimensions combined the average score (for tax morale) was 3.6. For the two dimensions of tax sanctions I found the following scores: punishment: 3.3, and rewards: 3.6. For these two dimensions combined the average score (for tax sanctions) was 3.5. Some of these scores are close to the neutral score of 3.0 (understanding of tax rules, punishment), the other scores indicate–slight- agreement. For the overall group of respondents, I tested the model (as measurement model), with the two variables and their dimensions, for convergent validity, discriminant validity, and composite reliability. All these tests were positive. This means that the three dimensions (knowledge, understanding expectations) adequately construct the variable of tax morale, and the same is true for the dimensions of rewards and punishment, and the variable of tax sanctions. Subsequently, I looked at the correlations between the dimensions and variables, and between the variables as such, as a test of the inner (or structural model) and found
significant t-values for all correlations involved. The effect of tax sanctions on tax morale is 6.4 percent, which—again—is rather low; 93.6 percent is explained outside of the model.

Results of the in-depth face-to-face interviews
Overall, 15 respondents participated in the interviews, equally (5+5+5) divided over the three groups of employees. While the on-line survey showed clear differences between the three groups, a major feature of the interview results was the high level of consensus between the respondents, without any clear differences between the three groups. The interviews showed that the respondents, as taxpayers, agree upon applying rewards and punishments in the field of taxation. Furthermore, they show a preference for the use of certain types of rewards and punishment: reduction in payable taxes (financial reward), and easiness in handling matters relating to public services (non-financial reward), for compliant taxpayers; social sanctions, and un-ease in handling matters relating to public services, for non-compliant taxpayers. According to the respondents, sanctions should be proportionate to the offense. In addition, the proper and equitable implementation of the current sanctions was advocated. More generally, the respondents repeatedly emphasize the importance for tax compliance of non-corrupt and transparent spending of tax revenues.

Results of the simulation game
The simulation game (for public officials) was meant to find out what the potential effect (in terms of increased tax compliance) is of the application of punishment and rewards. Three classes of 45 participants each were given three different treatments (one without any reward or punishment, one with rewards, one with punishment). Apart from the reward/punishment features, the basic conditions outlined to the three groups were the same (and in line with the actual current conditions in Indonesia: tax authorities do not consider checks and audits of annual tax returns of public officials to be a priority).

Table 6 shows the difference in the share of participants that is willing to cheat in declaring income, given the conditions for each treatment group. In the actual conditions (without reward or punishment) 62% of the public officials are inclined to cheat. With punishment, this is even a bit higher (67%), but with rewards, this is considerably lower (56%).

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Inclination to cheat</th>
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<tbody>
<tr>
<td>Treatment 1 – actual conditions + no rewards or punishment</td>
<td>62.22%</td>
</tr>
<tr>
<td>Treatment 2 – actual conditions + rewards</td>
<td>55.56%</td>
</tr>
<tr>
<td>Treatment 3 – actual conditions + punishment</td>
<td>66.67%</td>
</tr>
</tbody>
</table>

When the class that took the punishment treatment was asked for the kind of punishment they think is appropriate, the vast majority of respondents favored tax sanctions in the form of non-financial sanctions (confinement sanctions, imprisonment sanctions, and social sanctions) and/or mixes between social sanctions and imprisonment sanctions. When the class that took the reward treatment was asked for the kind of rewards they would favor, the respondents made a clear link between paying taxes, and (rewards to cover) expenditure for public services. Tax discounts were the second popular category, followed by financial rewards for purely private purposes.
To summarize and link the findings, I find that the model of tax sanctions and tax morale (with the dimensions) worked quite well, in terms of the model as a measurement model, but that as a structural (explanatory) model the captured effect is rather low, which means that further improvements and extensions are certainly needed. I found that the model performed especially badly for government employees, but less so for state enterprise employees and private workers. There seems to be a difference between government employees on the one hand and state enterprise employees on the other hand (who resemble more employees from the private sector). Furthermore, this study also showed that rewards are potentially more effective in increasing tax compliance than punishment. Interestingly, the kind of rewards that respondents favor relate to expenditure on services in the public domain (education, housing, health services). This illustrates the importance of the proper use of tax revenues, and more generally of the expenditure side of the government budget, for issues of tax compliance.

Therefore, the future innovations should be conducted by changing the concept of tax sanction into the social sanction in the scheme of rewards and punishments. As a policy implication, I recommend a project by promoting rewards and punishments in the form of ease and unease in getting public service for obedient and non-obedient taxpayers to achieve the increasing tax compliance in Indonesia.

5. REFERENCES


