



















TAX COMPLIANCE IN INDONESIA





THE ROLE OF PUBLIC OFFICIALS AS TAXPAYERS



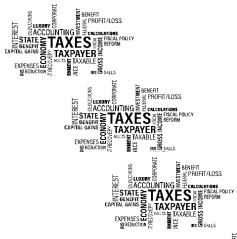


Share of Total Income and Taxes Paid by Income Group in 2011

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Abdul Rahman





TAX COMPLIANCE IN INDONESIA: THE ROLE OF PUBLIC OFFICIALS AS TAXPAYERS

Abdul Rahman

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Abdul Rahman Enschede, January 2017

SUMMARY

This thesis addresses the problem of low tax compliance in Indonesia, focusing on the role of public officials as taxpayers. It aims to improve our understanding of perceptions of public officials of their tax compliance and the factors that influence it.

The main research question was formulated as follows.

"How can Indonesia increase its tax compliance by focusing on public officials?"

The sub-research questions derived from the main research question were:

- 1. What is the current state of affairs regarding tax compliance and tax reforms in Indonesia, compared to other countries?
- 2. What does the literature tell us about underlying factors for tax compliance, generally and specifically tax compliance by public officials?
- 3. How do public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale?
- 4. What are the key factors for improving tax compliance focusing on public officials?

Tax compliance and tax compliance problems in Indonesia are inseparable from the larger tax system. Indonesia faces structural problems with low tax compliance, as shown by its relatively low tax ratio (i.e. the ratio of tax revenues to GDP). Problematic tax compliance mainly occurs because of a difference between the availability of public goods-needed by taxpayers and public goods-actually provided by the state. This situation is exacerbated by tax corruption involving taxpayers and tax officials. As a consequence, the trust of taxpayers in government is low and this encourages noncompliance. Indonesia's efforts to improve its tax system have been realized by various tax reforms, which started in 1983, by changing the tax collection system from official assessment to self-assessment. Subsequently, tax reforms have included the reform of tax rates and tax bases of various taxes, as well as tax administrative reform. Unfortunately, these reforms have not improved tax compliance. Indonesia's tax ratio is still low, at around 12 percent. This means that the potential for improving tax compliance is still very large.

Through the analysis of literature and policy documents, we identified four main factors affecting tax compliance: modernized tax administration system (MTAS), tax sanctions, tax services, and tax morale. We had a closer look at what the literature has to say about these four factors, how they have been subject to changes as part of tax reform in Indonesia, and how the relationship between each factor and tax compliance has been evaluated in the Indonesian context, in academic research. Subsequently, we focused on the role of public officials. In the scope of Indonesia's laws and social system, public officials are viewed as representatives of government and as role models ("father-figures") and change agents. We briefly discussed some literature on role models and change agents, such as social learning theory, according to which the behavior of public officials will influence the behavior of society, for example in fulfilling tax obligations. We found that to date no research has been done on tax compliance by public officials specifically.

The empirical research part of the thesis, in its first step, involved a survey study among 400 respondents working in the public sector (as government employees and state enterprise employees). We found that public officials perceive their tax compliance as good, even though we also found that public officials behave far from perfect. The perception of public officials of the extent to which the Indonesian tax administration is modernized, and of the level of tax services, was sufficient, but the perception of the two other main factors was bad. This can be linked to their views on the tax system in Indonesia. The majority of respondents indicated the importance of paying taxes, and the vast majority of respondents acknowledged their obligation to be compliant with tax laws, but the survey results also showed considerable dissatisfaction with the way the tax system is implemented in Indonesia. Respondents mentioned the government's failure in properly developing Indonesia, the misuse of tax revenues, failing tax reforms, and the gap between intentions as laid down in tax laws and actual implementation. Still, a large majority acknowledged that as public officials they are role models for other taxpayers.

In terms of correlations between the four variables and tax compliance, we found rather low (but significant) correlations with tax compliance for MTAS, tax services and tax morale, but no significant correlation for tax sanctions. Overall, the model performed in a limited way: the combined effect of the four variables on tax compliance was low. We found similar results when we looked at the two groups of public officials involved: government employees and state enterprise employees. Overall, state enterprise employees had lower scores on their perception of the five variables, but not all differences between government employees and state enterprise employees were significant.

In its second (follow-up) step, the empirical research focused on two variables: tax sanctions and tax morale. It consisted of an on-line survey, in-depth- face-to-face interviews, and a simulation game. The survey and interviews included respondents from the private sector. For the follow-up research an analytical model was developed, with the two variables (tax sanctions and tax morale) and various dimensions of these variables (knowledge, understanding, and expectations for tax morale; rewards and punishment for tax sanctions). We found that this model worked quite well, in terms of the model as a measurement model. However, as a structural (explanatory) model the captured effect was rather low, and further improvements and extensions are needed. We found that the model performed especially badly for government employees, but less so for state enterprise employees and private workers. This implies that -contrary to the earlier findings- 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). The follow-up research also showed that rewards are potentially more effective in increasing tax compliance than punishment. Moreover, the kind of rewards that respondents favor relate to expenditure on services in the public domain (education, housing, health services).

The later issue 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. It is clear that tax compliance issues cannot be separated from the overall public finances of Indonesia, and the performance of the Indonesian government in terms of bringing welfare to its people. Tax compliance would benefit from more

information on how taxes are used, and from better use of taxes as such. To start with, the government (and the Indonesian tax authorities) should provide regular and transparent information on how tax revenues are used. A better and more transparent use of tax resources does require strong commitment from the government, and such commitment is the primary tool to achieve a better tax system and more voluntary tax compliance in Indonesia.

In terms of further research, we suggest research into potential additional underlying factors for tax compliance, as well as into improvement of measurement (that should go beyond the use of perceptions, as was done in this thesis). Moreover, further research is needed to clarify differences in tax compliance between government employees, state enterprise employees and employees working in the private sector. Finally, it is suggested to do further research into the potential difference between the use of rewards and punishment in raising tax compliance.

SAMENVATTING

Dit proefschrift betreft de gebrekkige naleving van belastingwetgeving ("tax compliance") in Indonesië, meer specifiek de rol die ambtenaren (in hun hoedanigheid als belastingbetaler) kunnen spelen ter verbetering van "tax compliance" in Indonesië. Het doel van het proefschrift is het verkrijgen van een beter inzicht in de perceptie door ambtenaren van de mate waarin en wijze waarop zij zelf belastingwetgeving naleven, en in de factoren die daarop van invloed zijn.

De centrale onderzoeksvraag is als volgt geformuleerd:

"Hoe kan Indonesië de naleving van belastingwetgeving verbeteren, door zich te richten op ambtenaren als belastingplichtigen?"

Het onderzoek kent de volgende deelvragen:

- 1. Hoe valt de huidige situatie in Indonesië met betrekking tot "tax compliance" en belastinghervorming te kenschetsen, mede in vergelijking met andere landen?
- 2. Welke factoren dragen volgens eerder onderzoek bij aan "tax compliance" door belastingbetalers in het algemeen, en van ambtenaren als belastingplichtigen in het bijzonder?
- 3. Hoe percipiëren ambtenaren in Indonesië hun "tax compliance", en onderliggende factoren als de mate van modernisering van de belastingadministratie, het gebruik van sancties, dienstverlening aan belastingplichtigen, en belastingmoraal?
- 4. Wat zijn de sleutelfactoren voor verbetering van "tax compliance" door ambtenaren in Indonesië?

"Tax compliance" en de problemen die Indonesië op dit terrein ondervindt, zijn nauw verbonden met het Indonesische belastingstelsel als geheel. Indonesië kent een structureel probleem van gebrekkige "tax compliance", zoals blijkt uit de relatief lage belastingratio (i.e. de ratio van belastingopbrengsten en BNP). Deze gebrekkige "tax compliance" is grotendeels terug te voeren op het verschil tussen de door burgers gewenste overheidsvoorzieningen en het –tekortschietende- feitelijke aanbod daarvan, waardoor burgers zich minder gedwongen voelen bij te dragen aan de overheid. Het probleem wordt versterkt door het voorkomen van corruptie, waarbij zowel belastingplichtigen zijn betrokken als ambtenaren die zijn belast met de uitvoering van belastingwetgeving. Het vertrouwen van belastingplichtigen in de Indonesische overheid is laag en dat draagt bij aan gebrekkige "tax compliance".

De Indonesische overheid heeft meerdere belastinghervormingen doorgevoerd met het oog op verbetering van het Indonesische belastingstelsel. Deze hervormingen vonden hun aanvang in 1983, toen werd overgegaan op een systeem waarbij belastingplichtigen zelf hun belastingaangifte verzorgen (self-assessment). Latere belastinghervormingen betroffen vooral de grondslag en tariefstructuur van diverse belastingen, en de verbetering van allerlei administratieve processen. Al deze hervormingen hebben niet het gewenste effect gehad op de prestaties van het belastingstelsel: de belastingratio van Indonesië groeide weliswaar iets, maar heeft zich gestabiliseerd rond de 12

procent, hetgeen – ook in vergelijking met andere landen- laag is te noemen. Dat betekent echter ook dat er in potentie grote mogelijkheden zijn tot verbetering van de "tax compliance".

Door middel van analyse van literatuur en van beleidsdocumenten (van de Indonesische overheid en van diverse internationale organisaties) zijn vier factoren geïdentificeerd die mogelijk van invloed zijn op "tax compliance" door belastingplichtigen: de mate van modernisering van de belastingadministratie, het gebruik van sancties bij "non-compliance", de dienstverlening aan belastingplichtigen, en de belastingmoraal van belastingplichtigen. Literatuur over deze factoren is vervolgens nader bestudeerd. Beschreven is hoe deze factoren zich hebben ontwikkeld als object van de belastinghervormingen in Indonesië, zoals die zich sinds 1983 hebben voltrokken, en welke effecten dat volgens de literatuur heeft gehad. Aanvullend is literatuur bestudeerd die zich richt op de rol van ambtenaren als rolmodellen en "change agents" en is beschreven wat de status dienaangaande is van Indonesische ambtenaren (zowel in formeel-juridische zin als in sociaal opzicht binnen de Indonesische samenleving). Specifiek onderzoek naar de (voorbeeld)rol van ambtenaren als belastingplichtigen is echter tot op heden niet verricht. In die zin begeeft dit proefschrift zich op onontgonnen terrein.

Het empirische onderzoek betreft twee onderdelen: een survey-onderzoek en een vervolgonderzoek. Aan het survey-onderzoek namen 400 respondenten deel, allen werkzaam in de publieke sector, hetzij als ambtenaar in dienst van Indonesische overheden (centrale overheid, regionale en lokale overheden), hetzij in dienst bij staatsbedrijven. In het algemeen percipiëren respondenten hun "tax compliance" als goed, al bleek uit antwoorden op diverse vragen dat ambtenaren zich –als belastingplichtigen- zeker niet voorbeeldig gedragen. Een grote meerderheid geeft desalniettemin aan zichzelf als rolvoorbeeld te beschouwen voor andere belastingplichtigen.

Indonesische modernisering de De perceptie de mate van van van belastingadministratie was eveneens positief, de dienstverlening belastingplichtigen werd voldoende bevonden, maar men was negatief over het gebruik van belastingsancties en over de belastingmoraal. Het merendeel van de respondenten onderschreef het belang van het tijdig en voldoende betalen van belastingen, en van de verplichting zich te houden aan belastingwetgeving, maar de resultaten van het surveyonderzoek laten een aanzienlijke mate van ontevredenheid zien met de wijze waarop het belastingstelsel in Indonesië wordt geïmplementeerd. Respondenten wezen op tekortkomingen van de overheid bij het gebruik van belastingmiddelen ter verdere ontwikkeling van Indonesië. misbruik van belastingmiddelen. belastinghervormingen, en de grote verschillen tussen –formele- wetgeving en praktijk.

Ten aanzien van de relaties tussen de vier variabelen (modernisering van belastingadministratie, dienstverlening, sancties, en belastingmoraal) en de afhankelijke variabele ("tax compliance"), zijn zwakke (maar wel significante) correlaties gevonden voor de relatie tussen modernisering van de belastingadministratie, dienstverlening, en belastingmoraal enerzijds, en "tax compliance" anderzijds, maar geen significante relatie tussen belastingsancties en "tax compliance". Als verklaringsmodel presteerde het ontwikkelde model met de vier

verklarende en de afhankelijke variable zeer beperkt: het gecombineerde (d.w.z. totaal verklaarde) effect van de variabelen op "tax compliance" was gering. Uitsplitsing van de resultaten voor de twee groepen ambtenaren (overheidsambtenaren, ambtenaren in dienst bij staatsbedrijven) liet zien dat ambtenaren in staatsbedrijven over de hele linie (d.w.z. ten aanzien van alle vijf variabelen) een minder positieve perceptie hadden, maar niet in alle gevallen was dit verschil significant.

In het vervolgonderzoek stonden twee variabelen centraal: belastingsancties en belastingmoraal. Het vervolgonderzoek bestond uit drie onderdelen: een aanvullend on-line survey-onderzoek, diepte-interviews en een simulatie. Bij het aanvullend survey-onderzoek en de diepte-interviews zijn –naast ambtenaren- ook belastingplichtigen werkzaam in de private sector betrokken. Het vervolgonderzoek vond plaats aan de hand van een analytisch kader waarbij aan de twee kernvariabelen verschillende dimensies zijn onderscheiden. Voor belastingsancties betrof dat beloning en straf (positieve en negatieve sancties); voor belastingmoraal ging het om kennis, begrip en verwachtingen. Dit model presteerde als meetmodel goed, d.w.z. dat de dimensies de betreffende variabelen goed representeren. Als verklaringsmodel bleek ook hier het model slechts in beperkte mate "tax compliance" te kunnen verklaren. Daarbij presteerde het model wel duidelijk beter voor ambtenaren in dienst van staatsbedrijven en voor belastingplichtigen werkzaam in de private sector, maar ronduit slecht voor ambtenaren in dienst van overheden.

De diepte-interviews (met 15 respondenten) vormden vooral een bevestiging van het beeld van onvrede onder respondenten over het belastingsysteem in Indonesië en het functioneren van de Indonesische overheid in meer algemene zin, zoals dat ook uit het eerste deel van het empirisch onderzoek (het grotere survey-onderzoek) naar voren kwam. Daarnaast is in de diepte-interviews ingegaan op de rol van belastingsancties. Deze sancties stonden ook centraal in de simulatie waaraan 135 respondenten deelnamen. Zij kregen (in drie verschillende groepen) drie verschillende situaties voorgelegd, met verschillende sancties. Uit zowel de diepte-interviews als deze simulatie bleek dat beloningen (d.z.w. het belonen van "tax compliance") in potentie effectiever zijn dan straffen (d.w.z. het opleggen van negatieve sancties bij "noncompliance"). Verder gaven respondenten aan de voorkeur te geven aan beloningen die een direct verband houden met de aanwending van belastingmiddelen, zoals toegang tot huisvesting, onderwijs, en gezondheidsvoorzieningen.

Deze laatste bevinding onderstreept nog eens het belang voor "tax compliance" van het juist gebruik van belastingmiddelen, en meer in het algemeen van het verband tussen belastingheffing en overheidsuitgaven. Duidelijk is dat de gebrekkige "tax compliance" in Indonesië niet los kan worden gezien van de kwaliteit van de Indonesische overheidsfinanciën in het algemeen, en van het functioneren van de Indonesische overheid met het oog op de welvaart en het welbevinden van burgers. "Tax compliance" zou gediend zijn met meer inzicht bij burgers in het gebruik van belastingmiddelen, en een beter gebruik van die middelen op zich. Als eerste stap zou de Indonesische overheid zich moeten commiteren aan het regelmatig verschaffen van inzicht in hoe belastingopbrengsten worden aangewend.

Op grond van de bevindingen van dit proefschrift, ligt vervolgonderzoek naar andere factoren (dan de hier gebruikte) ter verklaring van "tax compliance" voor de hand. Dergelijk onderzoek zou (mede) gebruik moeten maken van methoden die niet uitsluitend gebaseerd zijn op de perceptie van respondenten. Vervolgonderzoek zou ook meer inzicht moeten bieden in verschillen in "tax compliance" gedrag tussen ambtenaren in dienst van overheden, ambtenaren in dienst van staatsbedrijven, en belastingplichtigen werkzaam in de private sector. Tot slot verdient het mogelijke verschil in effectiviteit van het gebruik van negatieve en positieve belastingsancties nader onderzoek.

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CHAPTER 1 Introduction

1.1 The thesis topic: tax compliance of public officials in Indonesia

Raising a sufficient amount of tax revenues is essential for all countries, developed as well as developing. Success in taxation to a large extent depends on tax compliance. Tax compliance can be problematic because it reflects the willingness of taxpayers to meet their tax obligations in line with applicable regulations, within the broader context of government performance and the functioning of public finance systems. In this context, the willingness to comply depends on conditions of vertical reciprocity (i.e. the relationship taxpayers and government in terms of taxes paid and government output consumed) and horizontal reciprocity (i.e. the relationship between taxpayers, especially in terms of equity). Disharmonious vertical and horizontal relationships can have a negative impact on tax compliance. Although this is true for all countries, this is especially true for developing countries. Complexity of the tax system, high compliance costs, tax loopholes and exceptions that are perceived as unjust, lack of integrity of tax officials due to poor salary structures, insufficient law enforcement, poor government performance on the expenditure side, and corruption are examples of features of public finance systems in developing countries that make tax compliance especially bothersome (Mansfield, 1987; Burgess and Stern, 1993; Laurence 1999; Toye, 2000; Yoo, 2000; Islam, 2001; Bird, 2004).

As a developing country, Indonesia also has a significant problem with tax compliance, resulting specifically from the gap perceived by taxpayers between the public goods-needed and the public goods-actually-provided by the state. This condition is exacerbated by tax corruption involving both taxpayers and tax officials. As a consequence, the trust of taxpayers in government and in the tax system is generally low, and so is tax compliance. This is reflected by the low capability of government to collect taxes from society, as measured by the tax ratio (i.e. tax revenues as a percentage of GDP). Figure 1.1 shows the development of the tax ratio of Indonesia in the period 1983-2014.

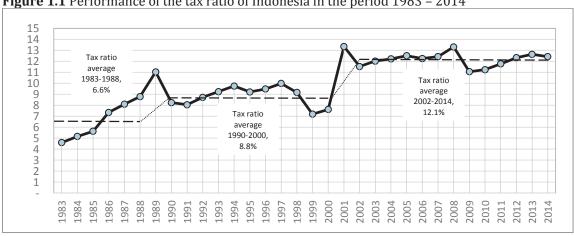


Figure 1.1 Performance of the tax ratio of Indonesia in the period 1983 – 2014

 $Source: Ministry\ of\ finance,\ directorate\ general\ of\ taxes,\ and\ central\ bureau\ of\ statistics$

Although it is clear that Indonesia has been able to shift its tax ratio upwards over the period 1983-2014, currently Indonesia's tax ratio is still below the IMF standard for developing countries, as shown in figure 1.2. According to the current IMF classification Indonesia belongs to the group of lower-middle-income countries, which on average have a tax ratio of 19 percent. Indonesia's tax ratio is 12.4 percent which is even lower than the average of the group of lower income countries, as is shown in figure 1.2.

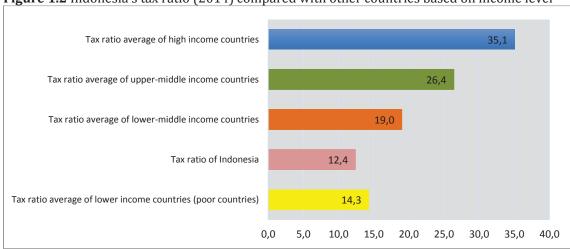


Figure 1.2 Indonesia's tax ratio (2014) compared with other countries based on income level

Source: IMF, 2011 and Indonesia's state budget, 2014 $\,$

As can be seen in figure 1.3 Indonesia is also outperformed by other ASEAN countries such as Malaysia, Philippines, Singapore, Thailand and Vietnam, which all have higher tax ratios.

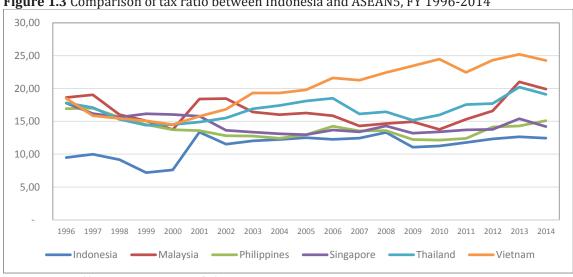


Figure 1.3 Comparison of tax ratio between Indonesia and ASEAN5, FY 1996-2014

Source: Ministry of finance, Directorate general of taxes, IMF report $\,$

Given its low tax ratio, it is not surprising that tax compliance and more generally the performance of the tax system have received much attention in Indonesia. Over the last three decades various reforms have been made to the tax system, starting in 1983 by changing the tax collection system from official assessment to self-assessment. Furthermore, reforms were made regarding tax rates and tax bases (by and large

broadening the tax base and reducing tax rates). Moreover, increased tax compliance was aimed at by focusing on modernization of the tax administration system, on a better tax morale and more effective tax sanctions, and on increasing the quality of tax services. Unfortunately, these reforms have not solved the issue of poor tax compliance and have not resulted in an adequate level of the tax ratio. Therefore, in this thesis we try to assess the Indonesian government's strategy to increase tax compliance. In this context, we focus on one group, namely public officials and their tax compliance. We believe these actors can be regarded as role models and change agents in the Indonesian tax system. We focus on public officials in the executive branch (i.e. not on elected politicians holding public positions). From the academic perspective, not much research has been done on tax compliance by public officials specifically, which makes this in an interesting group to focus on.

This chapter further introduces the thesis. The next section (1.2) spells out the research aim and research questions underpinning the thesis, including the methodology used to answer these questions. The chapter concludes by providing an outline of the structure of the thesis in section 1.3.

1.2 Research aim and research questions

In this study, we focus on public officials in Indonesia and their role in tax compliance. As explained above, the underlying idea of this focus is that if Indonesia wants to increase tax compliance in general (and thereby its tax ratio) and these taxpayers can serve as a role model and change agent. Finding out what determines the tax compliance of these critical group of taxpayers and how it can be increased, can be seen as a first step towards more generally raising tax compliance in Indonesia. Therefore, the main research question underpinning this thesis is:

"How can Indonesia increase its tax compliance by focusing on public officials?"

Answering this question requires us to answer a range of subordinate questions. First we have to provide context to the problem at hand by looking more generally at issues of tax compliance and tax reform, worldwide as well as specifically for the Indonesian case, from the policy perspective. This is reflected in the first sub-question, which will mainly be answered by means of analysis of policy documents and by literature review:

1. What is the current state of affairs regarding tax compliance and tax reforms in Indonesia, compared to other countries?

Secondly, we need to address tax compliance (in general and specifically for the group at hand: taxpayers working in public sectors) from the academic perspective. By doing, so we can develop a theoretical framework that includes the main elements that are relevant to tax compliance. As will become clear in the relevant part of the thesis these elements are: the level of modernization of the tax administration system, tax sanctions, tax services, and tax morale. Sub-question 2 is formulated as follows and will be answered by means of literature review:

2. What does the literature tell us about underlying factors for tax compliance, generally and specifically tax compliance by public officials?

Third, we conduct an empirical analysis (step 1) into tax compliance by tax officials in Indonesia. As will be explained in the thesis, it is not possible to directly observe the actual tax compliance of these taxpayers. This means that the empirical analysis deals with the perceptions of the group at hand of how their compliance is influenced by underlying factors. The data for this part are gathered by means of a questionnaire. Sub-question 3 is formulated as follows:

3. How do public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale?

Fourthly, building on the results of the questionnaire the empirical analysis is deepened (step 2) to bring out those factors that are key factors in increasing tax compliance by public officials, by means of various methods (on-line survey, in-depth face-to-face interviews and a simulation game). This is reflected in sub-question 4.

4. What are the key factors for improving tax compliance focusing on public officials?

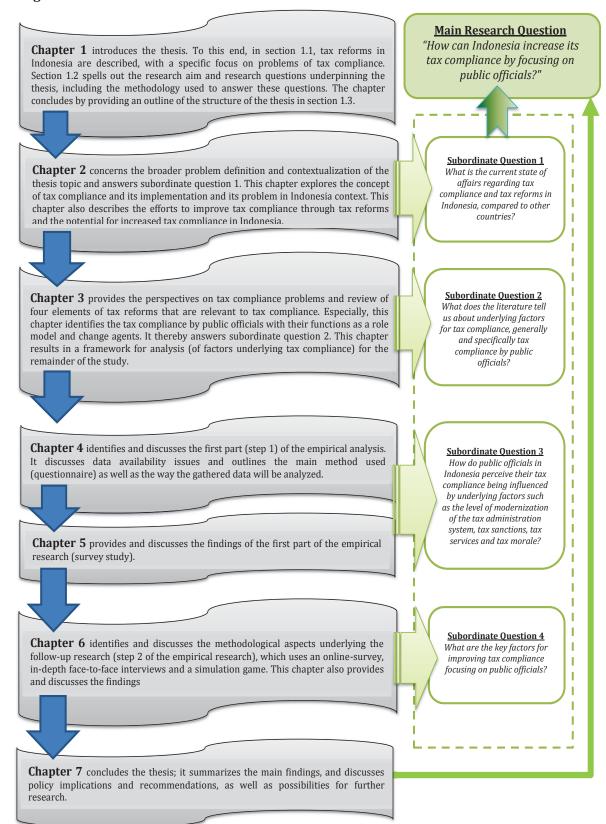
After answering these four sub-questions, the main research question will be answered and lessons will be drawn for the most effective way to improve tax compliance in Indonesia.

1.3 Outline of the thesis

Chapter 2 concerns the broader problem definition and contextualization of the thesis topic and answers subordinate question 1. This chapter explores the concept of tax compliance and its implementation and its problems in the Indonesian context. This chapter also describes the efforts to improve tax compliance through tax reforms and the potential for increased tax compliance in Indonesia. Chapter 3 provides the perspectives on tax compliance problems and review of four elements of tax reforms that are relevant to tax compliance. Especially, this chapter identifies the tax compliance by public officials with their functions as a role model and change agents. It thereby answers subordinate question 2. This chapter results in a framework for analysis (of factors underlying tax compliance) for the remainder of the study. Chapter 4 identifies and discusses the first part (step 1) of the empirical analysis. It discusses data availability issues and outlines the main method used (questionnaire) as well as the way the gathered data will be analyzed. Chapter 5 then provides and discusses the results of this part of the empirical analysis. Chapter 6 identifies and discusses the methodological aspects underlying the follow-up research (step 2 of the empirical research), which uses an online-survey, in-depth face-to-face interviews, and a simulation game. The results are also presented in this chapter. Chapter 7 concludes the thesis: it summarizes the main findings, and discusses policy implications and recommendations, as well as possibilities for further research.

Systematically, the flow of this thesis is presented in the following figure

Figure 1.4 Flow of the thesis



CHAPTER 2

Tax Compliance and Tax Reform

This chapter answers subordinate research question 1, which was formulated as follows: What is the current state of affairs regarding tax compliance and tax reforms in Indonesia, compared to other countries? Based on literature review and review of policy documents, section 2.1 first briefly explores the concept of tax compliance. Subsequently, actual tax compliance in the specific Indonesian context will be discussed in section 2.2. Furthermore, the efforts of Indonesia to improve tax compliance by means of tax reforms are reflected upon in section 2.3. Section 2.4 tentatively explores the potential for increased tax compliance in Indonesia. Section 2.5 concludes.

2.1 The concept of tax compliance

Tax compliance has been defined by various authors. Without being exhaustive, the following definitions can be mentioned:

- Tax compliance reflects the level of willingness of a community to meet their tax obligations in accordance with applicable regulations (Allingham and Sandmo, 1972);
- Tax compliance constitutes 'a climate' of awareness to meet tax obligations in the form of understanding -or trying to understand- all the provisions of tax legislation, filling out tax forms completely and clearly, calculating the amount of tax payable correctly and accurately, and paying timely tax payable (Novak, 1989);
- Tax compliance refers to how taxpayers comply with their obligations voluntarily (i.e. voluntary compliance) as part of the self-assessment system, given their responsibility in calculating, paying and reporting timely tax payable (Roth et al., 1989);
- Tax compliance refers to the motivation of a person, group, or organization to act or not act in accordance with the tax laws (Gibson et al., 1991);
- Tax compliance is the degree to which a taxpayer complies (or fails to comply) with the tax rules of his country, for example by declaring income, filing annual tax return, and paying the tax due in a timely manners (Sarker, 2003);
- Tax compliance refers to the responsibility in submitting the annual tax return and in reporting accurately all actual incomes, in line with a self-assessment system (Sommerfeld, 1994);
- Tax compliance is the extent to which the taxpayer comply with tax laws (Hom, 1999);
- Tax compliance consists of individual activities carried out to meet obligations in accordance with the applicable rules, either conscious or as a result of coercion (Mc Mahon, 2001);
- Tax compliance is the willingness to pay without threat or coercion (Samuel, 2011);
- Tax compliance is the awareness of taxpayers to fulfill their tax obligations in accordance with applicable regulations without previous investigation, warnings, threats, or applying either criminal or administrative sanctions (Alm et al., 2004);

From all these definitions, it can be concluded that tax compliance is the compliance of taxpayers (whether individuals, groups, or organizations) with applicable tax laws, which (often within a system of self-assessment) consists of activities such as 1) registering as a taxpayer; 2) filling out tax forms completely and clearly, i.e. delivering tax returns (annually, monthly); 3) calculating correctly the amount of tax payable; 4) paying tax payable on time, all 'voluntarily', i.e. without previous investigations, warnings, threats, or application of either criminal or administrative sanctions.

In practice, tax compliance is influenced by many factors. In chapter 3 we will go into the causes of tax (non-)compliance is more detail. For now it is sufficient to argue that the factors influencing tax compliance can roughly be put into two groups, namely economic factors and non-economic factors. Economic factors cover the level of actual income (financial pressures), cost of compliance and non-compliance, tax rates, tax benefit, and tax audits. Non-economic factors include taxpayer perception of the use of tax money, the relationship with tax officers, tax system complexity, level and application of tax fines, attitude toward taxes, complexity of tax laws, personal characteristics (age, gender, tax knowledge, occupation), social behavior (ethics, social norms, peer or other taxpayer's influence, corporate ethics), national tax culture, quality of tax services, perceived tax fairness, completeness and accuracy of a country's tax administration system, frequent changes of tax law, existence of different tax administration system for different taxes, incomprehensible language of tax laws, strict deadlines for tax payments and registration procedures (Witte and Woodbury, 1985; Jackson and Milliron, 1986; Dubin and Wilde, 1988; Hite, 1988; Kepper and Nagin, 1989; Alm, Bahl, and Murray, 1990; Hofstede, 1991; Alm, 1991; Fischer et al., 1992; Alm, Jackson, and McKee, 1992; Bradley, 1994; Alm et al., 1995; Andreoni et al., 1998; Davis et al., 2003; James and Alley, 2004; Laury and Wallace, 2005; Wenzel, 2005; Devano and Rahayu, 2006; European Commission, 2007; Chittenden and Foster, 2008; Chau and Leung, 2009; Misu, 2011).

Economic factors behind tax compliance refer mainly to the existence of costs in fulfilling tax obligations, while the non-economic factors refer to perceptions and attitudes of taxpayers towards tax compliance. Because our research explores the perception of taxpayers (*in casu* public officials), we focus on non-economic factors behind tax compliance. As a preliminary way of structuring, we can put these non-economic factors into four clusters of factors:

- Factors relating to **tax administration** (completeness and accuracy of the tax administrative system, frequent changes of tax law, existence of different tax administrations for different taxes, incomprehensible language of tax laws, strict deadlines for tax payments and registration procedures);
- Factors relating to **tax sanctions** (level and application of tax fines);
- Factors relating to **tax services** (relationship with tax officers, treatment of the taxpayer), and;
- Factors relating to **tax morale** (taxpayer perception of the use of tax money, attitude toward taxes, age, gender, tax knowledge, occupation, ethics, social norms, peer or other taxpayer's influence, corporate ethics, perceived tax fairness).

2.2 Tax compliance in Indonesia

2.2.1 Main tax compliance problems in Indonesia

Governments worldwide aim at sustainable high levels of tax compliance, in the sense that they strive for increasing and maintaining tax compliance levels so that their tax ratios are in accordance with international standards, by average in the range of 20-40 percent GDP (European Commission, 2012). Unfortunately, Indonesia has not succeeded in this context.

As a developing country with high economic growth rates (IMF, 2012), Indonesia is still struggling with its low tax compliance. Based on the literature, tax compliance in Indonesia is problematic for various reasons.

Firstly, public trust toward tax authorities is relatively weak because of tax corruption involving tax officials. Tax corruption is a diversion or misuse of tax money for personal gain including collusion between taxpayers on the one hand, and government officials (and politicians) on the other hand (Asher and Level, 2001). Tax corruption is inefficient, as it weakens the operational capacity and decreases tax revenue; it also heavily influences the perception of taxpayers of the equity of the tax system (Alley and Bentley, 2008; Zulfikar, 2011) and can give rise to tax revolts. In the case of Indonesia, this can be illustrated by the tax boycott in 2012. Various community leaders, as well as large organizations such as Nahdlatul Ulama (NU), advocated a tax boycott as a protest to the government (Mas'udi, 2012). Although such a tax boycott can be regarded as an ultimate violation of tax laws (and thus as an ultimate form on tax non-compliance), it should be seen in its social and moral context. The movement was triggered by the feeling that the social contract between state and taxpayers was being infringed, especially due to tax corruption as such, but also because of more general discontent with the use of tax resources by government. On the other hand, the existence of the tax boycott movement also potentially affects the horizontal reciprocity or the relationship between the taxpayers. This is because, from the context of social norms and ethics, tax boycotts can encourage other taxpayers (outside the tax boycott movement) to disobey. As a result, tax noncompliance becomes something that is considered ethically right.

Secondly, in Indonesia, issues about the provision of public goods by the state play an important role. The availability of publicly provided goods that are essential to people (health, education, roads, electricity, and so on) can be regarded to be part of a social contract between the state and the community of taxpayers. In Indonesia, the budgets for some basic needs are still relatively small when compared with other countries. For instance, in 2010, Indonesia's health budget of USD 76.9 per capita was much smaller than that of China (USD 220.9 per capita), Malaysia (USD 367.9 per capita), and the developing countries in the Asia Pacific region (USD 182.8 per capita) (World Bank, 2012). Low level public provision of goods by the state will affect tax compliance, and thus has implications for tax revenue (which will make it even harder to keep up decent levels of provision). In short, the political will of governments to provide goods and services is crucial, otherwise Indonesia will be trapped into the vicious circle of violation of the social contract and tax non-compliance.

Thirdly, there are still problems related to the services and facilities for paying taxes. Generally, the Indonesian taxpayer does not seem fully unsatisfied with the performance of the Directorate General of taxes. A survey conducted by Institut Pertanian Bogor (Bogor Agricultural Institute, one of the largest universities in Indonesia) in 2010 showed a score of 3.79 out of 4 on a satisfaction index with the 'Kring

Pajak' program as the most successful contact center that aims to provide information and receive complaints from the public about taxes. Still, discrimination in services, the complexity of using tax applications, unequal service facilities, and lack of dissemination are regular features of the Indonesian tax administration, especially on the regional level (Zulfikar, 2011; Sari 2012).

Finally, there is a lack of commitment by government to improve tax compliance by integrating various databases with relevant information (of the directorate general of taxes, of banks and companies, and of other government agencies). The government should be able to coordinate the various institutions related to taxation in order to harmonize policies and to apply the principles of good governance in financial management including transparency in the judicial process.

Referring to the earlier preliminary distinction between clusters of factors affecting tax compliance (tax administration, tax services, tax sanctions, and tax morale) we can conclude that in the case of Indonesia all four clusters are relevant. As far as tax administration is concerned etcetera driving factors of problematic tax compliance of both in the global context and in Indonesia consist of aspects, at least, 1) **tax administration**, in form of problems associated with procedures of administration, transparency in administration, unintegrated data among tax authority, banks, and companies; 2) **tax sanction**, in the form of problems concerning sanctions perceived as unfair and discrimination within enforcing sanctions; 3) **tax service**, in the form of problems regarding discrimination in services (inequality), treating taxpayers with a police perspective, not maximal facilities; and 4) **tax morale**, in the form of problems related to horizontal reciprocity and vertical reciprocity, social norms, psychological tax contract (exchange of rights and obligations), public trust, provision of public goods.

As a result, the existence of problematic tax compliance influences the tax revenue, the tax gap, and the ratio of compliance in Indonesia, to which we now turn.

2.2.2 The impact of problematic tax compliance in Indonesia

In the introductory chapter, some information was provided on the tax ratio of Indonesia, compared to other countries. In this section some additional information will be given.

1. GDP development and tax revenues

Figure 2.1 shows the growth of both GDP and tax revenues (in absolute terms) and their year-on-year growth rates. In the period 1983-2014, Indonesia experienced a significant increase of GDP, with an average growth rate of nominal GDP of 18 percent. The average inflation rate in this period was 10 percent, with a sudden peak inflation of 78 percent in 1998; if this outlier is taken out the average inflation rate for the period 1983-2014 is close to 8 percent and the average growth rate of real GDP is 10 percent. The GDP growth was however rather volatile, with a peak in 1990, when GDP almost doubled following rapid and concentrated industrial reform and deregulation, as well as support from international organizations and from some developed countries, after the oil prices plummeted. In the same period, tax revenues also grew significantly, with an average growth rate of roughly 22 percent. Here, we see a peak in 2001, coinciding with the implementation of a modernized tax administration in the second phase of reforms (see section 2.4 for details).

12000 GDP 2014 10,542.7 10000 8000 6000 4000 Tax Revenue 2000 2014 1,310.22 0 2003 6661 2000 2001 2002 120% GDP growth average at around 18% in period of 100% 1983-2014 Tax revenue growth average at 80% around 22% in period of 1983-2014 60% 40% 20% 0% 1996 2000 2001 1991 1992 1995 1997 -20% Growth of Tax revenue Growth of GDP Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

 $\textbf{Figure 2.1} \ \textbf{GDP} \ and \ tax \ revenues \ (in trillion \ IDR, \ current \ prices) \ and \ year-on-year \ growth \ rates, \ 1983-2014$

In detail, the composition of tax revenues including non-tax revenue can be seen in the figure 2.2.

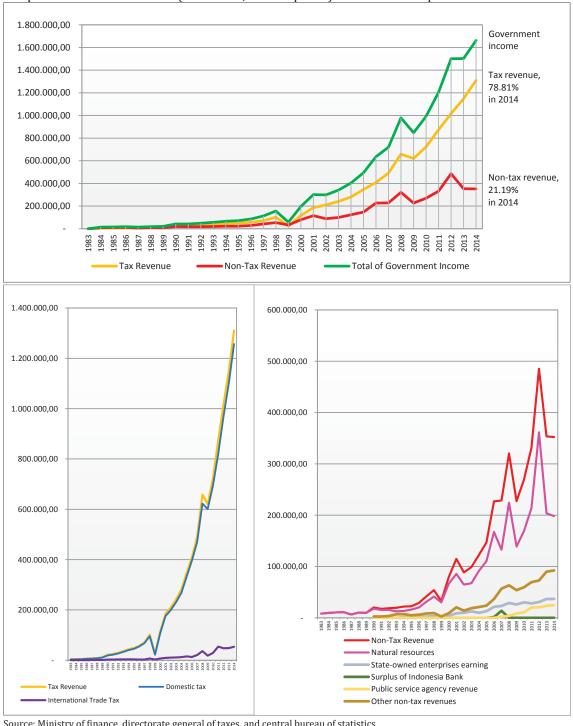


Figure 2.2 Composition of government income (tax revenue and non-tax revenue) and detailed composition of these revenues (billion IDR, current prices) in Indonesia for period of 1983 - 2014

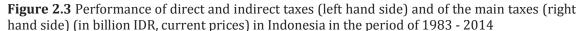
Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

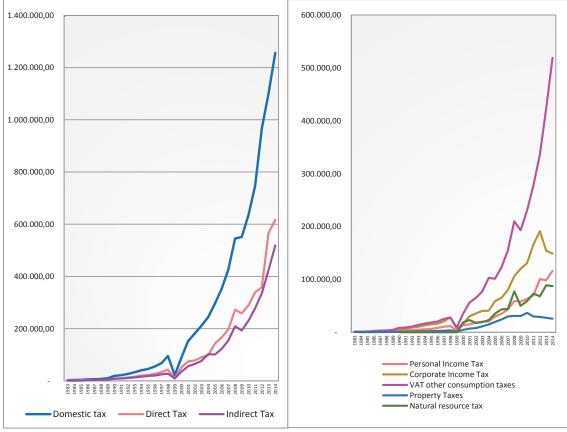
From figure 2.2, it follows that almost 80 percent of the government income in 2014 is derived from taxes. Total government income shows an increasing trend because of the enhancement of both the tax revenues (consisting of domestic taxes and the international trade tax) and of the non-tax revenues encompassing income from

natural resources, state-owned enterprise earnings, the surplus of the Central Bank of Indonesia, public service agency revenues, and other non-tax revenue.

In term of tax revenues, we see that the domestic taxes are most important and show a significant increase over the period 1983-2014, whereas the international trade taxes (import and export taxes) only rise slightly. In term of non-tax revenues, it is clear that income from natural resources has become the largest source of revenue; its amount tends to grow but is also rather volatile. Other non-tax revenues also show an increasing trend. The volatility of the non-tax revenues implies the important role of tax revenues for the stability of Indonesia's total government income.

Figure 2.3 gives details on the development of Indonesia's domestic taxes. These concern direct taxes (personal income tax, corporate income tax, property taxes, and natural resources tax) and indirect taxes (VAT and other consumption taxes). From this figure, it follows that both direct and indirect taxes follow the overall growth path of total domestic taxes over the period 1983-2014. Compared to the indirect taxes, the direct taxes slightly dominate in terms of revenue level, but not much. This development is different from the development in most developed countries, in which direct taxes have become the main source of government revenue (Burgess and Nicholas, 1993; Alm and Benno, 2006). In the case of Indonesia (as with most developing countries), if we explore in more detail the performance of individual taxes, it appears that the VAT and other consumption taxes have become the largest tax and their amount rises sharply since 2000 and 2009 [see figure 2.3].



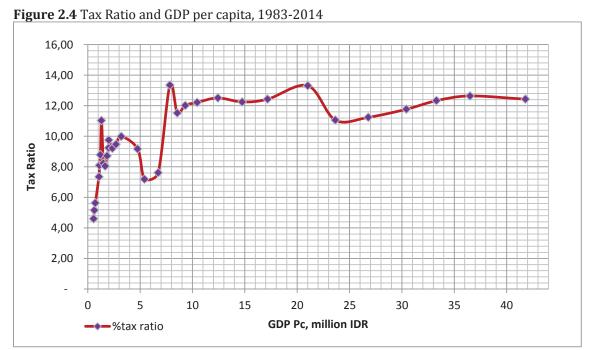


Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

Although it is true that the personal income tax shows an increasing trend, its contribution to total domestic tax is lower than that of the corporate income tax and of the VAT and other consumption taxes. These findings at least indicate that tax reforms have not been able to promote the personal income tax as a major tax; they also indicate that future reforms have a significant potential for this kind of tax to be improved in terms of revenue level.

From the figures, we can conclude that Indonesia has been able to meaningfully increase its tax revenues, but that GDP grew in a similar sense, resulting in the flat tax ratios as shown in the introductory chapter (figure 1.1).

While GDP as such is a rough indicator of the resources available in the economy for paying taxes, such taxing potential is perhaps more adequately indicated by GDP per capita. Figure 2.4 shows the development of GDP per capita, for 1983-2014, as well as the development of the tax ratio. Indonesia's GDP per capita has increased significantly since 1983 (on average at a growth rate of 15 percent) and reached approximately 42 million IDR (\$ 3,200) in 2014. However, the tax ratio has remained fairly stable, especially since 2001. If we take the information from figures 2.1 and 2.4 together, we can conclude that Indonesia's government has profited from the formidable growth of GDP in terms of tax revenues that have increased at the same pace. But despite the considerable GDP per capita growth (which has moved Indonesia from the group of poor countries to the group of lower middle income countries, according to the IMF classification) Indonesia has not been able to put its tax ratio at a significantly higher level.

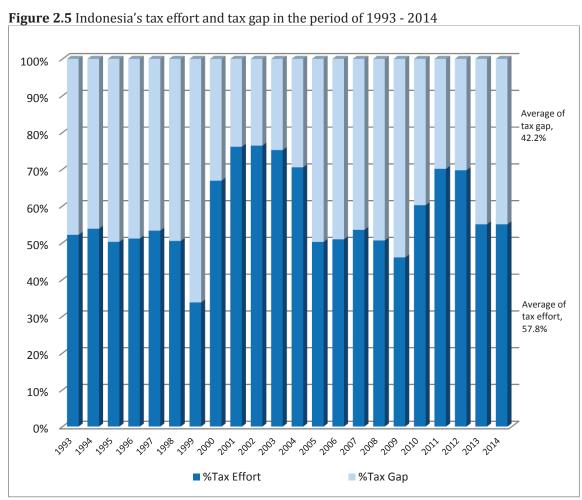


 $Source: Ministry\ of\ finance,\ directorate\ general\ of\ taxes,\ and\ central\ bureau\ of\ statistics$

2. Tax Effort and Tax Gap

The capability of government to collect taxes is influenced by a tax gap. The tax gap represents the difference between the actual revenue collected and the amount that could be collected (James and Alley, 1999), or tax capacity (i.e. the maximum level of tax

revenues a country can be achieved, given factors such as per capita GDP, the composition of the economy, and the degree of openness of the economy). Comparing the actual revenues with the tax capacity results a measure of tax effort or conversely a tax gap. This gap indicates the amount of tax revenue lost because of non-compliance in the form of underreported income and overstated deductions (Sommerfeld et al., 1994). Figure 2.5 shows the development of tax effort and tax gap in the period 1993-2014, based on calculations done by the Indonesian government. Practically, in Indonesia, the tax gap tends to fluctuate. The tax gap was relatively small in the period of 2000 until 2004 when phase two of the tax reforms was conducted and in the interval of 2010 until 2012 when phase three of tax reform was carried out. However, the tax gap has increased since 2012 and was around 45 percent in 2014.



Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

Calculations of tax effort and tax gap depend very much on how tax capacity is determined. Without discussing this issue here, it should be pointed out that other sources come to similar conclusions as shown in figure 2.5. According to the IMF Indonesia's tax revenue effort was close to 60 percent (IMF, 2014).

Similar evidence but using a different way to define tax capacity is given by Fenochietto and Pessino (2013) who have calculated tax effort ratios for various groups of countries by level of development. According to their estimates, Indonesia in 2011 had a tax capacity of 28 percent of GDP, and –given its actual tax ratio of 11.9 percent- a tax effort ratio of 0.43. On average both low income countries (65 percent) and middle income countries (64 percent) had much higher tax effort ratios, according to their method and calculations.

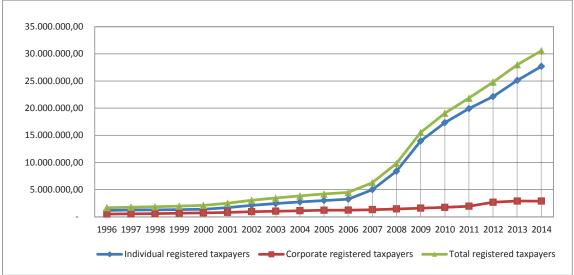
3. Ratio of compliance

In section 2.1 various aspects of tax compliance were mentioned such as registering and filing annual tax returns. Below some information is provided on these two elements.

Registered taxpayers

Figure 2.6 shows the development and composition of registered taxpayers in Indonesia in the period 1996-2014.

Figure 2.6 Composition of Indonesia's registered taxpayers in the period of 1996 – 2014 (in million)



 $Source: Ministry\ of\ finance,\ directorate\ general\ of\ taxes,\ and\ central\ bureau\ of\ statistics$

The number of registered taxpayers reached over 30 million in 2014, of which around 90 percent concerns registered individual taxpayers. There is a turning point in 2007 with a significant increase in the number of registered individual taxpayers resulting from the government's efforts to promote taxation and the success of a sunset policy program (i.e. a tax amnesty program) in 2008 that annulled the administrative sanctions for taxpayers who did not fulfill their tax obligations correctly and then paid tax voluntarily. In contrast, the number of registered corporate taxpayers rises slightly and has a stable trend.

Overall, both individual and corporate taxpayers demonstrate the increasing trend within the period of reforms. This finding indicates the positive impact of tax reforms on the compliance of register. However, this success could not be followed by the high number of registered taxpayers with the filling compliance, the payment compliance, and the reporting compliance, in which all indicators or dimensions are reflected in the number of annual tax return.

Annual tax returns

The number of annual tax returns reflects the number of registered taxpayers filling out tax forms, reporting income and paying taxes (Brown and Mazur, 2003; Devano and Kurnia, 2006). Figure 2.7 shows the development of the number of annual tax returns compared to the development of the number of effective registered taxpayers [number of registered taxpayers that have complete administration and have potency to pay and to submit the annual tax return (Ministry of finance, 2014)]. We can see a rise in the number of annual tax returns, especially since 2009, but there is still a large gap between the number of effective registered taxpayers and the number of annual tax returns.

20.000.000,00 18.000.000,00 16.000.000,00 14.000.000,00 12.000.000,00 10.000.000,00 8.000.000,00 6.000.000.00 4.000.000,00 2.000.000,00 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 737.8 731.8 695.0 690.0 701.3 815.9 967.6 1.070 1.182 1.240 1.240 1.278 2.097 5.413 8.202 9.332 9.482 10.78 10.80 Number of annual tax returns mber of effective registered taxpayers | 1.663 | 1.775 | 1.856 | 1.966 | 1.980 | 2.485 | 2.781 | 3.145 | 3.528 | 3.883 | 3.871 | 4.231 | 6.341 | 9.996 | 14.10 | 17.69 | 17.65 | 17.73 | 18.35

Figure 2.7 Number of effective registered taxpayers and number of annual tax returns (million), 1996-2014

Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

We can define this gap as a ratio of compliance (i.e. by comparing the number of annual tax returns with the number of effective registered taxpayers; Putri, 2012; Ministry of finance, 2014). The development of this ratio of compliance from 1996 until 2014 can be presented as follows:

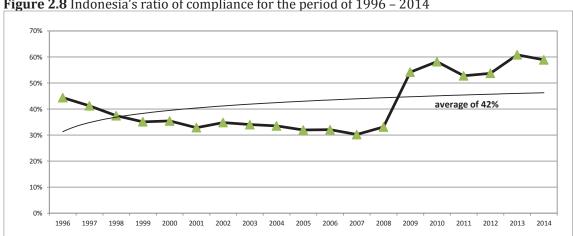


Figure 2.8 Indonesia's ratio of compliance for the period of 1996 – 2014

Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

From figure 2.8, it follows that the ratio of compliance shows a decreasing trend since 1996 until 2008. The ratio rises significantly in 2009 after the tax amnesty program was introduced. However, this program was only applicable during a short time. As from 2010 the ratio of compliance seems to stabilize again, but at a higher level than before 2009 (i.e. around 55 percent). Overall, the average of ratio of compliance in the period of 1996 – 2014 was approximately 42 percent.

2.3 Tax reforms in Indonesia

2.3.1 Tax reforms in the global context

In this section, the issue of tax compliance in Indonesia is put in a broader context, namely that of tax reform. One strong motivation behind tax reforms is that tax reform can bring simplicity in the tax system (i.e. make the tax system easy to understand and to comply with), can increase equity (i.e. fairness in the distribution of the tax burden) and can increase efficiency (i.e. having the lowest possible administrative and compliance costs given a certain level of tax revenue). Tax reforms often focus on achieving a high level of voluntary compliance, a high confidence in the tax administration, and a high productivity of the tax authorities through changing the tax policy and the tax structure (i.e. tax bases and tax rates), improving the tax administration, and reducing tax avoidance and tax evasion (Perry and Whalley, 1992; Mas'oed, 1994; Alm, 1996; Abimanyu, 2003; Nasucha, 2004).

Gillis classifies tax reforms based on six attributes, namely: 1) breadth of reform: does the tax reform focus on the tax structure or on tax administration, or both; 2) scope of reform: is the reform comprehensive in the sense that it covers almost all the important sources of revenue, or is it a partial reform that covers only one or two important components of the tax system; 3) revenue goals involved: a general tax revenue, improving the tax ratio, replacing revenue (revenue neutral reform), or reducing revenue (revenue-decreasing reform); 4) equity goals involved; 5) resource allocation goals; and 6) timing of reform: changing the whole of tax policies simultaneously (contemporaneous reforms), changing tax policies gradually (phased reforms), or changing the tax policies step-wise (successive reforms) (Gillis, 1989).

Based on several studies (Gill, 2003, who looked at tax reforms in Latin American, Caribbean, European and Central Asian countries; OECD, 2010, involving 50 OECD and non-OECD countries), there are certain trends and communalities in tax reforms worldwide. Firstly, tax reforms often deal with the positioning and better integration of the tax authority in the government structure. Secondly, and linked to this issue, tax reforms often involve merging of tax and customs authorities. Thirdly, the collection of social security contributions is often integrated with tax collection. Fourthly, tax reforms often include organizational reforms of tax authorities which historically are fragmented along the lines of certain tax types. Fifthly, data processing and the use of ICT (also for the exchange of information between national tax authorities) are important topics within contemporary tax reforms. Finally, often special units are established within the tax authorities to deal with large (corporate) taxpayers (Gill, 2003; OECD, 2010).

Reports of the European Commission, and of PricewaterhouseCoopers recently point out that countries worldwide continue to reform their tax system, even though the global post-crises economy is still rather unstable (European Commission, 2014; Pricewater-houseCoopers, 2016). Based on data of 2014, the latter report highlights 40 reforms that focus on making it easier or less costly for firms to pay taxes and on

reducing the administrative burden of tax systems, for instance by introducing improved online systems, in order to boost tax compliance (European Commission, 2014).

The studies mentioned above provide an aggregate overview of tax reforms in various countries. In the remainder of this section (subsection 2.3.3) we will look specifically at the Indonesian case. Moreover, it is important to note that tax reform can be understood as part of public sector reform in a broader sense. Public administration reform is a tool to achieve a public interest objective by performing efforts such as economizing public expenditure, improving public service quality, making government more efficient, and implementing effectively selected policies (Pollit and Bouckaert, 2011). Public administration reform has been conducted under various labels such as New Public Administration (NPA; originating from the US, in the late 60s), New Public Management (NPM; originating from the UK, in the 80s) and Reinventing Government (RG; originating from the US, in the early 90s). As argued by Frederickson (1996) for NPA and RG (but his analysis seems to be largely applicable to NPM as well, see Box, 1999 and Hood, 2007), these public administration reform paradigms have a lot in common. The paradigms advocate the use of private sector models in the public sector, such as privatization, entrepreneurship, downsizing and rightsizing of organizations, quality management, marketing, and most importantly, the idea of community members as satisfied customers. Whereas RG (and NPM) focus relatively much on efficiency issues, the earlier NPA paradigm paid more attention to issues of social equity. The latter factor points to the importance of specific policies, such as public housing, education and healthcare, as well as to issues such as the attitude of public officials and service without discrimination (Scholz and Wood, 1999; Gallagher, 2005; Frederickson, 2005; Pollit and Bouckaert, 2011). Tax reform, aimed at a better tax administration system and an increase of tax revenues, also involves these two main elements (efficiency and social equity). Before going into the Indonesian case, we have a closer look at tax administrative reform in general.

2.3.2 Tax administration and tax administrative reform

This section will first outline the main elements of tax administration. Subsequently it will discuss tax administrative reform in general, and in Indonesia specifically.

Tax administration

Tax administration (i.e. the way governments operate a tax system, as laid down in tax laws, in terms of the actual levying of taxes) is one element in the tax system that is crucial in determining the success of tax collection. Furthermore, effective tax administration can increase support to the government, while less effective and especially arbitrary implementation of tax laws can have a negative effect on popular support, and in extreme cases can lead to resignation of the ruling government (Alley and Bentley, 2008). Moreover, tax administration also has a role in formulating tax strategy and policy, in supervision and evaluation of the tax system, in coordination and control of anti-corruption, but also in fostering external economic relations (Hasseldine, 2010).

The term tax administration can be interpreted narrowly and broadly. In a narrow meaning, tax administration can be defined as: 1) steps or procedures of imposing and collecting taxes covering taxpayer registration, tax assessment and tax billing (Sophar, 1997); or 2) activities in collecting money from income and wealth, in line with some basic principles, namely efficiency, effectiveness, fairness, certainty,

simplicity, and neutrality (Alley and Bentley, 2008); or 3) all processes, from mapping, collecting until reporting of taxation data, in practice, facilitated by the automatic process (Camp, 2009); or 4) administering the rights and obligations of taxpavers, both in the tax offices or in taxpayer sites (Triwigati, 2013). These narrow definitions focus very much on operational processes and activities. More broad interpretations (Mansfield, 1987; Casanegra de Jantscher, 1987; Triwigati, 2013) focus on tax administration 1] as the link between the tax rules and the tax system, or 2] as a set of functions (planning, organizing, mobilization, dispute settlement) within the tax system, or 3] as a subsystem of the larger tax system, covering legislation, facilities, infrastructure, in which government and taxpayers jointly conduct their functions and duties to attain specific objectives, or 4] as an institution, i.e. an organization that governs and implements tax collection. Other broad interpretations deal with its academic underpinning (tax administration as the application of insights from various academic disciplines such as law, public administration, sociology, psychology, and economics with the view to increase or decrease government revenue; Mansfield, 1987), or focus on the aspect of social interaction (tax administration as the art related to human contact and accountability of what is paid to the community; Hasseldine, 2010).

Apparent in some of the definitions above is that tax administration has certain objectives. The main general objective is obviously to maximize tax collection, by means of providing quality service to taxpayers (Serra, 2005). The latter comes with specific objectives in the area of taxpayer services, such as providing information and instructions to taxpayers; proper registration; organizing and processing tax returns (data input, processing declarations and payments); taxpayer support including receiving complaints, and facilitating objects and appeals from taxpayers (Tanzi and Pellechio, 1995; Alm and Vazquez, 2003). These objectives induce costs (administrative costs for government, mirrored by compliance costs for taxpayers). Overall, the objective of tax administration is to attain its revenue target, and at the same time to minimize administrative and compliance costs (Sofyan, 2005; Rahayu, 2010). In the context of this thesis, tax administration will be effective when it reaches a high level of voluntary tax compliance with minimum costs and maximum revenue (Tanzi and Pellechio, 1995; Silvani and Baer, 1997).

Tax administrative reform

Tax administrative reform aims at improved tax administration. Klun (2002) has pointed out that -from the organizational perspective- tax administration requires political commitment from stakeholders to improve the system as well as willingness for adopting better administrative practices. As an organization, the tax administration should be a learning organization, and tax administrative reform is part of that learning process. Ott (1998) has approached tax administrative reform as being a part of tax reform generally, in the global context, and has highlighted the importance of providing regularly reform in tax administration sectors appropriate with changes in the cultural and economic environment of the tax system. Tanzi and Pellechio (1995) see tax administrative reform as a process by which tax administration can be kept on its right track (i.e. to provide maximum revenue at minimum costs); they argue that unfortunately- in many countries tax administration does not function optimally and deviates from the tax laws, resulting in reduced revenue, unintended distortions in the tax system, and various kinds of inequities. These deviations are caused by complex and opaque tax laws, by the political system, and by the tax administrations themselves. Therefore, the existence of continuous tax administrative reform is required in order to

enhance the performance of the system and to keep it in line with the basic intentions underlying the tax system.

The possible elements of tax administrative reform are large in number and variety. Tax administrative reform can consist of improved ways to determine tax liabilities in accordance with changed economic conditions; it can be about enforcing penalties, or about a tax amnesty in order to improve taxpayer compliance; it may focus on human resource management within tax administrations, or on involving technology in facilitating the administration process; reform could be about improving services, and raising the quickness and easiness of the tax process (Bird, 2004). Other potential elements include automating services and data to simplify administrative processes; increasing internal capacity and incentives for tax officers; organizational restructuring; improved international cooperation and exchange of information; carrying out intensive audits of non- or less compliant; about formulating punishments to prevent violations; facilitating the procedure of (legal) dispute; intensifying the use of withholding taxes; privatizing activities in the tax unit to improve the effectiveness and service to the taxpayer; approaching non-compliant taxpayers by dissemination of information and by education; establishing large organizational units based on groups of taxpayers (rather than on specific taxes); adopting a threshold for the registration tax that exempts small enterprises from major taxes; establishing an audit plan to detect violations as efficiently as possible; promoting taxpayer self-assessment; imposing some forms of alternative taxes on small taxpayers with limited revenue potency; using banks for receiving tax payments, and so on. Roughly these elements can be grouped around five principal functions, namely 1) taxpayer education, 2) registration, accounting, and return process, 3) enforcing collection 4) auditing, and 5) legal service and appeals (Tanzi and Pellechio, 1995; Das-Gupta, 2004; Camp, 2009).

Likewise, regarding its implementation, to obtain successful tax administrative reform, various requirements have been put forward: explicit and sustained political commitment; a capable team of hardworking officials dedicated full-time to tax administrative reform; a well-defined and appropriate strategy; simplified tax structures; relevant training for staff; additional resources for the tax administration or, at least, some reallocation of resources; and changes in incentives for both taxpayers and tax administrators (Tanzi and Pellechio, 1995; Bird and de Jantscer, 1992).

Ott (2001) has argued that (in addition to increased efficiency by generating the smallest administrative costs in tax collection) the main objective of tax administrative reform is to attain high effectiveness in tax compliance, with a view to enhancing overall tax revenue. As the focus in this thesis is also on tax compliance, the potential elements of tax administrative reform as put forward in the literature and highlighted above will be grouped into the four main aspects of tax administration that we identified earlier as drivers for tax compliance: tax administration (interpreted in the narrow sense outlined at the beginning of this section, i.e. in terms of the administrative processes dealing with tax collection in all its aspects), tax sanctions, tax services, and tax morale.

2.3.3 Three phases of tax reforms in Indonesia

Introduction

Tax reforms in Indonesia took place in three phases, each with their own background and rationale, as these tax reforms were closely linked with broader changes in economic policies and in public administration in Indonesia (Setiyaji and Hidayat, 2005; Ikhsan et al., 2005; Kiswara, 2006; Bawazier, 2011; Directorate of Forming State Budget, 2013).

Firstly, the tax reforms in the period of 1983-1997 (more specifically in 1983, 1984 and 1997) were performed in pursuit of the idea of Indonesia as a self-sufficient nation, given the volatility and general lowering of oil prices. Economic policies were targeting the development of a sustainable (i.e. less oil-dependent) national economy within the context of globalization, aiming at stimulating national investment, among other things by the enhancement of public participations. Increasing legal certainty was an important part of these policies, and the tax reforms in that period reflected that. An important change was the shift from official assessment of tax liabilities to self-assessment. According to Martinez-Vazquez and McNab (1997), this first phase of tax reform in Indonesia has brought along a gradual improvement, and has combined positive elements of tax reform worldwide with the specific economic conditions and characteristics of Indonesia.

Secondly, the tax reform of 2000 aimed specifically at the establishment of a modern tax administration, at lowering the administrative burden of taxpayers, and at increasing the transparency of the tax system.

Finally, the tax reforms in 2004-2009 were performed in pursuit of the increase of tax compliance and of the efficiency of tax collection. Tax services were improved as well as the professional skills of tax officials. Special attention was paid to the potential of small and medium enterprises for taxation.

Below we will have a closer look at the changes the various reforms brought about. We will distinguish between changes in various tax bases and tax rates, and changes in tax administration specifically.

Changes in tax bases and tax rates

In all three phases, changes were made to the bases and rates of various taxes such as the Personal Income Tax (PIT), Corporate Income Tax (CIT), Value Added Tax (VAT) and other consumption taxes, the property tax, and the natural resource tax. Mainly these changes involve the broadening of bases and simplification and reduction of rates. The main changes are as follows:

Personal Income Tax (PIT). In 1983, the government introduced a progressive system in the calculation of the personal income tax. In this context, three brackets of income were defined; in later reforms, changes were made to this system by changing the (number of) brackets and the rates, as shown in table 2.1.

Table 2.1 Developments of brackets (BR, income in million IDR per year) and rates of the PIT, Indonesia, since 1983

	BR 1	Rate	BR 2	Rate	BR 3	Rate	BR 4	Rate	BR 5	Rate
1983	0-10	15%	10-50	25%	>50	35%	n/a	n/a	n/a	n/a
1994	0-25	10%	25-50	15%	>50	30%	n/a	n/a	n/a	n/a
2000	0-25	5%	25-50	10%	50-100	15%	100-200	25%	>200	35%
2008	0-50	5%	50-250	15%	250-500	25%	>500	30%	n/a	n/a

The system is applied by deducting from gross income the non-taxable income (resulting in the taxable income). The development of non-taxable income from 1983 until 2014 is shown in table 2.2.

Table 2.2 Development of Non-Taxable Income (NTI, income in million IDR per year) since 1983

	NTI per	If person has wife/hus	Total (NTI per	
	person	NTI for wife/husband	NTI for dependent, max 3	person+spouse+
			persons	dependent)
1983	0.960	0.480	0.480	1.920
1994	1.728	0.864	0.864	3.456
2000	2.880	1.440	1.440	5,760
2004	12.00	1.200	1.200	14.40
2005	13.20	1.200	1.200	15.60
2008	15.84	1.320	1.320	18.48
2014	24.30	2.025	2.025	28.35

Corporate Income Tax (CIT). In the tax reform of 1983, the government introduced the progressive method for corporate income tax by determining three brackets. Afterward, reforms were generated by changing the (number of) brackets and the rates, as presented in table 2.3.

Table 2.3 Developments of brackets (BR, income in million IDR per year) and rates of the CIT, Indonesia, since 1983

	BR 1	Rate	BR 2	Rate	BR 3	Rate
1983	0-10	15%	10-50	25%	>50	35%
1994	0-25	10%	25-50	15%	>50	30%
2000	0-50	10%	50-100	15%	>100	30%
2009	n/a	28%	n/a	n/a	n/a	n/a
2010	n/a	25%	n/a	n/a	n/a	n/a

Referring to table 2.3, the main change for the CIT was made in 2009, when the progressive rates were changed into a single rate, so that the rate became 28 percent (which later, in 2010, became 25 percent).

Value Added Tax (VAT) and other consumption taxes. In 1983, the government set the Value Added Tax (VAT) at a single rate, namely 10 percent. This rate has remained in place throughout all reforms. For several luxury goods such as private aircrafts, luxury cars, and private yachts, the government imposed a luxury sales tax in addition to the VAT. Rates for these luxury taxes differ based on the level of luxury of the goods involved and have experienced changes following the tax reforms. In the period of 1983-1997, the rates were in the range of 10-50 percent, in the period of 2000-2004 in the range of 10-75 percent, and in the period of 2004-2009 around 10-200 percent.

Property tax. The tax reform in 1983 resulted in a property tax. The government determined the single rate for this tax at 0.5 percent. Since then there have been no changes in the rate.

Natural resource tax. Indonesia government set the rate of the natural resource tax at 48 percent in 1983, after which it was reduced (44 percent in 2000, 42.4 percent in 2009, to 40 percent in 2014).

In addition to changes in the tax rates, various changes were made to the bases of the taxes involved. These mainly include measures that broadened the tax base, such as changes to the definition of taxable income in the PIT, the inclusion of taxable net profits in the CIT, various changes in the VAT, the use of the tax object sale value in the property tax, and the use of taxable income based on profit sharing in the natural resources tax.

Changes in tax administration

Changes in tax administration were performed on a general level (by amendment of tax laws), as well as on the more specific level of the modernization of tax administration, the improvement of tax services, the refinement of tax sanctions, and the enhancement of tax morale.

On the more general level, the main reform initiated in 1983 was the change of the tax collection system from official assessment to self-assessment. To support this change, the government issued several laws about general provisions of taxation, the PIT, the VAT and other consumption taxes, the property tax, and the stamp duty, concerning the simplification of the number and variety of taxes, the simplification of tax rates, and the abolition of tax incentives. Furthermore, in the tax reform of 1994, introduced changes concerning taxpayer liability, the tax period expiration, the tax advisory council, the subject and object of income tax, deductible costs, tax facilities, tax compensation, the depreciation system, withholding tax system, VAT object, property tax object, and non-taxable tax object sales value for property tax. Moreover, in 1997, the government introduced five new legislations regarding the formation of a board of tax dispute resolution, the simplification of local taxes and retribution, tax collection by so-called forced letters, the land and building title transfer duty by self-assessment, and the non-tax revenue and its tariff. These changes were further complemented and refined by later tax reforms in the 2000s. Often such changes were linked to changes in the tax base.

As far as the modernization of tax administration is concerned, this issue has been the subject of reforms since 2000. Changes concerned mainly the development of the tax administration both in terms of software, hardware, and human-ware based on information and technology. In addition the organizational structure of the tax administration was subject to reform.

Regarding tax services, improvements have focused on system and core business processes since the 2000s by implementing e-payment, e-registration, and e-filing in order to digitalize the contact with taxpayers. In this period, a specific unit was created by the Directorate General of Taxes (DGT) to look after the information systems and to support the services. In addition, to handle the taxpayer problems, DGT created account representatives and help desks, and generally simplified the procedure of providing services to taxpayers. Since 2002, the government has invested in the establishment of new (large and smaller) tax offices.

With regard to tax sanctions, starting FY1994, the government extended the coverage of the criminal sanction for tax cases and aggravated this sanction. In 1997, the rules for applying tax sanctions (both for tax officers and taxpayers) were formulated. Changes continued in 2000 by releasing three sanctions. Firstly, the instrument of a warning letter was introduced for undelivered annual tax returns. Secondly,

administrative sanctions in the form of a fine sanction were increased from 25,000 to 50,000 IDR for overdue monthly tax returns and 50,000 to 100,000 IDR for overdue annual tax returns. Finally, the formulation of criminal sanction was reinforced or emphasized, especially article of 38-41A of the general tax law dealing with general provisions regarding sanctions for negligence and violations by tax officials and taxpayers in the annual tax returns. These measures were complemented by introducing more possibilities for taxpayers to get legal protection and support. Moreover, in the reform of 2007, the government increased the administrative sanctions for unreported or late annual and monthly tax return including the intensification of sanctions for past due payments. In this period, the criminal sanction for non-registered businessmen releasing tax invoices was introduced including the detailed sanction for tax officers. In addition, in 2007, the government also regulated the increase of the tax rate (in addition to the standard tariff) at 20 and 100 percent for non-registered taxpayers.

Regarding tax morale, most changes were targeting tax officials through changes in human resources management, aiming at enhancement of ethics and integrity and higher professional quality of tax officials. Measures taken included stricter selection, allocation of staff based on capacity and capability, reorganizations, training, and a self-capacity development program. In 2007 the government issued a code of conduct for all tax officials.

2.4 The potential for increased tax compliance in Indonesia

In spite of three decades of tax reform, as described in the previous section, Indonesia has only been able to raise its tax ratio from 4.6 percent (1983) to 12.4 percent (2014), which means it took Indonesia on average almost 4 years to increase its tax ratio by just 1 percentage point. At that rate, if nothing changes, it will take Indonesia another 30 years to reach the equivalent of the average tax ratio of lower middle income developing countries (19 percent). In 2015, the Indonesian President pledged to lift the tax ratio to 16 percent by 2019 (Bappenas, 2015), which is obviously a considerable challenge. Somehow the Indonesian government has not been able to get the Indonesian population into its "tax nets".

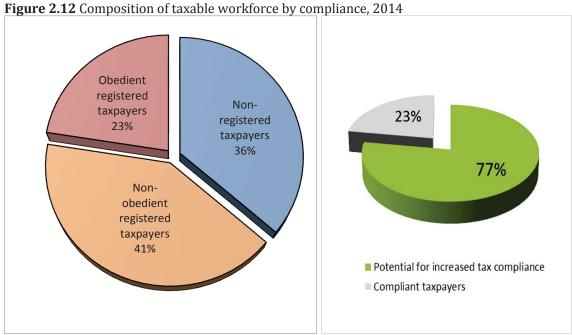
Figure 2.11 presents the development of the population size, of the size of the workforce, the taxable workforce (i.e. that part of the workforce that is subject to taxation: those taxpayers that have income above the non-taxable income), of the number of registered taxpayers and of the number of "obedient" taxpayers (i.e. the number of registered taxpayers that file annual tax returns). It should be noted that filing annual tax returns does not fully cover tax compliance (as income may be understated and/or tax liabilities may not be fully paid for).

annual tax returns in Indonesia, FY 1996 and 2014 (in million) **■** 1996 **■** 2014 254,86 198,32 119,91 83,90 33,56 30,57 10,80 1,66 0,74 Workforce **Total Population** Taxable workforce Registered taxpayers Obedient registered taxpavers

Figure 2.11 Comparison of population, workforce, registered taxpayers and taxpayers filing annual tax returns in Indonesia. FV 1996 and 2014 (in million)

Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

This figure shows that, in 2014, from roughly 48 million people that are part of the taxable workforce, just over 30 million (64 percent) is identified as registered taxpayers. Furthermore, from these 30 million people, 35 percent is "obedient" in the sense that they file annual tax returns. Figure 2.12 shows the same information, broken down for the overall taxable workforce: 23 percent is compliant, 36 percent is not registered and 41 percent is registered but not obedient. This means that there is a huge potential (corresponding to 77 percent of the taxable workforce) to improve compliance by registering and/or properly filing tax returns.



Source: Ministry of finance, directorate general of taxes, and central bureau of statistics

2.5 Summary and conclusions

The objective of this chapter was to give insight into the current state of affairs regarding tax compliance and tax reforms in Indonesia, compared to other countries. We analyzed relevant policy documents and performed a literature review to define the problem at hand by looking more generally at issues of tax compliance and tax reforms worldwide as well as specifically for the Indonesian case, from the policy perspective.

In this chapter we defined tax compliance as the compliance of taxpayers (whether individuals, groups or organizations) with applicable tax laws, which (often within a system of self-assessment) consists of activities such as 1) registering as a taxpayer; 2) filling out tax forms completely and clearly, i.e. delivering tax returns (annually, monthly); 3) calculating correctly the amount of tax payable; 4) paying tax payable on time, all 'voluntarily', i.e. without previous investigations, warnings, threats, or application of either criminal or administrative sanctions. We distinguished between economic and non-economic factors that impact tax compliance. Economic factors behind tax compliance refer mainly to the existence of costs in fulfilling tax obligations, while the non-economic factors refer to perceptions and attitudes of taxpayers towards tax compliance. Because our research explores the perception of taxpayers (*in casu* public officials), we focus on non-economic factors behind tax compliance. As a preliminary way of structuring, we put these non-economic factors into four clusters of factors: factors relating to tax administration, factors relating to tax sanctions, factors relating to tax services, and factors relating to tax morale.

We identified four main reasons for poor tax compliance in Indonesia. Firstly, public trust toward tax authorities is relatively weak because of tax corruption involving tax officials. Secondly, in Indonesia inadequacies in the provision of public goods by the state play an important role. A low level of public provision of goods by the state will affect tax compliance, and thus has implications for tax revenue (which will make it even harder to keep up decent levels of provision). Thirdly, there are still significant problems related to the services and facilities for paying taxes. Discrimination in services, the complexity of using tax applications, unequal service facilities and lack of dissemination are regular features of the Indonesian tax administration. Finally, there is a lack of commitment by government to improve tax compliance by integrating various databases with relevant information.

Subsequently, we outlined the main elements of tax reform in Indonesia over the last three decades, and payed specific attention to tax administrative reform, aimed at maximum tax revenues at minimum costs. In spite of three decades of tax reform, as described in this chapter, Indonesia has only been able to raise its tax ratio from 4.6 percent (1983) to 12.4 percent (2014), which is below the average tax ratio of similar countries. Despite the considerable GDP per capita growth (which has moved Indonesia from the group of poor countries to the group of lower middle income countries, according to the IMF classification) Indonesia has not been able to put its tax ratio at a significantly higher level. However, there is still a huge potential (corresponding to 77 percent of the taxable workforce) to improve compliance by registering and/or properly filing tax returns.

CHAPTER 3

Tax Compliance by Public Officials

This chapter reviews relevant literature and develops the theoretical framework and analytical categories for the remainder of the thesis. In doing so, this chapter answers sub- question 2: What does the literature tell us about underlying factors for tax compliance, generally and specifically tax compliance by public sectors officials? In section 3.1, we have a look at different perspectives on explaining tax compliance as they have been put forward in the literature. In sections 3.2-3.5, we will elaborate on the four clusters of factors (modernized tax administration system, tax services, tax sanctions, and tax morale) as they were introduced in the previous chapter, and their importance for tax compliance. Section 3.2 explores the main elements of a modernized tax administration system both in the global and Indonesian context. Furthermore, section 3.3 and 3.4 elaborate the elements of tax sanctions and tax services respectively. Subsequently, in section 3.5, the element of tax morale is elucidated. In section 3.6, we then focus on the position of public officials as taxpayers and their tax compliance. Section 3.7 concludes.

3.1 Perspectives on tax compliance problems

Following Kristiaji et al. (2013), in general, there are seven main perspectives on the causes of problematic tax compliance that are elaborated below. Note that these perspectives are not rivalling perspectives; they are to a large extent complementary and highlight specific aspects of the same phenomenon:

(1) Economics of crime. The idea of economics of crime was first introduced by Becker in 1968. In his article titled "Crime and Punishment: An Economic Approach", he assumes that a criminal is a rational creature, who also maximizes his utility by illegal means (Becker, 1968). The main contribution of this article is its description of how the probability of getting caught and the potential punishment influence the decision to opt for a crime. Four years later, the idea was adopted by Allingham and Sadmo, in the context of a person's decision whether to engage in tax evasion (Allingham and Sandmo, 1972). According to them, there are economic factors behind the choice of person to be obedient or disobedient in meeting tax obligations. These factors comprise the amount of income, the tax rate, the risk of audit, and the sanctions. In the perspective of audit and sanctions, they argued that if the risk of inspection is larger, taxpayers tend be more obedient. Furthermore, the more severe sanctions are, the more likely it is that a taxpayer complies. However, the potential sanction is only effective if combined with a significant risk of inspection (Kirchler and Wahl, 2010). Even very heavy sanctions will never be imposed to taxpayers who do not comply if a tax audit never occurs. Therefore, policies that can be implemented by the government against non-compliance are imposing severe sanctions in combination with conducting a lot more tax audits (Allingham and Sandmo, 1972). In short, the perspective of economics of crime on tax compliance states that compliance is influenced by economic factors, and to improve compliance, the approach focuses on the enforced compliance through tax audits and tax sanctions.

- (2) Tax morale and ethics. Studies of tax compliance from the perspective of psychology and behavioral economics conclude that the tax morale of taxpayers influences the decision to be obedient and disobedient regarding tax obligations (Torgler and Schaltegger, 2005). Tax morale itself is defined as the intrinsic motivation to pay taxes. If the person's tax morale is 'good', then there is a tendency of the person to be obedient without any rules. Tax morale levels vary between countries because of differences in social values and the influence of existing social institutions (Alm et al., 1992; Frey, 1997). In general, the factors affected tax morale can be simply classified into two sources, namely the interrelationships between the taxpayer (horizontal reciprocity) and the reciprocal relationship between the taxpayer and the tax authorities (vertical reciprocity). From this perspective, tax non-compliance occurs because of problems in individual tax morale influenced by horizontal and vertical reciprocity factors.
- (3) Psychological tax contract. In this approach, the tax is considered as an unwritten contract or psychological contract (Feld and Frey, 2002). Parties are bound by the agreement between the taxpayer and the competent authority, in which the competent authority uses tax resources to set and to implement public policies. The psychological tax contract thus refers to the vertical reciprocity approach discussed above. The psychological contract leads to an exchange of rights and obligations in the form of a fiscal exchange (Buchanan, 1976). A fiscal exchange means that there is an exchange between the taxpayer (by being compliant with tax laws and by paying tax to the state) and the state (by providing goods and services to the taxpayer). The greater the difference between the goods and services-needed by taxpayers and the goods and services-actually provided by the state, the greater the encouragement for taxpayers to not (fully) comply.
- (4) Treatment of taxpayers. The taxpayer's inclination to be obedient is also affected by the treatment or services provided by the tax authorities (Torgler and Schaltegger, 2005). The better the state (in this case represented by the tax authorities) treats the taxpayer, the higher the urge of taxpayers to comply. Empirical analysis shows two important aspects regarding the treatment of taxpayers, namely transparency and equality (Frey, 2003). If procedures of tax administration are well communicated to the taxpayer, the motivation to comply with the tax will be higher. In addition, if the tax authorities treat taxpayers as inferiors, or they (as 'çops') a priori treat them like 'robbers', then this will have a negative effect on tax compliance. Therefore, tax authorities should be oriented towards customer service. This is underpinned by empirical research conducted in Switzerland, which showed that the level of tax compliance is higher when the tax authorities implement transparency in its administration and treat taxpayers more friendly (Feld and Frey, 2002).
- (5) Democracy and tax compliance. Democracy provides a significant positive effect on tax compliance (Torgler, 2005). When compared with other political systems, (representative) democracy is a system that allows taxpayers to participate in decision-making, which makes it more likely that these decisions will be accepted by taxpayers, so that the taxpayer has a tendency to voluntarily contribute by means of taxes collected by the state (Pommerehne and Weck-Hannemann, 1996). Furthermore, fiscal decentralization allows for the decision-making to be done at the smallest scale possible, by groups of relatively homogenous taxpayers or voters (Tiebout, 1956).
- (6) Tax compliance as social norms. Cullis, Jones and Lewis have introduced social norms to explain tax compliance (Cullis et al., 2006). According to them, the norms of an individual are influenced by norms of other people or norms adopted by the community.

In the context of tax compliance, the norms of an individual taxpayer may affect the norms of other taxpayers. A taxpayer, who previously obeys within an environment that does not comply, will likely become disobedient because the environment affects his behavior. This is because there is a tendency of inclusion into a group of someone who shares group norms and of exclusion of someone who has different social norms. In this context, tax compliance as social norms relates to the horizontal reciprocity, i.e. reciprocal relationship between the behavior of a taxpayer and of another taxpayer. In practice, everyone has a certain threshold to pass when following a social norm. For a taxpayer this threshold will be higher when he sees more and more other taxpayers who do not comply. This is because there is a relationship between the number of followers of a norm and how strongly the social norm is obeyed by the taxpayer (Myles and Naylor, 1996). Or, as Bordignon states, every taxpayer will determine the level of compliance by first asking "How big is the contribution paid by someone else?" (Bordignon, 1993).

(7) Why someone pays taxes: the slippery slope framework. This perspective combines various previous ones. From the perspective of economics of crime compliance is driven by audit risks and sanctions from the government. Such compliance is closely related to the strength of the government in enforcing the rules (the power of the tax authorities). From the perspective of tax morale, tax compliance is the intrinsic motivation of a taxpayer due to trust in the tax authorities or government. Kirchler, Hoelzi and Whal have tried to incorporate these approaches into a single model named the slippery slope framework. In this framework, a person will tend to be obedient if there is trust in the tax authorities and strength (power) of the authority to regulate and prevent tax evasion (Kirchler et al., 2008). Briefly, it can be stated that the combination of trust on the government and law enforcement can effectively diminish tax non-compliance (Richardson, 2008).

Enforced tax compliance

Maximum

Power of authorities

Minimum authorities

Minimum authorities

Figure 3.1 Slippery Slope Frameworks

Source: Kirchler et al., 2008

The model is described by the three-dimensional graphics in figure 3.1. The dimensions are the power of authorities, trust in authorities, and tax compliance. The model can be interpreted as follows: 1) if power of and trust in tax authorities are both at the minimum point, then tax compliance will also 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 in government is high (for example, because the taxpayer believes that the government has met its obligations within the psychological contract); 4) the slope in the image represents various combinations of enforced and voluntary tax compliance. The word 'slippery' is used to illustrate that the level of compliance can easily slip to a lower level when taxpayers perceive the behavior of tax authorities similar as a 'police' treating them as 'robbers' by heavily using audits and sanctions. As consequence, trust is low and tax compliance is reduced (Gangl et al., 2012). Conversely, if tax authorities use their power in a way that is perceived as fair by taxpayers, it will increase voluntary compliance (Lavoie, 2009).

If we relate these perspectives to the four main elements outlined in the previous chapter, we find that some of the perspectives relate to one or more of these elements: tax administration: economics of crime; democracy and tax compliance; tax sanctions: economics of crime; why someone pays taxes; tax services: treatment of taxpayers; and tax morale: tax morale and ethics; psychological tax contract; tax compliance as compliance with social norms.

In the following sections, we will have a closer look at the four clusters of factors that we distinguished earlier: modernized tax administration system, tax sanctions, tax services, and tax morale. In each section, we will first discuss relevant literature and earlier empirical research, followed by a brief overview of what has been done specifically in Indonesia as part of the various tax reforms outlined in the previous chapter. These overviews are based on various policy documents (see Annual Report of Directorate General of Taxes FY2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014, Ministry of Finance of the Republic of Indonesia; Law No. 6 of 1983; Law No. 7 of 1983; Law No. 8 of 1983; Law No. 28 of 2007).

3.2 Modernized tax administration system (MTAS)

Modernized tax administration systems: brief literature overview

According to Hasseldine (2010), modernization of tax administration –ideally- has seven characteristics, namely: 1) conducting a professional approach to internal management such as human resources and strategic planning; 2) focusing on cost efficiency and work effectiveness; 3) introducing technology-based applications; 4) understanding the factors driving taxpayer compliance and the behavior of taxpayers; 5) creating a risk profile and a sophisticated response on the behavior of the taxpayer including formulating service rules and applying them; 6) enforcing transparency of government; and 7) providing a detailed performance report (Hasseldine, 2010). Others (see for example Caiden, 1991) have focused on the main targeted dimensions of a MTAS, which are fourfold: 1) organizational structure, 2) organizational procedure, 3) organizational strategy, and 4] organizational culture. More specifically, i.e. applied to the Indonesian context, the modernization of tax administration has been defined as a comprehensive renewal process covering aspects of updated information technology, procedures, facilities, and human resources with the aim to achieve higher tax compliance and

higher performance and productivity of the tax authority; this renewal process also aims at increasing trust in tax officials and at reducing corruption, collusion and nepotism (Sadhani, 2005; Pandiangan, 2008). Modernization of tax administration is both about improving the administrative performance of individuals, groups, and institutions in the tax system and about the mentality and attitude of tax officials within the tax apparatus (Nasucha, 2004; Sofyan, 2005; Iwan, 2012).

The service dimension of modernization of tax administration (and the resulting need to have special units that handle the needs and problems of taxpayers) has been emphasized by Andic (1994) and Sandford (1997). In related literature, relatively much attention is given to one specific group of taxpayers: large taxpayers. Research by Silvani and Baer (1997) shows that countries with special units for large taxpayers succeed to improve tax compliance and to increase tax revenue. Uruguay, Bolivia and Sri Lanka, Guatemala, Nicaragua, El Salvador, Tanzania and Egypt are examples of such countries from the developing world (Gallagher, 2005). Therefore, it is not surprising that currently almost modernization processes in developing countries in both Latin America and Asia focus on these larger taxpayers. This is because although the number of these taxpayers can be small (between 1,000 and 50,000), their contributions to overall tax revenue are significant, between 80-90 percent of tax revenue (Shome, 2004).

Modernization of the tax administration system in Indonesia

In terms of implementation, there are two approaches to modernization of tax administration systems, namely 1) a 'big-bang' approach, in which a MTAS is created immediately by imitating successful MTAS worldwide, and 2) a gradual improvement approach. According to Martinez-Vazquez and McNab (1997), Indonesia, as a developing country, in the first phase of tax reform, succeeded to combine both approaches by directly taking over elements from elsewhere that could immediately be implemented, and by gradual improvement of other elements in accordance with the actual conditions. Based on the work done by Caiden (1991), Nasucha (2004), Purnomo (2004), Pakpahan (2004) and Pandiangan (2008), the subsequent reform in Indonesia can be said to focus on specific programs, aimed at modernizing the four main distinct aspects of tax administration as highlighted above: modernization of organizational structure, modernization of organizational procedure, modernization of organizational strategy, and modernization of organizational culture, with the aim to attain a high level of voluntary compliance, a high level of confidence in the tax administration, and a high productivity of tax employees. The reforms consisted of 1) a program to increase voluntary compliance by means of a campaign to raise tax awareness and by developing better tax services; 2) a program to maintain the level of voluntary tax compliance through developing excellent services and simplifying the fulfillment of tax obligations; 3) a program to prevent non-compliance by means of sanctions, involving the mapping of various groups of non-compliant taxpayers, increasing the effectiveness of the examination, modernizing the rules and methods of examination and collection, utilizing the latest technology and IT development masterplan, and developing and utilizing a data base; 4) a program to improve public confidence on tax administration; and 5) a program to enhance productivity of tax officials, involving reorganization of the

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¹ These reforms partly coincided (and were intended to be strengthened) by the Tax Administration Reform Project (PINTAR) for Indonesia, that was run by the World Bank from 2009 to 2014 (and then abandoned due to lack of progress and non-compliance with WB procurement procedures).

directorate general of taxes (DGT) based on function and taxpayer groups, improvement of audit capacity, coaching of local tax officials by the central or regional office of DGT, formulation of a new policy for the management of human resources, enlargement of the quality of working facilities and infrastructure, as well as formulating operational work plans.

In terms of modernization of organizational structure, these programs have brought about an organization which is much more based on specific functions (with specific tasks and responsibilities) of the officials involved. Account representatives (ARs) have the specific task to serve and to directly supervise specific (groups of) taxpayers. An organizational structure has been set up to facilitate administrative processes using a clear distiction between functions and responsibilities. For example, tax audits are only done by trained auditors which have also specialized based on the group of taxpeyers involved (persons, small and large businesses); other employees have specialized as tax seizors (involved in the actual collection of tax) or as information technology experts. Linked to this is the completion and refinement of the Tax Information System (TIS) into an Integrated Tax Administration System (ITAS). This ITAS is a case management workflow system; it is used by all officials involved and routinely monitoring by the DGT.

In terms of modernization of organizational procedure, modernization was brought about to guarantee that all activities in tax offices follow standard operational procedures, simplified administrative procedures, and communication in line with taxpayers' needs. The modernization was started by amending some rules, namely Law No. 6 of 1983 about General Provisions and Tax Procedures, Law No. 7 of 1983 about Income Tax, and Law No. 8 of 1983 about Value Added Tax or VAT in order to simplify these rules, to provide more legal certainty to taxpayers, but also to close loopholes that could impair state revenue. The main changes included one-stop service procedures, simplification of administrative procedures, new (as shorter) time standards, raised and more transparant tax audits, simplification of tax report forms, acceleration of objection and appeal procedures, a reviewed procedure for restitution requests, and so on. The ITAS also is of great relevance here, as it opened up the possibility for e-registration, ecounseling (including setting up a Frequently Asked Questions facility), and e-filing of tax returns, that increased the quickness, accuracy and security of the process of taxpayer data recording. Automation of the audit process with the help of the workflow management in ITAS has helped to avoid duplication of data and recording errors. ITAS has simplified tax collection and tax arrears administration. More generally, the use of databases has been part of a national masterplan for cooperation in data exchange with other institutions.

In terms of modernization of organizational strategy, modernization involved new elements in the way taxpayers were approached. This included conducting a campaign to raise tax awareness and compliance, the implementation of a single "gate" (one-stop shop) for all administrative services for taxpayers, combined with computerization of tax administration (e-registration, e-filling, and electronic waiting line), tax payment through teller-bank, internet banking and ATM, and a complaint center.

In terms of modernization of organizational culture, modernization has included the implementation of good governance programs, which involved a code of conduct for all employees at the DGT to provide a standard behavior corresponding with taxpayers' needs, the formation of an ethic code committee, more effective supervision of DGT by the inspectorate general of the ministry of finance, and closer cooperation with the national ombudsman commission. All of this is linked to higher quality and professional

human resources (HR) management activities (training and development, reorganizations, succession planning, rewards and punishment, and moral and ethical reform activities) to provide the organizational culture that is committed commits to "service by heart" aimed at high consumer satisfaction. It also included better working facilities and better procurement procedures.

Evaluation

Empirical research, which focused on the relationship between the implementation of a MTAS and tax compliance in Indonesia, has been conducted by Sofyan (2005), Haris and Bahri (2008), Rahayu and Linga (2009), Pribadi (2010), Marlina (2010), Irawan and Khairani (2011), Dewintari (2011), Lestari (2012), Fasmi and Misra (2012), Aprilina (2012), Madewing (2013), Nopikasari (2013), Candra et al. (2013), and Triwigati (2013). Almost all studies find a positive and significant effect between the level of (or specific aspects of) MTAS and tax compliance. A meta-analysis study (Rahman and Groenendijk, 2014) of these researches found a relationship between MTAS and tax compliance with $\rho=0.5294$ (with a 95 percent confidence interval of 0.0641-0.9947; error in the sampling 19.46 percent and error in the measurement 4.69 percent), but as always with meta-analyses, we have to keep in mind that this outcome is sensitive to publication bias. This is because if the sample of studies retrieved for review is biased, then the validity of the results of a meta-analysis review, no matter how systematic and thorough in other respects, is threatened and is also biased (Egger et al., 2000; Rothstein et al., 2005).

3.3 Tax Sanction

Tax sanction: brief literature overview

According to some authors, the application of tax sanctions (without discrimination and with consistent implementation) is the most effective way to increase tax compliance (Ilyas and Burton, 2007; Arum, 2012) and to prevent non-compliance (Ali et al., 2001). In general, a sanction is a punishment imposed for offenders of applicable rules (Nugroho, 2006). It is a tool used to force an individual to act in accordance with social standards (Drever, 1988) that guarantees that the norm will be obeyed (Satochid, 1988; Jatmiko 2006; Mardiasmo, 2009) or –put differently- will force people into compliance of norms (Moeljatno, 1987). Yadnyana (2009) and Muliari and Setiawan (2010) have argued that the effectiveness of tax sanctions depends on how they are applied: 1) criminal sanctions are to be imposed on violators with relatively serious cases; 2) administrative sanctions are to be provided for violators with very light cases; 3) severe sanctions are to be used as a tool in educating the taxpayer; 4) tax penalties should be imposed on violators without tolerance. In terms of actual implementation, as illustrated by Gallagher (2005) for the case of El Salvador and Guatemala, in developing countries, the rules for imposing sanctions are generally clear, but implementation is weak.

Empirical research (which is of a large variety) shows mixed results. According to some findings (among others Friedland, Maital, and Rutenberg, 1978; Witte and Woodbury, 1985; Trivedi et al., 2003; Park and Hyun, 2003), tax sanctions provide the biggest motivation for taxpayers to comply. Obviously, the effectiveness of tax sanctions in enhancing tax compliance is linked to the effectiveness of tax audits (which determines the chance to get caught for non-compliance). This view is supported by research done by among others Allingham and Sandmo (1972), Yitzhaki (1974),

Pencavel (1979), Sandmo (1981), Cowell (1985), Dubin and Wilde (1988), Cowell (1990), Alm et al. (1991), Alm and De Juan (1995), Alm (1998), and Kirchler et al. (2007).

Tax sanction in Indonesia

In Law Number 28 FY2007 concerning General Provisions and Tax Procedures, it is mentioned that there are two kinds of tax sanctions, namely administrative and criminal sanctions. The objective of this law is to educate taxpayers in terms of discipline and to prevent taxpayers from conducting deviations, by implementation of fair, reasonable, and appropriate sanctions.

In the case of tax administration sanctions, the sanctions consist of a fine sanction, an interest sanction and an increment sanction. A fine sanction is an administrative punishment for the delay in submitting the annual tax return. In this context, it is important to realize that Indonesia uses the self-assessment system in tax matters. In Indonesia, the deadline for submitting the tax return differs: 1) the monthly tax return has to be made no later than twenty days after the end of the tax period: 2) the annual tax return of income tax for individual taxpayers has to be done not later than three months after the end of the tax year; and 3) the annual tax return of income tax for corporate taxpayers has to be done within a maximum of four months after the end of the tax year. If the tax return is not submitted within the specified time or deadline, taxpayers will be imposed by fine sanctions with details as follows: 1) IDR 500.000 for monthly value-added tax returns; 2) IDR 100,000 for other monthly tax returns; 3) IDR 1,000,000 for the annual tax return of corporate taxpavers; 4) IDR 100.000 for the annual tax return of individual taxpayers (Mardiasmo, 2009). The interest sanction is an administrative punishment imposed for violations related to tax payment obligations. In general, the interest sanction is set at 2 percent per month and charged when taxpayers are late in paying taxes or late in paying the tax underpayment. The increment sanction is an administrative punishment in the form of and increased tax amount to be paid that is basically calculated by a certain percentage from the tax amount underpaid. The increment sanction is imposed when a taxpayer does not provide the information needed to calculate the amount of tax payable, but also -for example- when there are irregularities in the implementation of accounting rules, offences in the withholding tax, or similar irregularities.

Tax criminal sanctions consist of confinement and imprisonment. The confinement sanction is a punishment imposed for crimes because of negligence causing the state financial loss. The maximum limit of confinement is one year; in certain cases it is allowed for offenders to live in their own homes under supervision of the tax authority. Under certain circumstances the confinement sanction can be substituted by a fine. The imprisonment sanction is imposed for crimes in the field of taxation conducted intentionally and with financial loss for the state. The maximum limit is life imprisonment, in which prisoners live in the building or in the prison house; the freedom of the prisoners is very limited, and they are divided into classes according to the seriousness of their crime (Marjan, 2014).

Evaluation

In the case of Indonesia, research on the relation between tax sanctions and tax compliance has been conducted by Salamun (1991), Cuccia (1994), Bida (2001), Jatmiko (2006), Hutagaol et al. (2007), Sanders et al. (2008), Musyarofah and Purnomo (2008), Sanjaya (2008), Muliari and Setiawan (2010), Yadnyana (2011), Santosa (2011),

Rahmanita (2011), Arum (2012), Rajif (2012), Santi (2012), and Jatopurnomo and Mangoting (2013). Most of this research shows a significant influence of tax sanctions on tax compliance. However, tax sanctions are far less effective in increasing tax compliance when they are not properly implemented, i.e. not according to the applicable rules and in a discriminatory way (Doran, 2009; confirmed by studies by Winerunga, 2013 and Jotopurnomo and Mangoting, 2013).

3.4 Tax Service

Tax service: brief literature review

Tax services can be defined as all services provided by the tax authority to taxpayers in order to facilitate taxpayers in fulfilling their tax obligations in accordance with the applicable rules and procedures (following Jatmiko, 2006; Rahayu, 2010; Santi, 2012; Fuadi and Mangoting, 2013). From this perspective, taxpayers are treated as customers and their consumer satisfaction matters (Mann, 2004). Adequate tax services (captured in the phrase 'the taxpayer is a king who must be served maximally') are important in order to encourage society to pay taxes (Ilyas and Burton, 2010) and it that way are very relevant to tax compliance, as is also evidenced by various empirical research (Wallschutzky, 1984; Alm et al., 1991; Bird and de Jantscher, 1992; Leaderman, 2003; Cummings et al., 2005; Singh, 2005; Camp, 2009; Supadmi, 2009; OECD, 2010).

Tax service quality is the result of the taxpayer's assessment of the services provided by the tax authority through comparison between expectations and reality or actual performances (Parasuraman, 1985; Cronin, 1992; Brady and Christopher, 2001; Chen and Tan, 2004; Ussahawanichakit, 2008). The expectations of taxpayers should constitute the minimum standard for the tax authority to attain customer satisfaction; the tax authority should aim at service levels that meet or exceed these expectations (Parasuraman, 1985; Supadmi, 2009). According to Zeithaml et al. (1990), there are five dimensions for the measurement of service quality (SERVQUAL or methodology for measuring service quality), namely 1] all forms of physical appearance from service providers involving physical facilities, equipment, personnel and means of communication (tangibility); 2] the tax official's ability to provide services promised (reliability); 3] how fast tax officials handle taxpayer problems and the willingness of tax officials to assist taxpayers and to provide good services (responsiveness); 4] guarantees given by the tax office to the taxpayer at the time of using the service that cover safety and convenience of services as well as courtesy and honesty of tax officials (assurance); and 5] to what extent tax officials respect taxpayers, by paying attention to and in understanding the needs of the taxpayer (empathy) (Irawan, 2002; Fitria, 2010).

According to Alm and Torgler (2006), countries such as Australia, the United Kingdom, the USA, and Canada are examples of countries that have succeeded to increase tax compliance performance by means of services focusing on the taxpayer by providing the best quality service, assisting taxpayers to understand and to fulfill their responsibilities, and treating them fairly.

Tax service in Indonesia

Enhancing satisfaction of taxpayers and of other stakeholders in the tax sector has become one of the strategic objectives of the Directorate General of Taxes (DGT) in order to realize a high level of public trust towards tax services. One of the efforts to attain a high level of satisfaction is to improve the quality of services to taxpayers by

means of the Excellent Service Program. The implementation of this program comprises both tax authority and taxpayers. As far as the tax authority is concerned, (regional) tax offices are the central 'place' of tax services. These offices are equipped with adequate facilities such as waiting, consultation, and service room, and toilets. All tax administrative activities are taken place at these tax offices. Tax officers hold office at these tax offices; they are expected to be knowledgeable and skilled, reliable, responsive, assurant and empathic in providing all tax services.

Regarding taxpayers, the government released specific programs regarding tax services for taxpayers. The first program aims at further developing these services, by means of the introduction of call centers at each regional tax office to answer any public questions –by phone- related to taxation (help desk function). These call centers are served by specialized personnel. In addition all regional tax offices provide computer-based tax information media. Furthermore, information on the DGT and tax offices' website is constantly refined and updated. As a part of the Excellent Service Program (and as already mentioned in chapter 2), specific tax officials have function as Account Representatives (ARs) for specific taxpayers.

Evaluation

Studies on tax services and tax compliance in Indonesia have been conducted by Jatmiko (2006), Chotimah (2007), Albari (2009), Pardi (2009), Wuri (2009), Widayati and Nurlis (2010), Rajif (2010), Rustiyaningsih (2011), Mustafa et al. (2011), Arum (2012), Antari (2012), Aryobimo and Cahyonowati (2012), Fikriningrum (2012), Santi (2012), Marini (2012), Nugroho (2012), Fuadi and Mangoting (2013), Syahril (2013), and Ihsan (2013). Without going into detail, according to these studies, there is a relationship between tax service and tax compliance in Indonesia, in the sense that refinements in services in this sector have a positive impact on tax compliance.

3.5 Tax Morale

Tax morale: brief literature overview

Tax morale is an important and integral attitude related to tax compliance (European Commission, 2012). Studies by Parker et al. (1995), Kaplan et al. (1997), Trivedi et al. (2003), and Wenzel (2004) highlight the significance of tax morale in building tax compliance. This is because the psychological contract developed between governments, in general, and specifically tax officials on the one hand, and taxpayers on the other hand will have an impact on the formation of tax morale that may affect the willingness of taxpayers to pay taxes (Rahayu, 2010). This statement indicates the importance of the reciprocal relationship between tax officials and taxpayers in order to increase tax compliance (Tatiana and Priyo, 2009; Yadnyana, 2010). It is also important to realize that the "right" tax morale creates compliance coming from intrinsic, genuine motives rather than compliance based on coercion or threats (Ardianti, 2012).

Tax morale encompasses the principles, norms, and values that are held by individuals in realizing their tax obligations. It is an intrinsic motivation to pay taxes, coming from the awareness that tax revenues contribute to the provision of public goods (Nerre, 2001; Torgler and Schneider, 2004; Cummings et al., 2005). The factors affecting tax morale comprise the perception of equity including the government's treatment of taxpayers (fair or not); trust towards government institutions; the nature of the fiscal exchange between the taxpayers and government based on customer satisfaction;

governments reward on honest taxpayers, such as subsidy and tax holiday; tax knowledge; and other individual characteristics (Togler, 2002; Togler and Schneider, 2004; Tatiana and Priyo, 2009). Other factors affecting tax morale include demographics, economics, active participation in the political process and the expectations of society.

According to these factors, tax morale differs significantly and systematically across because of differences in cultural and demographic characteristics (Alm and Torgler, 2006). For example, research on tax morale in the USA and Europe has shown that both have a strong democratic tradition, taxpayers are treated as citizens with equal rights and obligations, citizens are involved in political decision-making process (to make them feel like a citizens) and have mechanisms to see that tax money is spent in accordance with their expectations. If we compare between Northern and Southern Europe, Northern Europe has a "higher" tax morale than Southern Europe due to these differences in democratic practices (Alm and Togler, 2006). Research has also shown that, in terms of taxpayer's background, individuals with low education have a relatively high morale tax; women have a relatively high tax morale, as do parents; married people have a relatively high tax morale; and full-time employees (working for other people or organizations) have a higher tax morale than the entrepreneur or self-employed (Alm and Togler, 2006).

Tax morale in Indonesia

As a country that uses a system of self-assessment in tax administration, the role of tax morale is important to secure tax compliance in Indonesia. In order to improve tax morale, the directorate general of taxes (DGT) runs several programs for both tax officials and taxpayers.

Regarding tax officials, DGT has put programs in place that aim at fair implementation of tax rules, with a view to enhance trust in government. These programs involve the fostering of tax officials' morale by so-called self-improvement schemes ("heart management training") in which appeals are made to employees to fulfill their civic, public and religious obligations.

Regarding taxpayers, DGT implemented tax dissemination programs to improve understanding and knowledge of taxpayers about tax laws and taxpayers' rights and obligations. These programs use multi-media and websites, tax centers, tax counseling and tax education. As far as such education is concerned, DGT generates seminars for various professions including training for both the government and private sectors, and organizes the 'goes to campus' program for students that consists of a variety of interesting events such as tax debates, tax seminars, games, and others. Furthermore, DGT uses tax advertisements via outlets such as banners and television, and provides tax information through libraries in tax offices, tax magazines, and tax journals.

Evaluation

Research related to tax morale and tax compliance in Indonesia has been performed by Mustikasari (2007), Salman and Farid (2007), Widodo (2010), and Basri et al. (2012). As a result, they underline the relationship and significant effect of tax morale on tax compliance. Specifically, studies on tax morale focusing on tax knowledge, tax fairness, and trust in government as important features that impact tax compliance, have been carried out by Gunadi (2004), Prasetyo (2006), Gardina and Haryanto (2006), Zain (2007), Ali Roshidi et al. (2007), Muslim (2007), Albari (2008), Azmi and Perumal (2008), Sanjaya (2008), Supriyati and Hidayati (2008), Witono (2008), Saad (2009),

Ongkowijoyo (2010), Rahayu (2010), Widayati and Nurlis (2010), Marziana et al. (2010), Priyoga (2011), Supriyati (2011), Devi and Kautsar (2011), Hardiningsih (2011), Yusup (2011), Nugroho and Zulaikha (2012), Ardianto (2012), Ghoni (2012), Fikriningrum (2012), Siregar et al. (2012), Rajif (2012), Nugroho (2012), Anggraini (2012), Handayani and Pratiwi (2012), Widodo (2012), Djawadi and Fahr (2013), Syahril (2013), and Ihsan (2013). All studies convey the linkage between tax knowledge, tax fairness, and trust in government as dimensions of tax morale that impact tax compliance.

3.6 Public officials

In Indonesia, the public sector encompasses central government and local governments (i.e. provinces, regencies and cities), government agencies, the armed forces and the police, and state-enterprises. A state enterprise is a state company that is wholly or partly owned by central or local governments, in accordance with Law No. 17 of 2003 about state finances. In this context, service activities for the society in the scope of public sector organizations are carried out by employees who are called public sector employees. Depending on the type of public sector organization, the employees in this sector consists of government employees and state enterprise employees.

Formally, a government employee is someone who works as a servant of the state (i.e. central or local government), and who is a public servant appointed by the state after fulfilling certain conditions, and assigned to a certain position and task, obtaining a salary based on a set of rules. According to article 2 of Law No. 43 of 1999 about the fundamentals of employment (amendment of Law No. 8 of 1974), government employees consist of civil servants in central and local government, the armed forces and the police. A state enterprise employee is someone whose assignment, dismissal, rights and obligations are determined based on a contract of agreement in accordance with the employment regulation. Referring Law No. 13 of 2003 about employment and Law No. 19 of 2003 concerning state enterprise, it is mentioned that for the state enterprise employee, the applicable regulations for the employee are similar to those working in private companies. In this context the employment status is that of a private employee.

Public officials as role models and change agents

In Indonesia and within the scope of Indonesia's social system, that still follows a paternalistic concept, public officials are viewed as representatives of government, and as such the public official is figuratively like a father and a role model for the community (Dworkin, 2010; Coons and Weber, 2013). Formally, Law No. 5 of 2014 concerning the state civil apparatus regulates the obligation of public officials to actually be a role model for society, both in attitude, speech, and behavior. Based on social learning theory and social cognitive theory (Bandura, 1971; Benight and Bandura, 2004), role model behavior can affect the behavior of other people. According to this theory, although representing a small portion of society (around 2 percent), positive or negative behavior of public officials can influence people's behavior in general. This means that, within the domain of taxation, the social norm (i.e. tax morale) and the tax compliance behavior of public officials will affect the compliance of society as whole in fulfilling tax obligations.

A concept related to that of role models, is that of change agents. Change agents have been defined in the literature in various ways: 1) liaisons between the source of changes (science centers, policymakers, innovation, public policy, etc.) with the public as

the target of changes (Rogers, 1995; Anwar, 2013); 2) people as additional intermediaries in diffusion of innovations (Rogers, 1983); 3) individuals who have the role of bringing about constructive change in either individuals or social organizations and institutions (Hall and William, 1973); and 4) selected individuals or groups that are a role model in both integrity and high performance (Permenpanrb, 2014). In practice, change agents have a role in facilitating the process of diffusion of innovations from the sources to the targets of the innovation. Specifically, they have a function in establishing an information exchange relationship, in making a link between government and citizens, and in influencing behavior including morale (Rogers and Shoemaker, 1971; Ulrich, 1997; Carnall, 2008; Dawson, 2010; Stephen, 2010; Tidd, 2010; Lunenburg, 2010).

In Indonesia, the existence of public officials as change agents is regulated by Laws No. 16 of 2006, specifically the regulation of the ministry of utilization of state apparatus and bureaucracy reform (Permenparb) No. 27 of 2014 regarding the development of change agents in government institutions, in which the public officials, as the agent of changes are expected to: 1) be responsible for any given task in accordance with its duties and functions; 2) obey the rules of discipline and the code of conduct and be consistent towards the enforcement of them; 3) be able to provide a positive influence for the organizational environment; and 4) be innovative and proactive regarding the implementation of the tasks and the functions including improving the quality of the bureaucracy reform.

Referring to these regulations, also in the tax offices and in the tax system at large, public officials can be looked upon change agents, as mediators between the source of changes (innovations in taxation) and citizens (taxpayers) as the target of changes. This means that tax compliance behavior of public officials can be an example for taxpayers in private sectors specifically and society in general (Rogers 1983; Sadida, 2011). Unfortunately, as already mentioned in the introductory chapter, there is no research available (on the Indonesian case or elsewhere) regarding the attitude and the behavior of public officials as taxpayers.

3.7 Summary and conclusions

The purpose of this chapter was to review the literature about underlying factors for tax compliance, generally, and specifically tax compliance by public officials.

We started by discussing various –partial- perspectives on tax compliance problems, such as the economics of crime, tax morale and ethics, the relevance of a psychological contract, the importance of fair treatment of taxpayers, issues of democracy and tax compliance, tax compliance as social norms, and the so-called slippery-slope model. We were able to link most of these perspectives to the four factors affecting tax compliance that were distinguished in chapter 2: modernized tax administration system, tax sanctions, tax services, and tax morale. By incorporating these four factors into the research, we follow an approach that is more comprehensive than approaches that use just one of these perspectives.

We then had a closer look at what the literature has to say about these four factors, how they have been subject to changes as part of tax reform in Indonesia, and how the relationship between each factor and tax compliance has been evaluated in the Indonesian context, in academic research.

Subsequently, we focused on the role of public officials. In the scope of Indonesia's laws and social system, public officials are viewed as representatives of government and as role models ("father-figures") and change agents. We therefore briefly discussed some literature on role models and change agents, such as social learning theory, according to which the behavior of public officials will influence the behavior of society, for example in fulfilling tax obligations. We found that to date no research has been done on tax compliance by public officials specifically, which –as already outlined in the introductory chapter- makes this in an interesting group to focus on.

To get insight into the link between tax compliance by public officials and the four elements that are relevant to tax compliance (namely modernized tax administration system, tax sanctions, tax services, and tax morale), in the next chapter, we will explain the set-up of the first part of the empirical work, i.e. a survey study on the perceptions of public officials regarding tax compliance and underlying factors.

CHAPTER 4 Empirical Research Design for the Survey Study

As outlined in the introductory chapter, this study has a two-step empirical research part. First, a survey study was undertaken among public officials to examine the perception of these respondents regarding the four main elements that impact tax compliance, namely modernized tax administration system, tax sanctions, tax services, and tax morale. Secondly, and following-up on the findings from this initial survey study, an additional on-line survey study, in-depth face-to-face interviews and a simulation game were conducted, focusing on tax sanctions and tax morale.

In this chapter, the empirical research design for the survey study is presented, the findings of which will be presented in the next chapter (chapter 5). Taken together, chapters 4 and 5 aim at answering the following research question:

"How do public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale?"

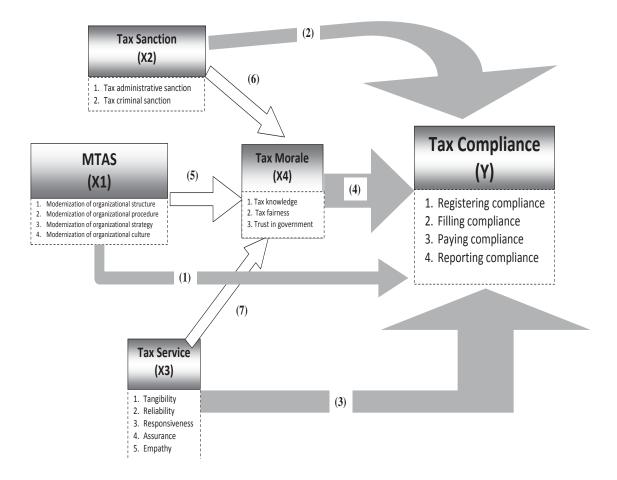
In section 4.1, the analytical framework is described as well as the hypotheses for this part of the empirical research. Section 4.2 deals with the operationalization of this framework; in this section, we will also explain why it was necessary to focus on the perceptions of the respondents rather than use actual data on tax compliance and underlying factors. Sampling issues are discussed in section 4.3, followed by an overview of the questionnaire as a tool for data collection in section 4.4. Then, aspects of data analysis are discussed in section 4.5. Finally, section 4.6 summarizes and concludes this chapter.

4.1 Analytical framework & hypotheses

4.1.1 Analytical framework

Based on the extensive literature review of chapters 2 and 3, for the initial survey, we will use the following analytical framework, in which tax compliance is a dependent variable and the four elements are independent variables. Figure 4.1 illustrates the framework:

Figure 4.1 Analytical framework for the survey study



This framework includes two types of relationships. First, there are the direct effects of modernized tax administration system (MTAS), tax sanction, tax service, and tax morale as independent variables on tax compliance as the dependent variable. The partial direct effects in figure 4.1 are the following:

- 1. MTAS to tax compliance [(1) ---> (Y)]
- 2. Tax sanction to tax compliance [(2)--->(Y)]
- 3. Tax service to tax compliance [(3) ---> (Y)]
- 4. Tax morale to tax compliance [(4) ---> (Y)]

The combined effect on tax compliance of the four independent variables is: [(1) + (2) + (3) + (4) ---> (Y)].

Secondly, we also can discern the indirect effect of MTAS, tax sanction, and tax service through tax morale (as a central variable in the framework) on tax compliance:

- 1. MTAS on tax compliance via tax morale [(5) ---> (4) ---> (Y)]
- 2. Tax sanction on tax compliance via tax morale [(6) ---> (4) ---> (Y)]
- 3. Tax service on tax compliance via tax morale [(7) ---> (4) ---> (Y)]

4.1.2 Hypotheses

A hypothesis is a provisional estimate about something that should be verifiable (Sugiyono, 2009). The first seven hypotheses used in this part of the study are associative hypotheses, i.e. they examine the co-occurrence of the variables involved. Verification will take place through statistical tests, where the null hypothesis (H_0) of no significant association is tested against the following alternative hypotheses (H_a):

- H1 : A modernized tax administration system is positively associated with tax compliance
- H2 : Tax sanction is positively associated with tax compliance
- H3 : Tax service is positively associated with tax compliance
- H4 : Tax morale is positively associated with tax compliance
- H5 : The combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is positively associated with tax compliance
- H6 : The combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is higher than the partial effect of each of these elements on tax compliance
- H7: The indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct combined effect of these three elements (i.e. without tax morale) on tax compliance

In the survey study, we have two groups of respondents: government employees and state enterprise employees. Earlier, we identified government employees as being "closer" (in terms of type of appointment and corresponding duties and obligations) to government, and the state enterprise employees as being more similar to those working in private companies. Therefore, we expect government employees to behave "better" in terms of tax compliance (and to be more sensitive to underlying factors for tax compliance) than state enterprise employees. For this reason, we have formulated the following additional hypotheses:

- H8 : Government employees have a higher tax compliance than state enterprise employees
- H9 : Government employees show a more positive impact of modernized tax administration system on their tax compliance than state enterprise employees
- H10 : Government employees show a more positive impact of tax sanction on their tax compliance than state enterprise employees
- H11 : Government employees show a more positive impact of tax service on their tax compliance than state enterprise employees
- H12: Government employees show a more positive impact of tax morale on their tax compliance than state enterprise employees
- H13: State enterprise employees show a lower combined effect of modernized tax administration system, tax sanction, tax service, and tax morale on their tax compliance than government employees
- H14: The combined effect of modernized tax administration system, tax sanction, tax service, and tax morale on tax compliance is higher than the partial effect of each of these elements on tax compliance, for both government and state enterprise employees

H15: The indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct effect of each of these elements (i.e. without tax morale) on tax compliance, for both government employees and state employees

4.2 Operationalization

4.2.1 Self-assessment and perceptions of respondents

The survey study concerns the self-assessment by respondents of their own tax compliance and their perceptions of how their tax compliance is influenced by the four main independent variables. Obviously, such self-assessment and perceptions (and the statement thereof by means of answering survey questions) do not constitute an ideal representation of actual behavior and circumstances. For privacy reasons however, it is not possible to get access to actual information on tax compliance of public officials on the individual level, as this would imply access to individual tax files. Moreover, even with such access, we would not get a full picture of tax compliance behavior of public officials, as the information in such files for example does not cover any understatement of taxable income (flaws in reporting compliance). As far as the independent variables are concerned, some -partly-lend themselves to direct measurement by the researcher (the level of tax services for example), but others do clearly not (such as tax morale). This means that a research design based on direct measurement of all variables involved is not possible. To avoid a complicated mixed design (with some variables directly measured, others indirectly measured through survey study, and with mixed units of analysis and observation), we decided to unequivocally use a survey study among public officials for this first part of the empirical research.

Wagner and Hollenbeck (1995) state that perception is the process by which individuals select, organize, store and interpret information gathered from the senses of sight, hearing, touch, smell and taste. Likewise, Robbins (2003) explains perception as a process by which individuals organize and interpret their sensory impressions to give meaning to their environment. According to Robbins (2001), perception influences individual behavior (Robbins, 2001). Given the data availability problems outlined above, within the domain of tax compliance research it is fairly common to use survey studies among respondents (or quasi-experimental research designs) to capture the effect of underlying factors for tax compliance behavior. This was also shown by the literature overview in the previous chapters. More specifically, Imelda (2014) found that the existence of taxpayers' perception, that a tax administration system is more effective and easier in fulfilling tax obligations, will enhance the willingness to pay taxes. Cummings et al. (2004), in his study on two countries in Africa (Botswana and South Africa), found that the perception of society of government being fair and non-corrupt increases the level of compliance in submitting annual tax returns. Similarly, the perception of taxpayers of the level of honesty, respect, and assistance from tax officials, as well as the level of trust in government influences tax compliance of taxpayers (Frey, 1997). In the case of Indonesia, Musyarofah and Purnomo (2008) found that the perception of taxpayers of the instrument of tax sanctions has a positive effect on tax compliance. Similar results were found regarding the perception of taxpayers about the level of tax service and tax compliance (Supadmi, 2009).

4.2.2 Operationalization of independent and dependent variables

The objects of research in this survey study are public officials. The variables involve attributes of these officials, namely their perceptions of tax compliance, modernized tax administration system, tax services, tax sanctions and tax morale. For each of the five variables, we have used various dimensions as a basis for operationalization. Modernized tax administration system (X1) covers four dimensions, namely modernization of organizational structure, modernization of organizational procedure, modernization of organizational strategy, and modernization of organizational culture, based on the work of Caiden (1991) as discussed in the previous chapters. Tax sanction (X2) has two dimensions: administrative and criminal sanction. Tax service (X3) involves five dimensions, namely tangibility (physical evidence), reliability, responsiveness, assurance (security), and empathy, based on the work of Zeithaml et al (1990). Tax morale (X4) includes three dimensions, namely tax knowledge, tax fairness, and trust in government. The dependent or endogenous variable is tax compliance (Y), which consists of four dimensions, namely registering compliance, filling compliance, paying compliance, and reporting compliance.

In detail, the operationalization of the five variables can be elaborated as follows:

Variable of modernized tax administration system (MTAS)

Conceptual Definition	Dimension	Indicator
conceptual Delimition	Dimension	muicatui
A modern tax administration system	Modernization of organizational structure	The formation of organization based on function
(MTAS) is a transparent and		The organizational structure simplifies the bureaucracy flow
accountable tax administration system		The organizational structure produces more structured and more focused administrative services
that utilizes information technology systems that are reliable and up to date.		The existence of account representatives that handle information and solve taxpayers' problems
renable and up to date.		The organizational structure has clear distinction between functions and responsibilities
	Modernization of organizational procedure	Standard operational organizational procedures
		Simplified administrative procedures and communication
		Administrative procedures that are appropriate with the taxpayer requirements
	Modernization of organizational strategy	Implementation of one-gate for all administrative processes
		Computerization of tax administration
		Simplification of tax payment
		The availability of a complaint center for taxpayers
	Modernization of organizational culture	The existence of standard behavior in line with taxpayer needs
		The culture to serve by heart
		The existence of a code of conduct
	organizational	taxpayer needs The culture to serve by heart

Variable of tax sanction

Conceptual Definition	Dimension	Indicator
Tax sanction is a punishment given to those who break the tax laws, as an attempt to force the taxpayer to comply with all the tax	anishment given to ose who break the x laws, as an attempt force the taxpayer to	Tax administrative sanction as a tool to educate and to prevent deviations Imposing fairly and reasonably fines for late report Imposing fairly and reasonably interest for lateness and incorrect payment Appropriateness with size of offences
regulations and as a tool to prevent the violating behavior	Tax criminal sanction	Imposing fairly and reasonably the imprisonment sanctions for state losses Imposing imprisonment sanctions in accordance with the level of violations Tax criminal sanction as a tool to educate and to prevent deviations

Variable of tax morale

Conceptual Definition	Dimension	Indicator
Tax morale is the	Tax Knowledge	Knowledge of tax laws and tax function
intrinsic motivation		Knowledge of the rights and obligations as taxpayer
within the individual to		Knowledge of use of tax revenues (instead of knowing
pay taxes as a result of		the fairness in tax allocation)
the existence of	Tax fairness	Fairness in application of tax system
awareness, readiness,		Benefit approach
and willingness to		Ability to pay approach
contribute to the		Horizontal equity
country and as part of a moral obligation		Vertical equity
illorar obligation	Trust in	Trust in use of tax revenue without corruption
	government	Trust in equal treatment of taxpayers
		Trust in tax collection without discrimination

Variable of tax service

Conceptual Definition	Dimension	Indicator
Tax service is level of	f Tangibility	Appropriateness of physical facilities in tax offices
tax services provided		Appropriateness of appearance of tax officers
by the tax authority to		The availability of means of communication
taxpayers in order to	Reliability	Timely services
facilitate taxpayers in		Capability to solve problems
fulfilling their tax		Consistency in service hours
obligations in		Appropriateness in skill and knowledge
accordance with the	Responsiveness	Responsible attitude
applicable rules and		Rapidness in handling
procedures		Easiness to be found
	Assurance	Assurance of free services
		Security for taxpayers in tax offices
		Trustworthiness and courtesy of tax officials
		Assurance of non-discrimination in providing tax
		services
	Empathy	Understanding taxpayer needs
		Attention from service officers
		Understanding the privacy of taxpayers
		Providing best solution
		Clear communication with easy language
		Attention from other officers

Variable of tax compliance

Conceptual Definition	Dimension	Indicator
Tax compliance is the	Registering	Register voluntarily
situation in which the	compliance	Register as a role model
taxpayer fulfills all	Filling	Recording and bookkeeping transactions of incomes
obligations in	compliance	Filling out tax forms
accordance with the	Paying compliance	Accuracy in filling out tax forms
tax laws.		Calculating all incomes
		Honesty in calculating all incomes
		Accuracy in using tax rate
		Calculating and paying taxes in line with applicable rules
		Paying taxes for all incomes
		Paying without cheating
	Reporting	Submitting annual tax return
	compliance	Submitting itself annual tax return
		Submitting timely annual tax return

4.3 Population, sampling and choice of respondents

The population in this study is formed by public officials in Indonesia. The following table shows the population size, as divided over the two groups of public officials we are interested in: government employees and state enterprise employees.

Table 4.1 Population of public officials in Indonesia per 2013

No	Description	Kind of Employees	Number of
			Employees
1	Government employees	Civil servants in central government; Civil servants in local government; Army/Police	5,212,982
2	Employees of state enterprises		585,735
Total	of Population		5,798,717

According to table 4.1, the total population is 5,798,717 consisting of 5,212,982 government employees and 585,735 state enterprise employees.

For this study, we have made use of the proportionate stratified random sampling method. The process of sampling can be elaborated as follows:

Process 1: random sampling

Because the population in this study is more than 100 units, to determine the size of the sample, we use the formula of Yamane and Slovin (Riduwan, 2005). Based on this formula, the sample size is calculated as follows:

$$n = \frac{N}{N \cdot d^2 + 1} = \frac{5,798,717}{[(5,798,717) \times (0.05)^2] + 1} = 400 \text{ respondents}$$

Process 2: stratified sampling

After getting the number of respondents needed, we establish strata in the sample based on (i.e. proportional to) the share of the two groups in the population, using the formula of Lynch (Babbie, 1990; Miller, 1991), namely:

$$n_i = \frac{N_i}{N} \times n$$

Where:

n_i = size of the stratified samplen = size of the total sample

 N_i = size of population based on stratum

N = overall population

By using this formula, we get the following sub-samples:

• Sample of government employees: (5,212,982/5,798,717) x 400 respondents = 360 respondents

• Sample of state enterprise employees: (585,735/5,798,717) x 400 respondents = 40 respondents

The units of analysis (i.e. respondents) in this part of the empirical research are public officials who are receiving executive training in the Institute of education and training of public administration, STIA LAN (authorized by Indonesia's National Institute of Public Administration), with locations in Jakarta, Bandung, and Makassar. STIA LAN was chosen for several reasons:

- This institute is dedicated specifically to train public officials (in central and local government, army, police, and state enterprises)
- As this institute has locations in Jakarta, Bandung, Makassar, we can include public
 officials from the east and western regions of Indonesia, thereby covering all
 provinces in Indonesia. In Jakarta, most institute participants come from the West
 region; in Bandung, from the West as well as the East region; Makassar: mainly from
 the East region.

4.4 Data collection: questionnaire

For our survey, we used a questionnaire as data gathering tool. A questionnaire is a technique to collect primary data by providing a set of questions or written statements for the respondent to be answered (Sugiyono, 2013). The data collected by means of a questionnaire are primary data, which are processed in order to meet the object of review, especially in terms of interpreting or in explaining the meaning of data. The selection of this technique is based on the reasons that: (a) the respondent has sufficient time to answer questions or statements; (b) each respondent has the same questions; (c) the respondent has the freedom to answer; and (d) it can be used to collect data from many respondents in a limited period of time.

With the questionnaire, data will be collected from the response of respondents toward a set of statements, both positive and negative statements. Furthermore, the questionnaire uses Likert scales or Likert Summated Ratings (Sugiyono, 2004). Likert scales are commonly used to measure perceptions of a person or a group toward social phenomenon. To get to Likert items, the variables to be measured were translated into

dimensions with several indicators (see the previous section), and these dimensions were taken as the starting point to construct the items (Sigit, 1999; Sugiyono, 2007). In the questionnaire, alternative answers were provided by means of a five-point scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. We also added the option of 'don't know' (number 8) for respondents who could not not answer the question at hand. "Forced choice" (to counter the central tendency bias inherent to uneven-point scales) by means of applying an even-point scale was considered, but was not chosen, as we feared that such forced choice could increase partial non-response (as respondents would then opt for the "don't know" answer or provide no answer at all).

Annex 1 contains the questionnaire that has been used. It has been drafted in English, then translated into Indonesian. After some test-runs, the questionnaire was finalized for use (in Indonesian); the questionnaire in Annex 1 is the English translation of this final version. The test-runs were conducted among (former) PhD students, who have a position as public official in Indonesia, in order to see if the formulation of the statements and questions in the questionnaire was adequate, and to see of the various Likert items were suited to construct Likert scales.

Regarding the format of the questionnaire, it is divided into two parts. In the first part, we inquired after the profile of respondents, and after their experiences in fulfilling tax obligations. Furthermore, we explored perceptions of respondents of their tax compliance and the underlying factors as outlined in the analytical model and hypotheses. In the second part, we explored the views of respondents as professionals (i.e. members of the state apparatus) towards the tax system in Indonesia and related aspects including problems associated with modernized tax administration system, tax sanctions, tax services, and tax morale, as well as their future expectations regarding these issues.

4.5 Data analysis technique

Data analysis technique is a series of activities performed after data collection to examine the relationship between variables, so that it can be concluded whether hypotheses are accepted or rejected (Sugiyono, 2011). Data can be analyzed by using a Structural Equation Model (SEM) analysis. SEM is a (set of) statistical technique(s) that analyze (latent i.e. not directly observable) variables by looking at data derived from the measurement instruments (Joreskog and Sorbom, 1996). In this context, we used correlation and regression analysis, and –to analyze the direct and indirect effect among variables- path analysis. Correlation, regression, and path analysis were realized by using SPSS application version 17.

Additionally SEM allows the researcher to diagnose which dimensions of variables are good indicators of these (latent) variables, i.e. to test the dimensions on their ability to construct the variables involved. To this end we used SmartPLS application version 2.0. Further information on this additional analysis (and on the outcomes) is given in Annex 2. Generally, in terms of convergent validity, discriminant validity and composite reliability of the dimensions used, the dimensions performed well.

The stages of data analysis embodied in this study can be elucidated as follows.

4.5.1 Descriptive analysis

Descriptive analysis was applied to the answers given by respondents for each variable, namely modernized tax administration system, tax sanctions, tax services, tax morale, and tax compliance, on statements referring to the indicators outlined in section 4.2.2.

Although we used Likert scale answer categories, we did not use Likert scores for the descriptive analysis, as Likert scale data, given the arbitrary character of the scales, are not very telling in terms of description. In this part of the analysis, we therefore used an alternative way to aggregate the answers on the various statements, and not the Likert scores of 1-5. We looked at the answers of respondents in terms of agreement (i.e. strongly agree and agree) or disagreement (i.e. strongly disagree and disagree) on positively and negatively formulated statements respectively. The number of such answers given by respondents was then divided by the total number of statements (S), i.e. including answers of (strong) agreement with negative statements or (strong) disagreement with positive statements, as well as neutral and "don't know" answers, for all statements on the dimension involved. To attain the overall assessment of a respondent for each dimension, the score was calculated as follows:

Score =
$$\sum$$
 strongly agree + agree answers² + \sum strongly disagree + disagree answers³

With:

S = the total number of statements for the dimension involved

A score of 40 percent, for example, means that for 40 percent of all statements on a specific dimension, the respondent (strongly) agrees with the (positively formulated) statements and/or (strongly) disagrees with the negatively formulated statements (and has chosen other answer possibilities in 60 percent of the cases).

Following Narimawati (2010), the results of the actual score percentage of the respondents can then interpreted by the following table:

Table 4.2 Criteria for the assessment of actual score percentage of respondents

No.	Percentage score	Criteria
1.	20.00 - 36.00	Very bad
2.	36.01 - 52.00	Bad
3.	52.01 - 68.00	Sufficient
4.	68.01 - 84.00	Good
5.	84.01 - 100.00	Very good

4.5.2 Verification analysis

For the verification analysis, we used Likert scores on the dimensions. The verification analyses consisted of the following tests.

² To positively formulated statements.

³ To negatively formulated statements.

1. Analysis of correlation

Analysis of correlation is carried out to see if a (significant) relationship exists between independent and dependent variables and to address the strength of the relationship between two variables based on the value of r derived from Pearson product moment correlation analysis (Hariwijaya and Triton, 2011). To that end, we used the following interpretation of r.

Table 4.3 Interpretation of the results of the analysis of correlation with r value

Interval	Relationship
0.001 - 0.200	Very low
0.201 - 0.400	Low
0.401 - 0.600	Sufficient strong
0.601 - 0.800	Strong
0.801 - 1.000	Very strong

Source: Hariwijaya and Triton (2011)

2. Regression analysis

Regression analysis is a statistical technique for estimating relationships among variables, especially in the case, when there are more than one independent variables (Hair et al., 1998; Sujianto, 2007; Arum, 2012). The regression equation developed in this context is:

Y = a + b1 X1 + b2 X2 + b3 X3 + b4 X4 + e1

With:

a = Intercept/constant Y = Tax compliance

X1 = MTAS

X2 = Tax sanction X3 = Tax service X4 = Tax morale

b1 b2 b3 b4 = Coefficient of regression of variables of X1 X2 X3 X4

e1 = Error

3. Statistical tests

We used two types of statistical tests:

- a. For those hypotheses that involve partial correlations (H1-4) we used a t-test. If the value of the calculated t (t-count) is higher than the value of t according to the table (t-table), then we accept the alternative hypothesis (Ha) in favor of H_0 (Ghazali, 2011).
- b. For those hypotheses that involve combined effects from the independent variables on the dependent variable, we used a combined significance test (Test-F). If the calculated F (F-count) is greater than the value of F according to the table (F-table), H_0 is rejected and Ha is accepted (Ghazali, 2011). Because we will only run one regression model including all variables (and no step-wise or hierarchical regression), the F-test involves comparison of that model to a model without predictors (intercept-only model).

4. Path analysis

This analysis is performed to measure the effect, represented by the path coefficient on each path of a causal relationship, of the independent variable on the dependent variable. By means of path analysis, we can measure the indirect and direct effect of independent variables on the dependent variable. Path analysis consists of the following stages:

Calculating the direct effect

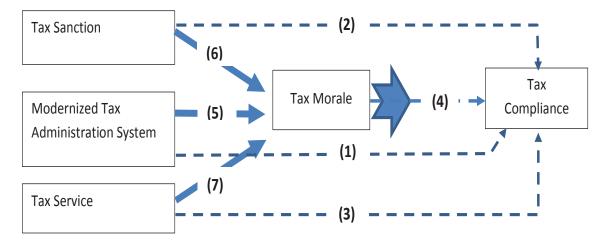
Partial effect. We calculate the value of the partial effect of the independent variables on the dependent variable (direct causal effect, DCE) based on the result of regression tests summarized in table coefficients (using SPSS version 17). The effect is calculated as the square of the (beta standardized) regression coefficient for the independent variable involved, multiplied by 100 to get a percentage effect.

Combined effect. We calculate the value of the combined effect of the independent variables on the dependent variable on the result of regression tests summarized in table coefficients (also using SPSS version 17). According to this table, we identify the adjusted R square (R^2) as the value of the combined effect, with the Determinant Coefficient (DC) = R^2 x 100 percent.

Calculating the indirect effect

In this study, the indirect effect of each independent variable on the dependent variable is analyzed based on the following figure:

Figure 4.2 The patterns of direct and indirect effect between independent and dependent variable



Referring to figure 4.2, the formula (Riduwan and Kuncoro, 2010) to measure the indirect effect can be elucidated as follows:

- 1) MTAS to tax compliance via tax morale $[5--->4--->(Y)] = DCE(1) + [DCE(5) \times DCE(4)]$
- 2) Tax sanction to tax compliance via tax morale [6-->4-->(Y)] = DCE(2)+[DCE(6)x DCE (4)]
- 3) Tax service to tax compliance via tax morale $[7-->4-->(Y)] = DCE(3) + [DCE(7) \times DCE(4)]$

Note:

- 1. DCE = Direct Causal Effect, coefficient value from table of coefficient (result of regression analysis with SPSS 17)
- 2. To know the percentage of each indirect effect, we multiply the result with 100 percent

4.6 Summary and conclusions

The aim of this chapter was to outline the empirical research design for the survey study.

Based on the previous chapters, we first identified the relationships between the four main elements of tax reform and tax compliance. We constructed the analytical framework, in which tax compliance is the dependent variable and the four elements are independent variables. We developed seven hypotheses regarding the partial and combined effect of the four elements on tax compliance. By considering the two groups of public officials within the study (government employees and state enterprise employees), we established eight more hypotheses regarding the comparison between these two groups concerning their tax compliance and the four elements that are relevant to tax compliance.

Next, we operationalized both independent variables and the dependent variable, by looking at various dimensions of the variables involved. We explained why a questionnaire (using self-assessment and perceptions of respondents) was chosen for, rather than direct measurement of the variables involved.

From the total population of almost 6 million public officials in Indonesia, a sample was taken of 400 respondents (with proportionate stratified sampling, resulting in 360 government employees and 40 state enterprise employees in the sample). Furthermore, it was explained why the actual 400 respondents were taken from the group of participants of STIA LAN, the national training institute for public officials in Indonesia. Subsequently, the structure and format of the actual questionnaire (see Annex 1) were elaborated upon. The actual survey was carried out in the summer of 2014.

Finally, we discussed the various types of analysis that will be used in the next chapter: descriptive analysis and verification analysis of hypotheses. The actual methods and tests involved (correlation and regression analysis and testing, path analysis) were discussed as well.

Building on the preparatory work done in this chapter, in the next chapter we will present the results of this first part of the empirical work.

CHAPTER 5 Results of the Survey Study

In this chapter, the perceptions of public officials regarding modernized tax administration system, tax sanctions, tax services and tax morale and their effects on tax compliance are described and analyzed. This is done in order to answer the subordinate research question 3: *How do public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale?* Section 5.1 provides some general characteristics of the group of public officials that formed the respondents of the survey study, as well as information on how they see their role as taxpayer. Subsequently, in section 5.2, all perceptions regarding modernized tax administration system, tax sanctions, tax services, and tax morale are analyzed in relation to their contributions to tax compliance, in line with the analytical framework and methods outlined in the previous chapter (hypotheses 1-7). In section 5.4, the focus is on the difference between government employees and state enterprise employees (hypotheses 8-15). Section 5.5 discusses the main findings of the survey study and their implications for follow-up research, and it concludes.

5.1 Description of the respondents

5.1.1 Characteristics of respondents

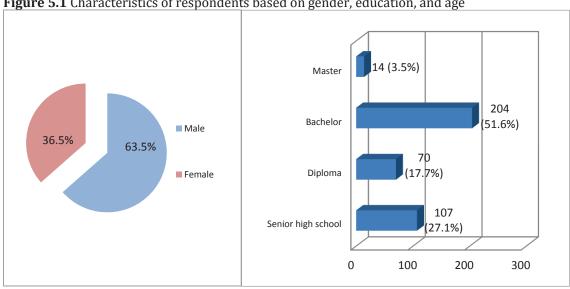
We first describe some **demographic characteristics** of respondents in this study. The result is shown in the following table and figure (table 5.1 and figure 5.1).

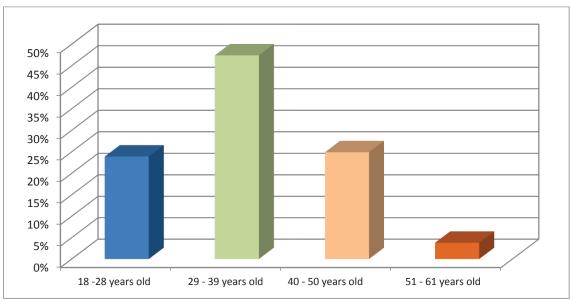
Table 5.1 Characteristics of respondents

No	Item	Frequency	Percent
1	Gender		
	Male	252	63.5
	Female	145	36.5
2	Marital status		
	Unmarried	90	22.6
	Married	304	76.2
	Divorced	5	1.3
3	Highest level of education		
	Senior high school	107	27.1
	Diploma degree (below undergraduate level)	70	17.7
	Bachelor degree	204	51.6
	Master degree	14	3.5

4	Age		
	18 – 28 years old	95	23.9
	29 – 39 years old	108	47.4
	40 – 50 years old	99	24.9
	51 – 61 years old	15	3.8

Figure 5.1 Characteristics of respondents based on gender, education, and age



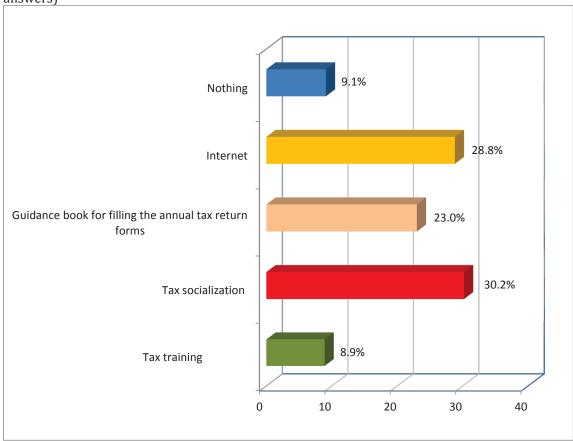


From table 5.1 and figure 5.1, it appears that more than 63 percent of the respondents are male, and about 36 percent is female. Furthermore, more than 76 percent of respondents are married. Nearly 50 percent of respondents are in the age of 29-39 years old. In terms of education, more than 55 percent of the respondents have a bachelor and/or master degree that is higher than a diploma degree (i.e. an academic programme below the undergraduate level, as the first stage after secondary school. It aims to give

students the basic technical and academic knowledge and transferable skills they need to go on to employment or further study in their chosen field). The fact that 45 percent of the respondents have a highest level of education below the bachelor degree reflects the situation before the bureaucratic reforms, when the senior high school/diploma level was sufficient to enter the public sector as a public official.

Figure 5.2 shows the sources the respondents use to get **knowledge about taxation** Tax dissemination material (provided by the tax authorities as part of tax socialization efforts) is the most important source (mentioned in around 30 percent of the cases), followed by internet (nearly 29 percent), the manual for filling in the tax return (about 23 percent), and tax training (almost 9 percent). Around 9 percent of the respondents indicate to have no specific source of tax knowledge.

Figure 5.2 Source of tax knowledge of respondents (multiple answers possible; n = 549 answers)



Additionally, some respondents mentioned other sources such as lesson materials and various other sources such as books, advertisements in TV, information from the financial service sector, tax magazines, electronic media, mass media, and colleagues respectively.

Figure 5.3 shows the **geographical origin** of the respondents.

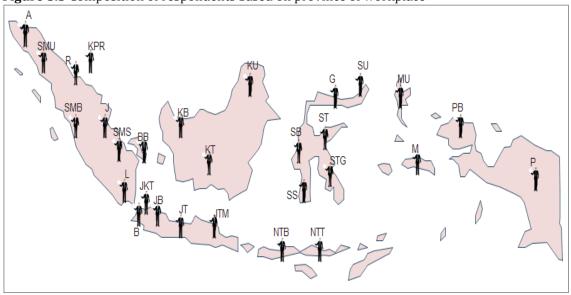


Figure 5.3 Composition of respondents based on province of workplace

The respondents come from 29 provinces in Indonesia, which represents 85 percent of all (34) provinces in Indonesia. There is a good coverage of the West and East regions. Respondents cover 14 out of the 16 (i.e. 88 percent) of the West regions⁴, and 15 out of the 18 (i.e. 83 percent) of the East regions⁵, as is shown in figure 5.4.

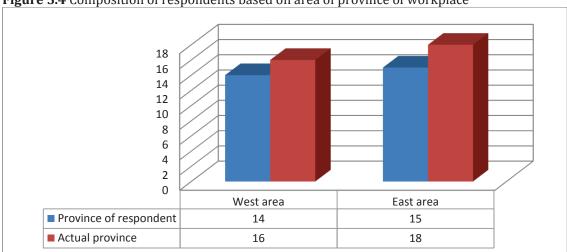
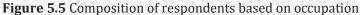


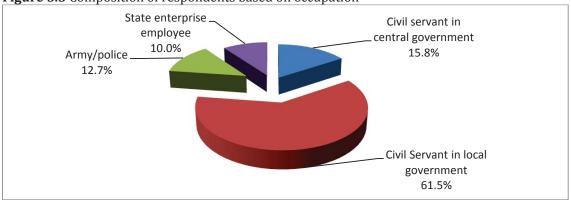
Figure 5.4 Composition of respondents based on area of province of workplace

⁴ Western area: A (Aceh), SMU (Sumatera Utara), KPR (Kepulauan Riau), R (Riau), SMB (Sumatera Barat), J (Jambi), SMS (Sumatera Selatan), BB (Bangka Belitung), L (Lampung), B (Banten), JKT (Jakarta), JB (Jawa Barat), JT (Jawa Tengah), JTM (Jawa Timur).

⁵ Eastern area: KB (Kalimantan Barat), KT (Kalimantan Tengah), KU (Kalimantan Utara), NTB (Nusa Tenggara Barat), NTT (Nusa Tenggara Tlmur), SS (Sulawesi Selatan), STG (Sulawesi Tenggara), SB (Sulawesi Barat), ST (Sulawesi Tengah), G (Gorontalo), SU (Sulawesi Utara), MU (Maluku Utara), M (Maluku), PB (Papua Barat), P (Papua).

Figure 5.5 shows the composition of the group of respondents based on their **occupation**.

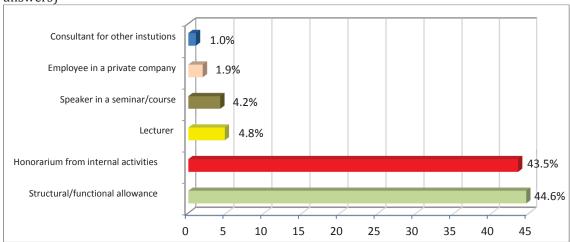




We can see that almost 62 percent of the respondents are civil servants in local government. The rests are civil servants in central government (16 percent), the armies/police (13 percent), and state enterprise employees (10 percent). The high share of respondents from local government corresponds with the current condition of employment in the public sector, in which most civil servants are employed at the local area to support the implementation of regional autonomy. The share of state enterprise employees in the group of respondents (10 percent) is in line with the population share (and the result of proportionate sampling as explained in the previous chapter).

In the terms of respondents' **income** besides basic salary, we find that most of the respondents have additional income from their institution such as functional or structural allowances (around 44 percent) and/or honorarium from internal activities (about 43 percent). Other additional income sources (mentioned in almost 12 percent of the cases) is derived from external activities such as teaching/speaking at a seminar or course, employment in a private company and/or consultant to other institutions, as shown in figure 5.6.

Figure 5.6 Income of respondents besides basic salary (multiple answers possible; n = 480 answers)



Some respondents mentioned other sources of additional income such as trade and various other sources.

5.1.2 Respondents as taxpayers

In this sub-section, we present the findings regarding the role of the respondents as taxpayers in the tax system, by focusing on four aspects: 1) experience of respondents in fulfilling their tax obligations; 2) experience with services in tax offices, 3] the interest in and knowledge of respondents regarding taxation; 4) respondents' perceptions of their position in the implementation of the tax system. This description is meant to provide some background information, before (in section 5.3) we more systematically present findings on respondents' tax compliance and their perception of the importance of the four underlying factors.

Experiences in fulfilling tax obligations

According to our findings, about 31 percent of the respondents do not submit the annual tax return regularly. Specifically over the last 2 years, around 27 percent indicate that they have been late in submitting the annual tax return; nearly 24 percent of the respondents have been late in paying the personal income tax. However, only about 16 percent of the respondents have experiences with getting tax sanctions. This means that a considerable part of the respondents, who do not submit their tax return on time and/or do not pay their taxes on time, is not confronted with the appropriate sanctions. Out of those respondents that indicated that they have been late in submitting their tax return, 55 percent said they were not confronted with administrative sanctions; 63 percent said that they were not confronted with criminal sanctions. 42 percent of the respondents, who indicated both late submitting and paying were not hit by administrative sanctions; 44 percent of these respondents indicated that no criminal sanctions were taken against them.

Experience with services in tax offices

About 55 percent of the respondents indicate that over the last three years they have visited the tax office only 1-5 times. About 17 percent indicate more frequent visits (6-10 times or more than 10 times). Around 26 percent of the respondents did not visit the tax office over the last three years. A very small proportion of the respondents (about 1 percent) indicated that they never visit the tax office because their annual tax return is reported via a drop-box 6 .

As far as the purpose of visits is concerned, most of the respondents that indicated one or more visits over the last three years, come to submit the annual personal tax return (mentioned by 79 percent of the respondents), and/or to register the tax identification number (mentioned by almost 76 percent of the respondents), to submit monthly and yearly tax reports (66 percent), to consult (65 percent) or to complain (51 percent). Other reasons include picking up tax dissemination material, tax forms, changing the tax identification number cards, and reporting a change of job status.

Asked for the facilities at their local tax offices, the respondents indicated that the following facilities were present: parking space (mentioned by 95 percent of the respondents), waiting room (96 percent), electronic board or digital signs (83 percent), toilets (94 percent), TV and newspaper (89 percent), electronic queue (82 percent), tax materials and forms (93 percent), a help desk (85 percent), air-conditioning (almost 90

⁶ A drop-box is a box provided by the tax office as a tool to deliver the annual tax return. Usually, this drop box will be placed at strategic places, such as in malls, shopping centers, and certain offices.

percent), and wifi (44 percent). Other facilities that were mentioned by some respondents include a worship or meditation room and candy for visitors.

Nearly 92 percent of the respondents indicate that all services at their tax offices are free of charge. This is in accordance with government regulations. However, we find that some respondents (8 percent of all respondents) mention that they actually pay money for services at the tax office, either for some administrative services (mentioned in 40 percent of the cases where respondents indicated some sort of payment), and/or consultation fees (25 percent), and/or a tip for the service (also 25 percent) and/or costs of negotiations (approximately 23 percent). This illustrates the existence of irregularities in the tax sector.

Around 26 percent of the respondents mention that they have had unpleasant experiences in getting the right tax services; about 59 percent of the respondents indicate they have never had such bad experiences. Bad experiences relate to complex and not straightforward tax administrative processes (mentioned by around 49 percent of those respondents that have bad experiences), and/or discrimination in service provision (46 percent), and/or length of service provision (47 percent), and/or the need to pay for several services (37 percent), and/or unfriendly services (34 percent), and/or less informative services (51 percent), and/or unresponsive services (49 percent).

Of the respondents, 16 percent mention that they use one or more external parties in handling their tax obligations. These parties consist of private tax consultants (mentioned by 36 percent) and/or staff working in tax offices and providing private consultancy (46 percent) and/or staff in their own office (38 percent) and/or colleagues in their own office (39 percent), and/or corporate treasurers (64 percent).

Regarding the experiences of respondents with the interaction with Indonesia's modernized tax administration system, 58 percent of respondents said they have experienced changes in the tax office after introduction of this modernization; 48 percent said they have not experienced any change. Changes highlighted include the application of new information and technology (mentioned by 80 percent of the respondents who experienced changes); the implementation of information systems and technology for tax services specifically (79 percent); more responsible tax officials (70 percent); more ease in determining the wealth imposed taxes (67 percent); shorter lead time for services (73 percent); more transparency (67 percent); drastic reduction of the unofficial charges (69 percent); better tax dissemination (66 percent); improvement of standard operating procedures for tax services (72 percent); the use of individual identity in e-fin/e-filling (60 percent); the online submission of tax returns to facilitate taxpayers (72 percent); office facilities that are more complete, and "as good as in the bank" (69 percent); quick and comfortable tax services (69 percent); and submitting the annual tax return more flexible, via online or coming directly to the tax offices (approximately 71 percent).

Interest in and knowledge of respondents regarding taxation

Asked for the extent to which they were interested in tax matters, only 26 percent of the respondents indicated that they are interested in taxation. Nearly 55 percent was neutral; around 6 percent of the respondents said that they were uninterested or very uninterested.

This relatively low level of interest is also reflected in the level of knowledge. After a brief explanation of the issues at hand, respondents were asked if they consider themselves to have sufficient understanding/knowledge of issues of tax compliance, modernized tax administration, tax sanctions, tax services, and tax morale. On average

only 52 percent of the respondents indicated to have sufficient knowledge of these issues; tax compliance issues are said to be understood sufficiently by 62 percent of the respondents, tax services by 56 percent, tax sanctions by 52 percent, modernized tax administration system by 47 percent, and tax morale issues by 44 percent.

Views of respondents regarding the tax system and their role in it

Asked what first comes to mind when the term taxation is used, 76 percent of the respondents came up with a positive association, such as the importance of taxation for state revenue (about 18 percent), the duty of every citizen with a taxable income to pay taxes (15 percent), the improvement of public facilities (13 percent), economic development (13 percent), welfare for the poor people (9 percent) and helping others (8 percent). This indicates that most respondents have a positive frame regarding taxation. On the other hand, 24 percent of the respondents associated taxation with negative issues, such as getting sanctions (8 percent), reduced income (6 percent), audits (4 percent), and complexity in tax administrative processes (5 percent).

The vast majority of respondents (95 percent) acknowledged that they have the responsibility to pay taxes. Asked more specifically on certain obligations, the respondents agree that this involves having a TIN (98 percent), paying taxes properly and timely (93 percent), filling out and submitting annual tax returns (93 percent), submitting the annual tax return on time (89 percent), conducting the bookkeeping (only 55 percent), reporting other taxable incomes than the basic salary (77 percent), reporting data of tax objects correctly (84 percent) and –generally- implementing tax laws properly (88 percent).

Confronted with some specific statements about tax compliance, 78 percent of the respondents said they actively fulfill their tax obligations, 60 percent said they are proud to pay taxes because they feel that the current public facilities are in accordance with the taxes paid, and 71 percent even find themselves happy if their incomes are taxed. According to 79 percent of the respondents, tax laws should be obeyed whatever the conditions. 80 percent agrees that non-compliance in taxation always leads to declining tax revenue. However, 29 percent of the respondents feel that paying taxes is primarily a burden.

In general, only about 34 percent of the respondents are satisfied with the implementation of the tax system in Indonesia. Nearly 26 percent are dissatisfied because they consider the government to have failed in the development of Indonesia (mentioned by 46 percent of these respondents) and/or because of the misuse of tax resources (73 percent). Another factor mentioned (by 42 percent) is the absence of significant changes in the tax system in spite of decades of tax reform and the implementation of a modernized tax administration system. Of all the respondents 64 percent agree with the statement that employees in the public sectors are good in making rules but poor in their realization and/or the apparatus is good in making laws, but in the end they violate them.

Regarding their own role, 72 percent of the respondents agree that employees in the public sectors are part of the implementation of tax laws and are a role model for the society based on the labor law no. 43, article 5, of 1999. Around 76 percent of the respondents are aware that their behavior is an example for the community, especially when it comes to fulfilling tax obligations. 80 percent state that in the end they are proud to be a role model in taxation. Of all respondents 79 percent agree that tax compliance has to be started from the leaders; the statement that their behaviors are an exemplary model for subordinates, also regarding taxation, is agreed upon by 85 percent

of the respondents. In fact, 40 percent of the respondents admit that their own tax compliance behavior follows the tax compliance behavior of their boss(es).

Finally, respondents were asked if they agree (or not) with the main relationships that were part of the analytical framework. On average (for the four relations involved) 80 percent of the respondents agree that the existence of modernized tax administration system, tax sanctions, tax services, and tax morale affects their tax compliance. In more detail, they agree that the modernization of structure, procedure, strategy, and culture within the framework of a modernized tax administration system produces simple administration process and facilitates them in meeting tax obligations (85 percent agree); the existence of administrative and criminal sanctions as a tool to educate taxpayers and to create the discipline makes them to be cautious and afraid of making mistakes (82 percent agree); the existence of tax knowledge, tax fairness, and trust in government prompts them to pay taxes and to submit the annual tax return (77 percent agrees); and the existence of physical facilities at the tax office, reliability, responsiveness, assurance and empathy from the tax officials facilitate them in the administrative process (77 percent agree).

5.2 Descriptive and Verification Analysis (hypotheses 1-7)

Building on the analytical framework presented in the previous chapters, and on the various dimensions that were distinguished for the dependent and independent variables, the questionnaire included a range of statements by which the perception of the respondents regarding these variables is measured. The findings are presented in this section, first by going through the five variables one by one (section 5.2.1), then by looking at the correlations involved, as well as the partial and combined effects, i.e. the testing of hypotheses H1-H7 (section 5.2.2).

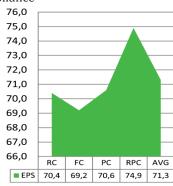
5.2.1 Respondents' perception of the five variables

Respondents' perception of their own tax compliance

Figure 5.7 shows the results for the dependent variable of tax compliance. As explained in chapter 4 (section 4.5.1), we calculated scores for each respondent on each dimension of the variables involved based on the share of (strongly) agreeing answers (positive statements) and (strongly) disagreeing answers (negative statements), in the overall number of statements regarding that dimension. The figures below show the average score of the respondents for each dimension. All dimensions of their tax compliance as perceived by the respondents can be interpreted as good.

Figure 5.7 Perception of respondents on the dimensions of tax compliance

Dimensions and indicators	% actual score
	Result of
	interpretation
Registering compliance (RC) by indicator of register	70.4
voluntarily and register as a role model	good
Filling compliance (FC) by indicator of recording and	69.2
bookkeeping transactions of incomes; filling out tax	good
forms; accuracy in filling out tax forms	
calculating all incomes; honesty in calculating all	
incomes; and accuracy in using tax rate	
Paying compliance (PC) by indicator of calculating and	70.6
paying taxes in line with applicable rules; paying taxes	good
for all incomes; and paying without cheating	
Reporting compliance (RPC) by indicator of submitting	74.9
annual tax return; submitting itself annual tax return;	good
and submitting timely annual tax return	
Average (AVG)	71.3
	good



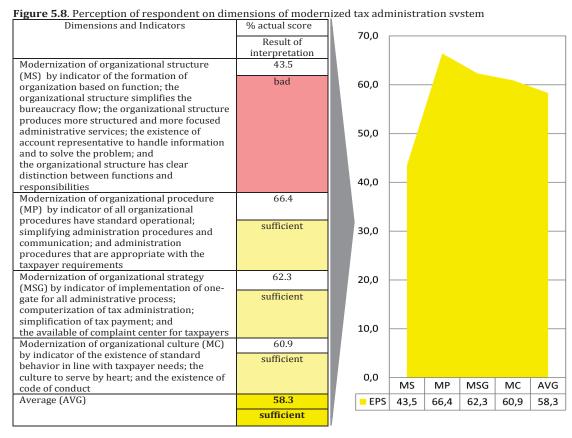
Differences between various groups of respondents regarding tax compliance

Although we did not formulate any hypotheses regarding possible differences in perception of tax compliance between various groups of respondents, we did run some tests to see if such differences are present. We did that by comparing the Likert scores on the variable of tax compliance by means of independent-samples (two-tailed) t-tests, with the following sub-samples:

- Male respondents and female respondents;
- Age group 18-39 years and age group 40-61 years;
- Respondents with a bachelor and/or master degree, and respondents with a senior high school and/or a below undergraduate diploma;
- Respondents from the West region and respondents from the East region. In all four cases, the differences were not significant (not even at significance level 0.2).

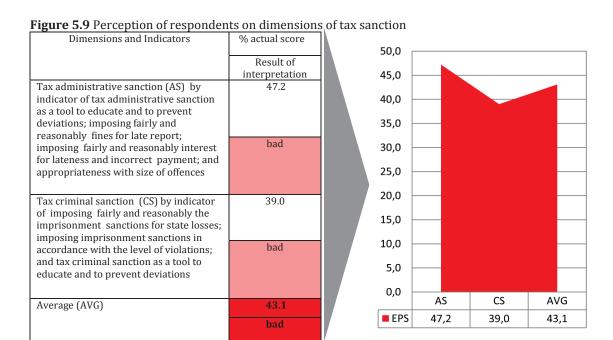
Respondents' perceptions regarding modernized tax administration system (MTAS)

Figure 5.8 shows the results for the first independent variable, modernized tax administration system, which also consists of various dimensions and corresponding statements. From the figure, it follows that the modernization of structure is perceived as bad, and the other dimensions of MTAS as sufficient.



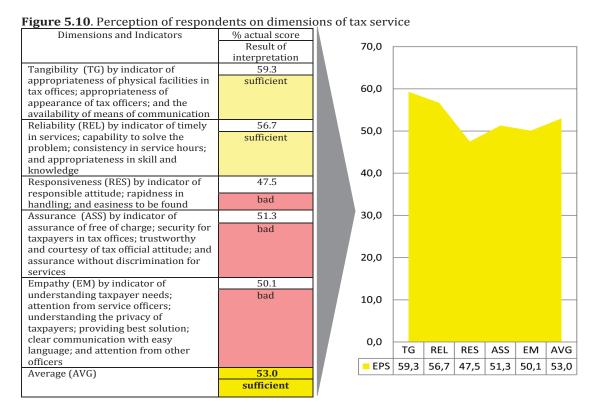
Respondents' perceptions regarding tax sanction

Figure 5.9 shows the results for the second independent variable, tax sanction, which also consists of various dimensions and corresponding statements. It is clear from figure 5.9 that the respondents hardly agree with the statements on tax sanctions, and their disagreement shows that they think tax sanctions are not properly implemented.



Respondents' perceptions regarding tax services

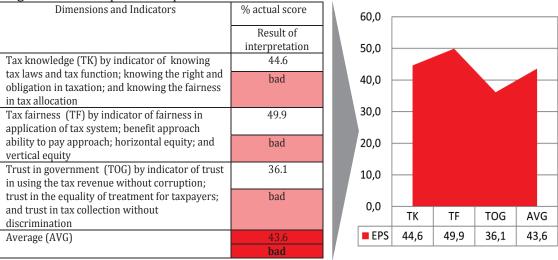
Figure 5.10 shows the results for the third independent variable, tax services, which again consists of various dimensions and corresponding statements. Figure 5.10 shows that the respondents perceive tax services to be sufficient along the dimensions of tangibility and reliability, but to be bad in terms of responsiveness, assurance and empathy. Overall, the perception of tax services is that they are sufficient.



Respondents' perceptions regarding tax morale

Figure 5.11 shows the results for the final (and central) independent variable, tax morale, and its various dimensions and corresponding statements. As shown in figure 5.11, in all three dimensions, respondents percieve tax morale to be bad.

Figure 5.11. Perception of respondents on dimensions of tax morale



5.2.2 Hypotheses H1-H7

We now turn to the actual hypotheses (H1-H7). We first look at the correlations between the four independent variables on the one hand and the dependent variable on the other hand.

Perception of MTAS and perception of tax compliance

Table 5.2 shows the correlation between (the perception by respondents of) MTAS and (their perception of) tax compliance.

Table 5.2. Composition of result of verification analysis regarding MTAS based on value of correlation, strength of correlation, hypothesis, and effect

	Correlation Strength of				Hypothesis	Effect ⁸		
	Correlation	Correlation correlation t-table t-count Result						
	0.358	Low	1.649	3.938	Accepted, positively associated	5.5%		

(Respondents' perception of) MTAS is positively associated with (their perception of) tax compliance, which means that hypothesis **H1** is accepted¹⁰. However, the strength of correlation is low, and the partial effect of MTAS on tax compliance is just above 5 percent.

⁷ As explained in chapter 4, the correlations are Pearson's r. All calculations used for the correlation, regression and path analysis, and for the testing of hypotheses, are based on Likert scores. Annex 6 provides descriptive statistics of these Likert scores (for the sample as a whole, and for GE and SEE).

⁸ The partial effects are taken from the regression analysis, which will be discussed later; the partial effects are calculated as the squares of the regression coefficients, see table 5.7.

⁹ Value of t with df = 398, and confidence level 0.95.

¹⁰ H1: A modernized tax administration system is positively associated with tax compliance.

Perception of tax sanctions and perception of tax compliance

Table 5.3 shows similar findings for tax sanctions and tax compliance.

Table 5.3. Composition of result of verification analysis regarding tax sanction based on value of correlation, strength of correlation, hypothesis, and effect

Completies	Strength of			Hypothesis	Effect	
Correlation	correlation	t-table	t-table t-count Result			
0.250	Low	1.649	0.100	Rejected, not positively associated	0.004%	

We find that (respondents' perception of) tax sanction is not positively associated with (their perceptions of) tax compliance: **hypothesis H2 is rejected**¹¹. The partial effect is almost zero.

Perception of tax services and perception of tax compliance

Table 5.4. Composition of result of verification analysis regarding tax service based on value of correlation, strength of correlation, hypothesis, and effect

Caralatia	Strength of			Hypothesis	E.C 4	
Correlation correlation		t-table	t-count	Result	Effect	
0.292	Low	1.649	1.833	Accepted, positively associated	1.2%	

Referring to table 5.4, we see that (respondents' perception of) tax services and (their perception of) tax compliance are positively related. **Hypothesis H3 is accepted**¹². Again however, the strength of the correlation is low, as is the partial effect.

Perception of tax morale and perception of tax compliance

Table 5.5 shows the findings on tax morale and tax compliance.

Table 5.5. Composition of result of verification analysis regarding tax morale based on value of correlation, strength of correlation, hypothesis, and effect

Carrelation	Strength of			Hypothesis	Ecc	
Correlation correlation		t-table	t-count	Result	Effect	
0.314	Low	1.649	1.649 1.918 Accepted, positively associated		1.5%	

We conclude that **hypothesis H4 is accepted**¹³, but again with a weak correlation and a small partial effect.

¹¹ H2: Tax sanction is positively associated with tax compliance.

 $^{^{12}}$ H3: Tax service is positively associated with tax compliance.

¹³ H4: Tax morale is positively associated with tax compliance.

Combined effect of MTAS, tax sanction, tax service, and tax morale on tax compliance Table 5.6 and table 5.7 show the result of the regression analysis, first the model summary, then the overview of the regression coefficients.

Table 5.6 Model summary

	D	Adimeted D	Ctd Eman of		Change	Statis	tics	
R	Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
0.394	0.155	0.146	11.15	0.155	18.093	4	395	0.000

a. Predictors: (Constant), TAX MORALE (X4), TAX SERVICE (X3), MTAS (X1), TAX SANCTION (X2)

Table 5.7 Regression coefficients (Y: TAX COMPLIANCE)

Model	0	lardized cients	Standardized Coefficients	t	Sig.	
	В	B Std. Error Be				
(Constant)	40.681	3.056		13.311	0.000	
MTAS (X1)	0.319	0.081	0.234	3.938	0.000	
TAX SANCTION (X2)	0.014	0.143	0.006	0.100	0.920	
TAX SERVICE (X3)	0.063	0.034	0.107	1.833	0.068	
TAX MORALE (X4)	0.187	0.097	0.122	1.918	0.056	

Table 5.6 shows the combined effect of the four variables on tax compliance. The table shows that the value of F-test is 18.093, which is higher than F-table (df1=4; df2=395) at 2.39. This result indicates that the combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is positively associated with tax compliance: **hypothesis H5 is accepted**¹⁴. However, the effect is rather small: only around 15 percent (see adj. R square, table 5.6).

Table 5.7 provides some additional information on the four dependent variables, and the t-values for the coefficients in the regression model confirm the acceptation/rejection of hypotheses H1-4 as performed above, based on (Pearson's r) correlation coefficients.

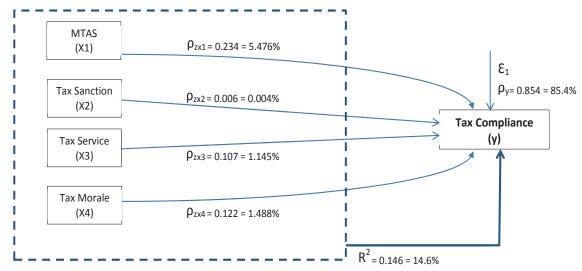
b. Dependent Variable: TAX COMPLIANCE (Y)

¹⁴ H5: The combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is positively associated with tax compliance.

Comparison between partial and combined effect of MTAS, tax sanction, tax service, and tax morale on tax compliance

Based on the beta coefficients resulting from the regression analysis, see table 5.7, the pattern of the relationships and the comparison between partial and combined effects of MTAS, tax sanction, tax service, and tax morale on tax compliance are presented in the figure below.

Figure 5.12. Pattern of partial and combined effect of MTAS, tax sanction, tax morale, and tax service on tax compliance

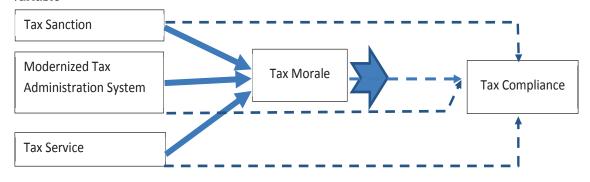


According to figure 5.12, the combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is higher than the partial effect of each of these elements on tax compliance. **Hypothesis H6 is accepted**¹⁵.

Direct effects and indirect effects through tax morale

Figure 5.13 –again- explains the direct effects and indirect effects, when we use the variable of tax morale as a central (intervening/mediator) variable on which the other three dependent variables have an impact (and which in its turn impacts tax compliance).

Figure 5.13 The patterns of direct and indirect effect between independent and dependent variable



¹⁵ H6: The combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is higher than the partial effect of each of these elements on tax compliance.

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In table 5.8 the results are shown of our analysis of these direct and indirect effects.

Table 5.8. Summary of direct and indirect influence of MTAS (X1), Tax Sanction (X2), Tax Service (X3), and Tax Morale (X4) on Tax Compliance (Y) of public officials

		Causal effect	m . 1	% effect (R square)	
Effect of variable	Direct	Indirect through tax morale (X4)	Total		
MTAS (X1) on Tax Compliance (Y)	0,234		0,234	5,476%	
		0,234 + (0,264 x 0,122)	0,266	7,076%	
Tay Canatian (V2) on Tay Campliana (V)	0,006		0,006	0,004%	
Tax Sanction (X2) on Tax Compliance (Y)		0,006 + (0,303x 0,122)	0,043	0,185%	
Tax Service (X3) on Tax Compliance (Y)	0,107		0,107	1,145%	
		0,107 + (0,272 x 0,122)	0,140	1,960%	

Table 5.8 shows that the indirect pattern increases the effect of MTAS on tax compliance at 1.6 percent, tax sanction at 0.181 percent, and tax service at 0.815 percent. Hence, this result clarifies that the indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct effect of these elements without tax morale on tax compliance. This means that **hypothesis H7 is accepted**¹⁶.

5.3 Government employees versus state enterprise employees (hypotheses 8-15)

In the previous section no differentiation was made between public officials. In this section we will present similar information as in the previous section (and we will follow the same format of presentation), but now in each case we make a difference between government employees (GE) and state enterprise employees (SEE).

Perception of tax compliance

Figure 5.14 shows the differences between GE and SEE regarding their perception of tax compliance. In the presentation we use the scores calculated according to formula outlined in section 4.5.1. GE show higher scores at all dimensions of tax compliance than SEE. Overall, GE tax compliance is percieved as good, and SEE as sufficient, but the difference is not significant ¹⁷. **Hypothesis 8 can thus be rejected** ¹⁸.

¹⁶ H7: The indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct combined effect of these three elements (i.e. without tax morale) on tax compliance.

¹⁷ For the significance tests we do not use the scores calculated according to the formula of section 4.5.1, but Likert scores (see annex 6 for the descriptive statistics on these scores). The result of the independent-samples one-sided t-test at significance level 0.05 using the Likert scores (with Likert score 3.4871 for GE, 3.4740 for SEE) shows there is no significant difference between GE and SEE.

¹⁸ H8: Government employees have a higher tax compliance than state enterprise employees.

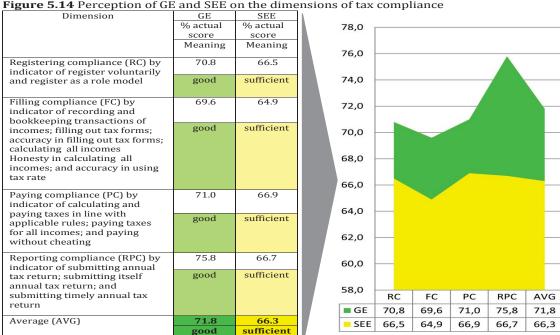
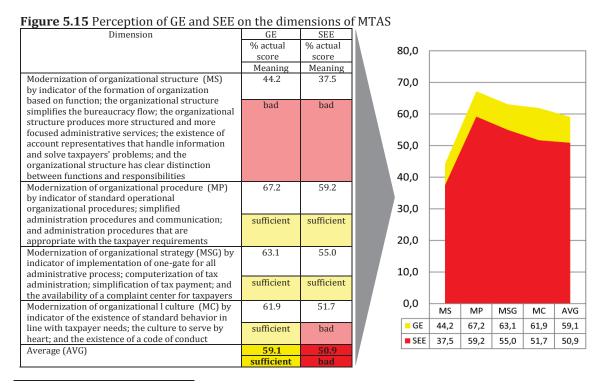


Figure 5.14 Perception of GE and SEE on the dimensions of tax compliance

Perception of modernized tax administration system (MTAS)

Figure 5.15 shows the differences between GE and SEE regarding their perception of modernized tax administration system (MTAS). Except for the dimension of culture GE and SEE have similar scores (i.e. in the same range). Overall, the difference of perception between GE and SEE regarding MTAS is statistically significant¹⁹.



 19 Result of independent-samples one-sided t-test at significance level 0.05 using the Likert scores (with Likert score 3.3595 for GE, 3.1470 for SEE).

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Perception of tax sanction

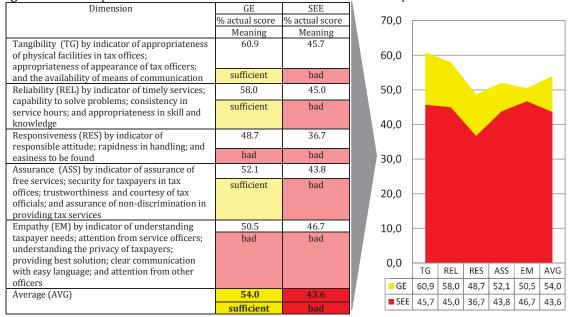
Figure 5.16 shows the differences between GE and SEE regarding their perception of tax sanction. The main and clear difference between GE and SEE is the perception of the criminal tax sanction. Overall, the perception of tax sanction is significantly different for GE and SEE²⁰.

Figure 5.16 Perception of GE and SEE on the dimensions of tax sanction Dimension GE SEE 60,0 % actua % actual score score 50,0 Meaning Meaning Tax administrative sanction (AS) by indicator of tax 47.8 41.7 40,0 administrative sanction as a tool to educate and to prevent deviations; imposing fairly and reasonably 30,0 fines for late report; imposing fairly and reasonably interest for lateness and incorrect payment; and bad bad appropriateness with size of offences 20,0 Tax criminal sanction (CS) by indicator of imposing 40.1 29.2 fairly and reasonably the imprisonment sanctions 10,0 for state losses; imposing imprisonment sanctions in accordance with the level of violations; and tax bad very bad 0,0 criminal sanction as a tool to educate and to prevent AS CS AVG deviations GE 47,8 40,1 43,9 Average (AVG) ■ SEE 41,7 29,2 35,4

Perception of tax services

Figure 5.17 shows the differences between GE and SEE regarding their perception of tax services, with the dimensions of tangibility, reliability, and assurance showing clear differences between GE and SEE. Overall, the difference in perception between GE and SEE is not statistically significant²¹.





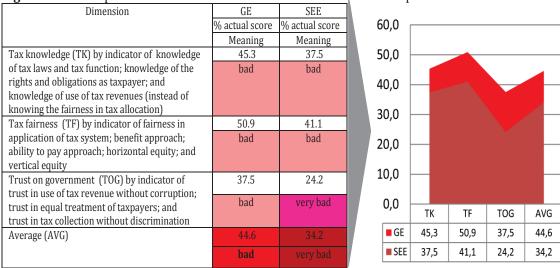
²⁰ Result of independent-samples one-sided t-test at significance level 0.05 using the Likert scores (with Likert score 3.0294 for GE, 2.7745 for SEE).

²¹ Result of independent-samples one-sided t-test at significance level 0.05 using the Likert scores (with Likert score 3.0659 for GE, 2.8325 for SEE).

Perception of tax morale

Figure 5.18 shows the differences between GE and SEE regarding their perception of tax morale. Trust in government scores lower among SEE than among GE.

Figure 5.18 Perception of GE and SEE toward the dimensions of tax compliance



The conclusion from the descriptions above is for all variables involved, and throughout all dimensions concerned, SEE have a more negative perception than GE. This difference is statistically significant²².

Perception of MTAS and perception of tax compliance

Table 5.9 shows the correlation between (the perception by GE and SEE of) MTAS and (their perception of) tax compliance.

Table 5.9 Composition of result of verification analysis regarding the effect of MTAS on tax compliance of both GE and SEE based on value of correlation, strength of correlation, hypothesis, and effect

MTAC - TC	Carre	Strength of		Fine	ding	Effect	
MTAS -> TC	Corr.	corr.	t-table	t-count	result	Effect	
GE	0.340	Low	1.649	3.076	Positively associated	3.8%	
SEE	0.541	Sufficiently strong	1.686	3.430	Positively associated	33.1%	

MTAS is positively associated with tax compliance for both GE and SEE. However, the strength of correlation is low for GE and is sufficient for SEE, and the partial effect of MTAS on tax compliance is just nearly 4 percent and is about 33 percent for SEE, which means that **hypothesis H9 is rejected**²³.

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²² Result of independent-samples one-sided t-test at significance level 0.05 using the Likert scores (with Likert score 3.3064 for GE, 3.0880 for SEE).

²³ H9: Government employees show a more positive impact of modernized tax administration system on their tax compliance than state enterprise employees

Perception of tax sanctions and perception of tax compliance

Table 5.10 shows the correlation between (the perception by GE and SEE of) tax sanctions and (their perception of) tax compliance.

Table 5.10 Composition of result of verification analysis regarding the effect of tax sanction on tax compliance of both GE and SEE based on value of correlation, strength of correlation,

hypothesis, and effect

Tax sanction -> TC	Соми	Strength		Fine	ding	Effort
rax sanction -> 1C	Corr. of corr.		t-table	t-count	result	Effect
GE	0.260	Low	1.649	0.262	Not positively associated	0.029%
SEE	0.175	Very low	1.686	- 0.677	Not positively associated	- 1.4%

Tax sanctions are not associated with tax compliance for both GE and SEE. The strength of correlation is low for GE and is very low for SEE, and the partial effect of tax sanctions on tax compliance is almost 0.03 percent for GE and is minus around 1 percent for SEE. Although this difference is in line with the expectations of hypotheses H10, the insignificance of the results for both groups leads us to conclude that **hypothesis H10 is rejected²⁴**.

Perception of tax services and perception of tax compliance

Table 5.11 shows the correlation between (the perception of GE and SEE of) tax services and (their perception of) tax compliance.

Table 5.11. Composition of result of verification analysis regarding the effect of tax service on tax compliance of both GE and SEE based on value of correlation, strength of correlation,

hypothesis, and effect

Tanagarrias NTC Com		Strength		Find	ling	Effect
Tax service -> TC	Corr.	of corr.	t-table	t-count	result	Effect
GE	0.294	Low	1.649	1.682	Positively associated	1.1%
SEE	0.277	Low	1.686	0.923	Not positively associated	2.4%

Tax services are positively associated with tax compliance for GE and are not positively associated for SEE. The strength of correlation is low for both GE and SEE, and the partial effect of tax services on tax compliance is just around 1 percent for GE and is about 2 percent for SEE. Based on the correlation analysis (weak correlation for GE, no correlation for SEE) we could accept hypothesis 11; the partial effects however run contrary to the hypothesis. To be on the safe side, we conclude that **hypothesis H11 has to be rejected**²⁵.

²⁴ H10: Government employees show a more positive impact of tax sanction on their tax compliance than state enterprise employees

²⁵ H11: Government employees show a more positive impact of tax service on their tax compliance than state enterprise employees.

Perception of tax morale and perception of tax compliance

Table 5.12 shows the correlation between (the perception by respondents of GE and SEE of) tax morale and (their perception of) tax compliance.

Table 5.12. Composition of result of verification analysis regarding the effect of tax morale on tax compliance of both GE and SEE based on value of correlation, strength of correlation,

hypothesis, and effect

Toy Movele > TC	Соми	Strength		Fin	ding	Effort
Tax Morale -> TC	COIT.	Corr. of corr.		t-count	result	Effect
GE	0.329	Low	1.649	2.211	Positively associated	2.3%
SEE	0.194	Very low	1.686	- 0.570	Not positively associated	- 0.9%

Tax morale is positively associated with tax compliance of GE and is not positively associated for SEE. The strength of correlation is low for GE and is very low for SEE, and the partial effect of tax morale on tax compliance is around 2 percent and is minus 0.9 percent for SEE. This difference is in line with the expectations of hypotheses H12, and leads us to conclude that **hypothesis H12 is accepted**²⁶.

Combined effect of MTAS, tax sanction, tax service, and tax morale on tax compliance for GE

Table 5.13 and table 5.14 show the result of the regression analysis, first the model summary, then the overview of the regression coefficients, for GE.

Table 5.13. Model Summary for GE

					Change	Statistic	cs	
R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
0.389	0.151	0.142	11.136	0.151	15.797	4	355	0.000

a. Predictors: (Constant), TAX MORALE (X4), TAX SERVICE (X3), MTAS (X1), TAX SANCTION (X2) b. Dependent Variable: TAX COMPLIANCE (Y)

Table 5.14. Regression coefficients (Y: TAX COMPLIANCE)

		dardized icients	Standardized Coefficients	t	Sig.	
	В	Std. Error	Beta		_	
(Constant)	41.182	3.221		12.787	0.000	
MTAS (X1)	0.262 0.085		0.194	3.076	0.002	
TAX SANCTION (X2)	0.041 0.155		0.017	0.262	0.793	
TAX SERVICE (X3)	0.061	0.036	0.104	1.682	0.093	
TAX MORALE (X4)	0.233	0.105	0.152	2.211	0.028	

²⁶ H12: Government employees show a more positive impact of tax morale on their tax compliance than state enterprise employees.

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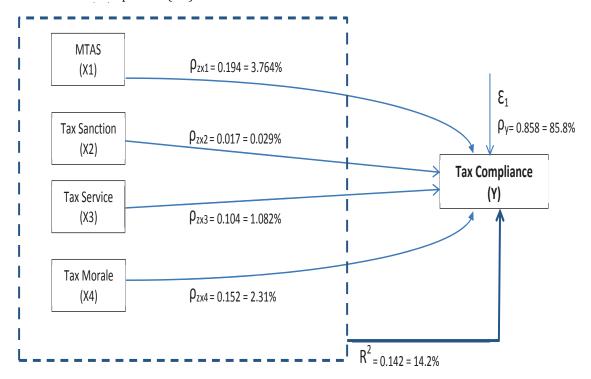
Table 5.13 shows the combined effect of the four variables on tax compliance. The table shows that the value of F-test is 15.797, which is higher than F-table (df1=4; df2=355) at 2.39. This result indicates that the combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is positively associated with tax compliance. However, the effect is rather small: only around 14 percent (see adj. R square, table 5.13).

Table 5.14 provides some additional information on the four dependent variables, which will be used below.

Comparison between partial and combined effect of MTAS, tax sanction, tax service, and tax morale toward the tax compliance, for GE

Based on the beta coefficients resulting from the regression analysis, see table 5.14, the pattern of the relationships and the comparison between partial and combined effects of MTAS, tax sanction, tax morale, tax service on tax compliance for GE are presented in the figure below.

Figure 5.19 Pattern of partial and combined effect of MTAS, tax sanction, tax morale, and tax service on tax compliance (GE)



According to figure 5.19, the combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is higher than the partial effect of each of these elements on tax compliance for GE.

Combined effect of MTAS, tax sanction, tax service, and tax morale on tax compliance, for SEE

Table 5.15 and table 5.16 show the result of the regression analysis, first the model summary, then the overview of the regression coefficients, for SEE.

Table 5.15. Model Summary for SEE

	D	Adjusted R	Std. Error of		Change	e Statis	tics	
R	Square	Square	the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
0.562	0.316	0.238	11.046	0.316	4.05	4	35	0.008

a. Predictors: (Constant), TAX MORALE (X4), TAX SERVICE (X3), MTAS (X1)., TAX SANCTION (X2)

Table 5.16. Regression coefficients (Y: TAX COMPLIANCE)

Tuble billot hegression eventelenes (1. 1111 dollit Enriver)							
		lardized cients	Standardized Coefficients t		Sig.		
	В	Std. Error	Beta	Beta			
(Constant)	30,213	10,336		2,923	0,006		
MTAS (X1)	0,892	0,26	0,575	3,43	0,002		
TAX SANCTION (X2)	-0,27	0,399	-0,116	-0,677	0,503		
TAX SERVICE (X3)	0,109	0,119	0,156	0,923	0,362		
TAX MORALE (X4)	-0,148	0,26	-0,093	-0,57	0,573		

Table 5.15 shows the combined effect of the four variables on tax compliance. The table shows that the value of F-test is 18.093, which is higher than F-table (df1=4; df2=35) at 2.64. This result indicates that the combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is positively associated with tax compliance. However, the effect is small: only around 24 percent (see adj. R square, table 5.15).

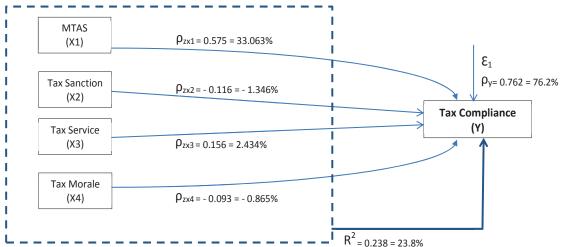
Table 5.16 provides some additional information on the four dependent variables, which will be used below.

Comparison between partial and combined effect of MTAS, tax sanction, tax service, and tax morale toward the tax compliance for SEE

Based on the beta coefficients resulting from the regression analysis, see table 5.16, the pattern of the relationships and the comparison between partial and combined effects of MTAS, tax sanction, tax morale, tax service on tax compliance for SEE are presented in the figure below.

b. Dependent Variable: TAX COMPLIANCE (Y)

Figure 5.20 Pattern of partial and combined effect of MTAS, tax sanction, tax morale, and tax service on tax compliance (SEE)



According to figure 5.20, the combined effect of modernized tax administration system, tax sanction, tax service, and tax morale is higher than most of the partial effects of these elements on tax compliance for SEE, with the exception of modernized tax administration.

Table 5.17 summarizes these findings.

Table 5.17 Comparison between partial and combined effects, for GE and SEE

			_		Combined effect	
No	Criteria	MTAS> TC	Tax Sanction (TS)> TC	Tax Service (TSc)> TC	Tax Morale (TM)> TC	MTAS + TS + TSc + TM> TC
1	Government employees					
	Partial effect	3,764%	0,029%	1,082%	2,310%	
	Combined effect					14.2%
2	State enterprise employees					
	Partial effect	33,063%	- 1,346%	2,434%	- 0,865%	
	Combined effect					23.8%

Referring to table 5.17, and looking at the partial effects, we see that tax sanction and tax morale have a higher effect on tax compliance for GE than for SEE. On the other hand, MTAS and tax service have a higher effect on tax compliance for SEE than for GE. Overall, the average of the partial effect is rather low and in all cases below 50 percent.

Furthermore, as far as the combined effect is concerned, MTAS, tax sanction, tax service, and tax morale provide a higher combined effect on tax compliance for SEE than for GE. This means that **hypothesis H13** is **rejected**²⁷.

Finally, comparing between the partial and combined effects, we find that the combined effect of MTAS, tax sanction, tax service, and tax morale on tax compliance is larger than the partial effect of each these elements for GE and most of the partial effects of these elements for SEE. It means that **hypothesis H14** is **rejected**²⁸.

²⁷ H13: State enterprise employees show a lower combined effect of modernized tax administration system, tax sanction, tax service, and tax morale on their tax compliance than government employees.

²⁸ H14: The combined effect of modernized tax administration system, tax sanction, tax service, and tax morale on tax compliance is higher than the partial effect of each of these elements on tax compliance, for both government and state enterprise employees.

Direct effects and indirect effects through tax morale

In table 5.18 the results are shown of our analysis of these direct and indirect effects for GE.

 Table 5.18 Summary of direct and indirect influence MTAS (X1), Tax Sanction (X2), Tax Service

(X3), and Tax Morale (X4) on Tax Compliance (Y) of government employees (GE)

		Causal effect		% effect
Effect of variable	Direct	Indirect through tax morale (X4)	Total	(R square)
MTAC (V4) - To Condition (V)	0,194		0,194	3,764%
MTAS (X1) on Tax Compliance (Y)		0,234 + (0,264 x 0,122)	0,231	5,336%
Tax Sanction (X2) on Tax Compliance	0,017		0,017	0,029%
(Y)		0,006+ (0,303x 0,122)	0,067	0,449%
m c : (vo) m c !: (vo	0,104		0,104	1,082%
Tax Service (X3) on Tax Compliance (Y)		0,107 + (0,272 x 0,122)	0,147	2,161%

Table 5.18 shows that the indirect pattern increases the effect of MTAS on tax compliance for GE at 1.572 percent, tax sanction at 0.42 percent, and tax service at 1.079 percent. Hence, this result clarifies that the indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct effect of these elements without tax morale on tax compliance for GE.

In table 5.19 the results are shown of our analysis of these direct and indirect effects for SEE.

Table 5.19 Summary of direct and indirect influence MTAS (X1), Tax Sanction (X2), Tax Service (X3), and Tax Morale (X4) on Tax Compliance (Y) of state enterprise employees (SEE)

		Causal effect		% effect (R square)	
Effect of variable	Direct	Indirect through tax morale (Y)	Total		
MTAC (V4) T. C l' (7)	0,575		0,575	33,063%	
MTAS (X1) on Tax Compliance (Z)		0,575 + (0,353 x - 0,093)	0,542	29,376%	
Tax Sanction (X2) on Tax Compliance	- 0,116		- 0,116	- 1,346%	
(Z)		- 0,116+ (0,105 x - 0,093)	- 0,126	- 1,588%	
	0,156		0,156	2,434%	
Tax Service (X3) on Tax Compliance (Z)		0,156 + (0,188 x - 0,093)	0,138	1,904%	

Table 5.19 shows that the indirect pattern increases the effect of MTAS on tax compliance for SEE at 3.687 percent, tax sanction at minus 0.242 percent, and tax service at 0.53 percent. Hence, this result clarifies that the indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct effect of each of these elements without tax morale on tax compliance for SEE.

Looking at these results we find that **hypothesis H15** is accepted²⁹.

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²⁹ H15: The indirect effect of modernized tax administration system, tax sanction, and tax service through tax morale is higher than the direct effect of each of these elements (i.e. without tax morale) on tax compliance, for both government employees and state employees.

5.4 **Discussion and conclusions**

The purpose of this survey study was to investigate how public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale. Specifically, the objectives were to understand the effect of the perception by public officials regarding implementation of modernized tax administration system, tax sanction, tax service, and tax morale on their tax compliance; to develop a model for the evaluation of the (central) role of tax morale; and to draw lessons from the findings for follow-up research.

The survey study involved 400 respondents, all of them public officials, with 360 government employees and 40 state enterprise employees. Most of the respondents were male and married. The most common age group was 29-39 years old; the most common level of education was a bachelor's degree. Respondents indicated they got their tax knowledge from the internet and through tax socialization (i.e. tax information from tax offices). In terms of origin, the respondents were adequately spread over Indonesia; they come from 29 different provinces. Most respondents were civil servant in local government, and most respondents had income in addition to their salary.

Figure 5.21 shows the average perception of public officials of their tax compliance and the underlying factors. Based on the answers to the statements on various elements of tax compliance (register compliance, filing compliance, paying compliance, reporting compliance), public officials generally perceive their tax compliance as good. Still, from answers to other questions in the survey, it became clear that public officials behave far from perfect: over the last two years 27 percent did not submit the annual tax return in time, and nearly 24 percent of the respondents indicated that they had been late in paying the income tax. We tested for differences in perception of tax compliance between various sub-samples (based on gender, age, educational level, and province of origin), but no significant differences were found.

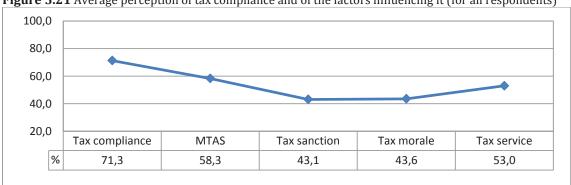


Figure 5.21 Average perception of tax compliance and of the factors influencing it (for all respondents)

When we look at the four underlying factors, there is a clear difference between MTAS and tax services on the one hand, and tax sanctions and tax morale on the other hand.

The scores on MTAS and tax services (based on the relevant statements in the survey) are not high, but can be labelled as sufficient. From other questions in the survey it became clear that a large minority (48 percent) of the respondents did not experience much change in the tax administration in terms of modernization; almost one third (26 percent) of the respondents indicated that they have had bad (i.e. discriminatory, unfriendly) experiences with getting the right tax services. A small group of respondents (8 percent) mentioned that they had to pay for certain tax services (which are supposed to be free).

The scores on tax sanction and tax morale were rather low. As far as tax sanctions are concerned this can be due to the fact that approximately half of those respondents that admitted to have been non-compliant recently, were not hit by any tax sanction. It is also interesting to note that public officials, even though they perceive their tax compliance as good, have a bad perception of their tax morale. This can be linked to their views on the tax system in Indonesia. The majority of respondents indicated the importance of paying taxes, and the vast majority of respondents acknowledged their obligation to be compliant with tax laws, but the survey results also showed considerable dissatisfaction with the way the tax system is implemented in Indonesia. Respondents mentioned the government's failure in properly developing Indonesia, the misuse of tax revenues, failing tax reforms, and the gap between intentions as laid down in tax laws and actual implementation. Still, a large majority acknowledged that as public officials they are role models for other taxpayers.

The verification analysis showed that in terms of the overall model, the four variables (MTAS, tax services, tax morale, and tax sanctions) have a combined effect of 14.6 percent on the dependent variable of tax compliance. This means that 85.4 percent of the dependent variable is explained outside the model. Significant (but rather low) correlations with tax compliance were found for MTAS, tax services and tax morale, but not for tax sanctions. The combined effect of MTAS, tax sanctions, tax service, and tax morale has a higher effect on tax compliance of public officials than their partial effects taken together (this is also true for the two sub-samples of government employees and state enterprise employees). The main policy implication of this finding is that a limited focus, in terms of future reforms, on just one or two of the four elements is not advisable; a comprehensive approach makes more sense.

The analytical model used for this part of the empirical research, assumed that MTAS, tax services, and tax sanctions have a direct effect on tax compliance, but also an indirect effect through the variable of tax morale. Table 5.20 shows these direct and indirect effects (for all public officials, in the PO column).

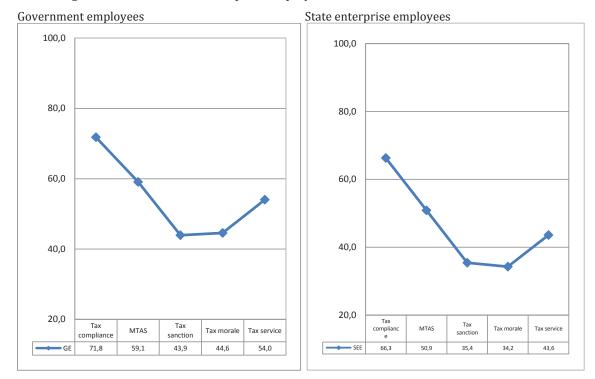
Table 5.20 Comparison between direct and indirect effect (via tax morale) of MTAS, tax sanction, and tax services on tax compliance of PO, GE, and SEE

Kind of effect	Causal effect	PO	GE	SEE*
MTAS (X1) on Tax Compliance (Y)	Direct effect	5,48%	3,76%	33,06%
	Indirect effect via tax morale	7,08%	5,34%	29,38%
Tax Sanction (X2) on Tax Compliance (Y)	Direct effect	0,00%	0,03%	-1,346%
	Indirect effect via tax morale	0,19%	0,45%	-1,588%
Tax Service (X3) on Tax Compliance (Y)	Direct effect	1,15%	1,08%	2,434%
	Indirect effect via tax morale	1,96%	2,16%	1,904%

^{*}For SEE, the direct effect of tax morale is - 0.093

This chapter also explored whether there are differences between the two groups that make up the respondents: government employees (GE) and state enterprise employees (SEE). Figure 5.22 shows the difference in scores on the five variables between GE and SEE; the pattern is the same for both groups. SEE have lower perceptions of all five variables, but testing showed that this difference is only significant for MTAS, for tax sanctions, and for tax morale (not for tax services and not for tax compliance).

Figure 5.22 Comparison of average perception of tax compliance and factors influencing it, between government and state enterprise employees



For GE we found positive and significant correlations between MTAS and tax compliance, tax services and tax compliance, and tax morale and tax compliance (but not for tax sanctions and tax compliance). All correlations were low. For SEE we did only find a positive and significant correlation between MTAS and tax compliance, which was however relativelty strong. These differences are also reflected in table 5.20 (the columns with GE and SEE), where the overall effects sizes are again rather small (overall for the model for GE: 14 percent; for SEE: 24 percent), except for the impact of MTAS on tax compliance for SEE. Apparantly, for SEE, the modernization of the tax administration is a relatively important factor for their tax compliance.

This survey study was the first step in the empirical research. The question is which implications the findings have for the remainder of the research. As shown by the overall effects, it is clear that the model developed so far has limited coverage in terms of explaining tax compliance by public officials. As a follow-up strategy, we could therefore go back to the drawing board, and go through the literature again to see if there are any main explanatory factors that we overlooked, but that is rather unlikely. We therefore will spend the remainder of the research to look closer (and with other empirical methods) into the main puzzles that the findings so far represent:

- Why do the factors of tax sanctions and tax morale perform so "badly" in explaining tax compliance? How do tax sanctions and tax morale interact? What do public officials think about the feasibility of the use of tax sanctions?
- Why is there so little difference between government employees and state enterprise employees? How does their behavior compare to other taxpayers, i.e. taxpayers from the private sector?

The next chapter will outline the design of the follow-up research.

CHAPTER 6

Follow-up research: empirical design and results

As explained in chapter 5, the follow-up research aims at finding out more about the role of tax sanctions and tax morale in the context of tax compliance, in order to find answers to the following subordinate research question:

"What are the key factors for improving tax compliance focusing on public officials?"

In this chapter we first have a closer look, based on additional literature research, into tax sanctions and tax morale, resulting in a conceptual framework. Subsequently, this conceptual framework is developed into an analytical framework to be used in the follow-up empirical research, including the formulation of hypotheses (section 6.1).

The empirical follow-up research consists of three parts:

- An on-line survey which resembles the initial survey, but now focuses on tax sanctions and tax morale. The targeted respondents are (income) taxpayers, both from the public and private sector;
- In-depth face-to-face interviews with 15 selected respondents (five government employees, five state enterprise employees, and five employees from the private sector), using a semi-structured questionnaire;
- A simulation game, to establish the potential effect of the use of rewards and punishments in taxation, conducted specifically for public sector officials.

Sections 6.2-6.4 deal with these three parts of the follow-up research. Each section consists of a discussion of methodological issues, followed by the presentation of the findings. Section 6.5 concludes and discusses.

6.1 Development of framework

6.1.1 Conceptual framework

1. Sanctions

A sanction is a tool or feedback mechanism used to force an individual to act in accordance with social standards and norms (Moeljatno, 1987; Drever, 1988; Satochid, 1988; Nugroho, 2006). In broad terms, sanctions can consist of positive things such as appreciation, respect, simpathy, awards, etc. and of negative things, namely punishment, antipathy, and reproach. Based on this distinction, Budihardjo et. al. (1991) give a definition of sanctions as positive or negative responses from the members of a social group based on the activity or behavior on the part of one or more of its members. The notion was reinforced by Tunggal (1997) and by Combie et al. (1984), who argue that positive sanctions (rewards) and negative sanctions (punishment) are used by the group to encourage people to conform to the norm, to drive favorable behavior in accordance with social norms and to control deviant behavior. Combie, et al. (1984) explain further that sanctions can act as a (ex ante) guide (to behaviour), but also as (ex post) social control (see also Roucek, 1987). In the field of taxation, in Indonesia, positive sanctions are realized in the form of tax facilities or tax incentives, while negative sanctions are manifest in the form of administrative and criminal sanctions (Ayu, 2013).

2. Rewards

A reward is a positive sanction in the form of incentives, prizes, benefit programs, appreciation, convenience, and others. Rewards are received by individuals as a result of their performance (Bastable, 2002), i.e. they should be given selectively and specifically to those who deserve it, and have maximum effect if they are given directly and timely (Najati, 2000). In the context of management theory, rewards are tools to increase motivation. In accordance with the theory of motivation put forward by McClelland (1987), there are three basic human motivations: 1) the need for power; 2) the need for affiliation; and 3) the need for achievement. According to McClelland the need for power and affiliation encourage people to be more developed than others because basically humans want to be more powerful, be more respected and be more important than others. The need for achievement will encourage someone to develop creativity and use his abilities to achieve maximum performance (Hayati and Suhendra, 2006).

Extrinsic and intrinsic rewards

Furthermore, Shculer (1987) states that rewards can be divided into extrinsic (i.e. financial) and intrinsic (i.e. non-financial) rewards. An 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 1) benefits given in accordance with the level of individual success, for instance related to certain performance standards; 2) prize as material rewards in the form of money that is paid as remuneration for the performance (Sarwoto, 1981); and 3) benefits program as an indirect reward given to individuals or groups (Suryo P R, 2007). An 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, such as a sense of security in employment, status, public appreciation and self-esteem (Shculer and Huber, 1993). In the literature various forms of intrinsic rewards have been put forward: 1) appreciation as an interpersonal reward in the form of status and recognition given to increase motivation (Ivancevich et al. 2006); 2) convenience; and 3) reliability, responsiveness, assurance and empathy in the dealings that the rewarded group member has with other group members (Zeithami and Bitner, 1996; Kolcaba, 2003).

3. Punishment

Punishment is given to those who violate the rules. Punishment, according to Tunggal (1997), is an unpleasant consequence as a response to certain behaviors or actions. According to Anoraga and Widiyanti (1993), punishment is a negative sanction that is expected to prevent someone taking up irregular behavior. Gibson, et al (1996) state that punishment will reduce the tendency to repeat the subsequent -unwantedbehavior. Punishment in the field of taxation are called tax sanctions. Tax sanction, according to Mardiasmo (2008), are aimed to guarantee that the provision of the tax laws (taxation norms) will be followed. In other words, tax sanctions 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 tax penalties become a powerful deterrent to reduce tax evasion or tax negligence. Tax sanctions are best implemented based on certain principles, namely: 1) criminal sanctions are imposed on violators with the quite heavy cases; 2) administrative sanctions are provided for violators with very light cases; 3) 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).

In the Indonesian tax system, tax penalties consist of financial and non-financial sanction. These sanctions can be described in some more detail as follows:

Financial sanctions in the Indonesian tax system

Financial sanctions are administrative punishments in the form of money. The legal basis of imposing financial sanctions is regulated in Law No. 16 of 2009 about third changes of Law No. 6 of 1983 that covers General Provisions and Tax Procedures. This provision states that there are various sorts of financial sanctions.

Fine Sanction. A fine sanction is an administrative punishment resulting from the delay in submitting the annual tax return. In the Indonesian tax system, the deadline for submitting the annual tax return can be divided into 3 (three) periods: 1) the monthly tax return has to be submitted not later than twenty days after the end of the tax period; 2) the annual tax return of income tax for individual taxpayers, has to be submitted not later than three months after the end of the tax year; and 3) the annual tax return of income tax for corporate taxpayers, has to be submitted maximum four months after the end of the tax year. If the tax return is not submitted within the specified time or deadline, taxpayers will be imposed by fine sanctions with details as follows: 1) IDR 500,000 for monthly value-added tax returns; 2) IDR 100,000 for other monthly tax returns; 3) IDR 1,000,000 for the annual tax return of corporate taxpayers; 4) IDR 100.000, for the annual tax return of individual taxpayer (Mardiasmo, 2009).

Interest sanction. An interest sanction is an administrative punishment imposed for violations related to late tax payment. In general, the interest sanction is set at 2 percent per month and charged to taxpayers that are late in paying taxes or late in paying the tax underpayment.

Increment sanction. An increment sanction is an administrative punishment in the form of an increase of the tax amount to be paid that is basically calculated by a certain percentage from the tax amount underpaid. The increment sanction is mainly imposed if the taxpayer does not provide the information needed to calculate the amount of tax payable. Other factors are violations in the implementation of accounting, offences in the withholding tax, and other irregularities.

These sanctions can accumulate. For example, if the taxpayer is were negligent in (timely) submitting the annual tax return and/or reports the annual tax return with incorrect or incomplete data, and/or attaches a dishonest statement that can lead to the financial loss to the state, the taxpayer is punished to pay the underpaid amount of tax payable plus an increment sanction at 200 percent of the amount of underpaid tax through the issuance of an Underpayment Tax Letter.

Non-Financial sanctions in the Indonesian tax system

Non-financial sanctions can take the form of a confinement sanction, an imprisonment sanction, and social sanctions.

Confinement sanction. A confinement sanction is a punishment imposed for crimes because of negligence causing state financial loss. The maximum limit of confinement is 1 (one) year, where in certain cases, offenders are allowed to stay in their own homes under supervision of the authorities. Basically, a confinement sanction is conducted without division classes and can be a substitute for fines (Marjan, 2014).

Imprisonment sanction. Both imprisonment and confinement sanctions are punishments in the sense of deprivation of liberty. The imprisonment sanction is imposed for crimes in the field of taxation conducted intentionally and causing the state considerable financial loss. The maximum limit is life imprisonment, in which prisoners stay in the building or in the prison house; the freedom of the prisoners is very limited, and they are divided into classes according to the seriousness of their crime (Marjan, 2014).

Social sanctions

Social sanctions can be imposed against violations causing the state financial loss by providing a sense of shame in order to give a deterrent effect. According to Berger and Luckmann (1990), social sanctions can consist of various methods used by the public to punish rebellious members. According to Wignyosoebroto (2007), social sanctions are a form of suffering that is intentionally provided by the community. Examples of social sanctions are conducting social work in workplaces and public facilities, being –publicly-labelled as a tax corruptor et cetera.

Based on the overview above, figure 6.1 shows a typology of sanctions.

Figure 6.1. Typology of Sanctions Incentive/subsidy **Extrinsic** Prize Reward **Benefit Program** School Hospital Positive/Reward Road **Bridge** Tax office facilities Appreciation Intrinsic Convenient Reward Reliability, responsiveness, assurance, empathy Sanction **Fine Sanction** Interest sanction **Financial** Increment Sanction sanction Negative/Punishment Confinement sanction **Non-Financial Imprisonment** Sanction sanction Social sanction

4. Morale

According to Salman and Farid (2007), many factors lay behind the still low level of tax compliance in Indonesia: the complexity of tax rules, the amount of tax to be paid, the risk of audit, heavy or light tax penalties, but also public morals. In the context of the latter factor, tax compliance is strongly influenced by the morality of taxpayers. Moral aspects in the field of taxation involve two things: 1) the moral obligation of the taxpayer in carrying out their tax obligations as good citizens; and 2) the moral consciousness of the taxpayer regarding the allocation of tax revenues by the government (Thurman et al., 1984; Troutman, 1993). Tax morale thus is an intrinsic motivation to pay taxes arising from the moral obligation to pay taxes, following from the belief that by paying taxes one contributes to society (Cumming et al, 2005), i.e. it is a set of principles and values applied in realizing tax obligations (Alm and Torgler, 2006). If a person's tax morale is good, then there is a tendency of the person to be obedient without any additional rules (leading to voluntary tax compliance). Levels of tax morale vary between countries because of differences in social values and the influence of existing social institutions (Frey, 1997; Alm and McClellan, 2012). The factors affecting tax morale can be outlined as follows: 1) perception of equity in taxation, including perception of the government's treatment of taxpayers (fair or not); 2) trust in government institutions; 3) the nature of the fiscal exchange between taxpayers and government (i.e. the treatment of taxpayers as "consumers"); 4) government's rewards to honest taxpayers such as subsidy, tax holidays, et cetera (Alm and Torgler, 2006). Meanwhile, according to a behavioral-view-of-performance model from Walker, the individual intrinsic motivation is affected by knowledge, understanding of rules that guide behavior, and expectations which affect the direction of actions and the magnitude of the energy released by an individual (Handoyo, 1997; Nurmiyati, 2011). Based on this model of Walker, the factors that affect tax morale can be further elucidated as follows.

5. Knowledge

According to Lovihan (2012), tax knowledge acquired through formal and non-formal education will have a positive impact on the awareness of the taxpayer of the obligation to pay taxes (Lovihan, 2012). Tax knowledge is knowledge of the taxpayer related to the definition of taxes, benefits and functions of taxes, tax sanctions, rights and obligations of taxpayers and other general provisions on taxation, Robbins (2003) states that a person who has knowledge of taxes will tend to behave positively, as such a knowledgeable person will have the ability and willingness to fulfill tax obligations in accordance with the applicable rules, such as is expected in a self-assessment system. According to research conducted by Widayati and Nurlis (2010), in the Indonesian context, indicators of knowledge could be outlined as follows: 1) taxpayers know about the obligation to have a tax identification number (TIN). Every taxpayer, who has income, must register to obtain a TIN as one means for administrating tax; 2) taxpayers understand their rights as a taxpayer such as proposing an objection or appeal, and understand the rights of the tax authorities to conduct supervision to taxpayers; 3) taxpayers knows their obligations as a taxpayer such as bookkeeping/recording.; 4) taxpayers know about tax penalties if they neglect tax obligations; 5) taxpayers know about non-taxable incomes and tax rates; 6) taxpayers know tax laws through the dissemination by tax offices.

6. Understanding of rules

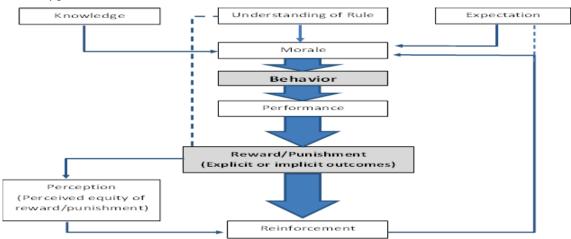
Understanding, according to Sudjana (1995), is the ability to capture the meaning or significance of a concept. Understanding of tax laws is the process, in which the taxpayers know about taxation and adequately apply their knowledge to pay taxes. Understanding is thus not equal to knowledge, it concerns its appropriate application. Suryadi (2006) in his research states that increased understanding of tax laws will impact positively on the consciousness of taxpayers in paying taxes. Gardina and Dedy (2006) found that low tax compliance is related to low taxpayer's understanding of taxation. Here we conceptualize understanding of rules as a process, in which the taxpayer understands about the circumstances, actions, events and occasions that are taxable (tax object), who is taxed (tax subject), how much tax is charged (tax rate), everything about the imposition and abolishment of tax debts, and the legal relationship between the government and the taxpayer (material tax law, such as the income tax law).

7. Expectations

Snyder (1994) defines expectations as the "mental willpower plus waypower for goals". Willpower is the driving force to hopeful thinking. It is a sense of mental energy that helps to move a person toward a goal. Waypower, the second component, is the mental capacity to find a way to reach goals. It reflects the mental plans or road maps that guide behavior towards goals. According to Linley & Joseph (2004) expectations can be understood as a combination of intrinsic motivation, personal self-efficacy and result-orientation.

Taken together, reward, punishment, knowledge, understanding of rules, and expectations "drive" a taxpayer towards a certain behaviour. In this context, reward and punishment represent the external factors and knowledge, understanding of rules, and expectations are factors of intrinsic motivation that are expected to influence positively tax compliance. This is because knowledge, understanding and expectations have an important role for tax compliance. A taxpayer, who knows and understands the tax laws including all procedures in taxation, and is supported by expectations regarding his behaviour, will have a high level of compliance. Figure 6.2 shows the linkages between the factors of intrinsic motivation and reward and punishment, and shows the feedback mechanisms involved.

Figure 6.2. Relationship between factors of intrinsic motivation (tax morale) and reward/punishment



Following Handoyo (1997) and Nurmiyati (2011), this simple and comprehensive process-model of the formation of tax compliance was described by Walker through adapting the performance motivation model as developed by Moorhead & Griffin. This model provides the dynamics for the formation of a certain performance; Walker calls this adapted model a behavioral view of performance. According to this model, the individual behavior is influenced by four main factors. The first factor is expectations. Expectation will affect the direction of action and the amount of energy released by an individual. The second factor is knowledge that affects the individual capacity. The third factor is understanding, which regulates behavior, and empowers individuals towards certain behavior. Finally, the fourth factor is the feedback implemented in the form of reward and punishment. Figure 6.3 integrates this conceptual framework with the typology of sanctions.

Understanding of Rule Expectation Knowledge Morale Behavior Performance Reward/Punishment (Explicit or implicit outcomes) Perception (Perceived equity of reward/punishment) Reinforcement Incentive/subsidy Extrinsic Reward **Benefit Program** School Hospital Positive/Reward Road Bridge Tax office facilities Appreciation Intrinsic Convenient Reward Reliability, responsiveness, empathy Sanction Fine Sanction Interest sanction Increment sanction Negative/Punishment Confinement sanction Non-Financial Sanction sanction Social sanction

Figure 6.3 Conceptual framework and typology of sanctions

6.1.2 Analytical framework and hypotheses

1. Analytical framework

Based on this general analytical framework of figure 6.3, the research framework (or: analytical framework) is formulated as shown in the figure below.

Figure 6.4 Analytical framework to be used in the follow-up research

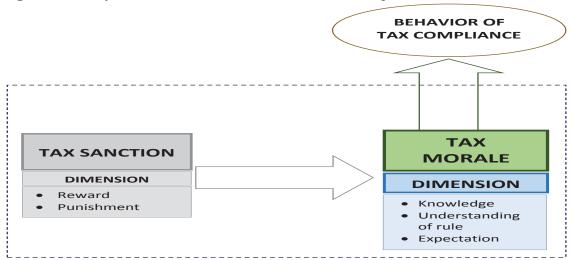


Figure 6.4 shows that individual tax compliance behavior is influenced by tax morale which is affected by two sets of factors. The first set of factors is the internal factors that consist of knowledge, understanding of rules, and expectations. The second factor is the external factors that consist of punishment and reward, which are the dimensions of the variable tax sanction. This means we have two variables in the framework: tax sanction and tax morale. Tax sanction is the exogenous variable, and tax morale is the endogenous variable; tax morale is a so-called latent variable. The overview below recapitulates.

Variable	Conceptual Definition	Dimension
Tax sanction	A sanction given to (non-)compliant taxpayers, as an attempt to force the taxpayer to comply with all the tax regulations	Reward
	and as a tool to prevent the violating behavior	Punishment

Variable	Conceptual Definition	Dimension
Tax morale	The intrinsic motivation of the individual to pay taxes as a result of the existence of awareness, readiness, and willingness to contribute to society, as part of a moral	Tax knowledge Understanding of rules
	obligation	Tax expectation

2. Formulation of hypotheses

A hypothesis is a provisional estimate about something that should be verifiable (Sugiyono, 2009). In this part of the study we have two main types of hypotheses. First, we have associative hypotheses (H3, H6, H9, H12-H15), between the two main variables. In addition we have hypotheses that deal with the relationship between the variables and their dimensions, in the sense that these hypothesis postulate that the dimensions adequately construct the variable involved.

The hypotheses H1-H15 concern the on-line survey (where we will differentiate between three groups of respondents: government employees, state enterprise employees, and employees from the private sector). Hypotheses H16-H17 concern the simulation game. They hypotheses are formulated as follows.

- H1 : The dimensions of reward and punishment construct the variable of tax sanction
- H2 : The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale
- H3: Tax sanction is positively associated with tax morale
- H4 : The dimensions of reward and punishment construct the variable of tax sanction, for government employees
- H5 : The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale, for government employees
- H6 : Tax sanction is positively associated with tax morale of government employees
- H7: The dimensions of reward and punishment construct the variable of tax sanction, for state enterprise employees
- H8: The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale, for state enterprise employees
- H9 : Tax sanction is positively associated with tax morale of state enterprise employees
- H10 : The dimensions of reward and punishment construct the variable of tax sanction, for private workers
- H11 : The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale, for private workers
- H12: Tax sanction is positively associated with tax morale of private workers
- H13: Government employees show a more positive impact of tax sanction on their tax morale than private workers
- H14: State enterprise employees show a more positive impact of tax sanction on their tax morale than private workers
- H15: Government employees show a more positive impact of tax sanction on their tax morale than state enterprise employees
- H16: The existence of reward reduces cheating in annual tax returns
- H17: The existence of punishment decreases cheating in annual tax returns

6.2 On-line survey

6.2.1 Data collection and instrument development

The survey method is used to get data from a particular place and from a large or small population by using questionnaires as the main instrument (Fowler, 1998, Sugiyono, 2012). The on-line survey used a questionnaire that is presented in Annex 3. The answer categories to the statements follow a five-point Likert scale. The draft questionnaire was developed in English, translated into Indonesian, and then tested on five people with similar background and characteristics as the targeted respondents, and adapted according to their input. The on-line questionnaire was turned into an on-line survey by means of Qualtrics software. Respondents were invited by emails, Facebook, and other social media such as WhatsApp and messenger, targeting all kinds of (income) taxpayers (both from the public and private sector). The on-line survey was open from April 15-May 15, 2015.

6.2.2 Data analysis techniques

Data analysis is a series of activities performed after the data from all respondents and other sources have been collected, to determine the relationship between variables, so that it can be concluded whether a hypothesis is accepted or rejected (Sugiyono, 2011). In this on-line survey, we analyze the data collected by descriptive and verification analysis. The stages of data analysis embodied in this study can be elucidated as follows.

1. Descriptive analysis

Descriptive analysis is conducted to provide insight into characteristics of respondents and the assessment of respondents towards the two variables and their dimensions. In this study, descriptive analysis (i.e. the mean and frequency of result) is realized by Qualtrics software.

2. Verification analysis

The verification analysis consists of various steps.

Assessing the outer model

The outer model (or: measurement model) defines how each (observed) dimension is associated with its (latent) variable. In this context, a dimension can construct a variable if it has convergent validity, discriminant validity and composite reliability.

Test of convergent validity

The convergent validity can be seen from the loading factor of dimensions for each variable. If the loading factor value or lambda value (λ) of each dimensions of a variable is above 0.7, it means that the dimensions meets the test for convergent validity and the dimensions are highly recommended for the variable. If the loading factor is in the interval of 0.50 - 0.60, the dimension can be tolerated as an element forming a variable when the model is still in the development stage (Ghozali, 2006).

Test of discriminant validity

The test of discriminant validity is conducted by comparing the value of loading factors of the dimensions on the variable involved with the value of loading factors of these dimensions on the other (non-involved) variable. If the value of loading factors of the dimensions on the variable is higher than those on the other variable, it is said that the dimensions have high discriminant validity.

Test of composite reliability

A variable is considered to be reliable if the composite reliability values are above 0.60 (Ghozali, 2006). It means that the dimensions are also reliable to construct the variable.

Assessing the inner model (structural model)

Inner models or structural models describe the relationship between the (latent) variables. Assessing the inner models is done by evaluating the relationship between the independent variable and the dependent variable (as outlined in the various hypotheses). Testing involves the use of a t-test for significance, and the value of R-square to measure the size of effect of the relationship.

The process of verification analysis is realized by using application of SmartPLS ver. 2.0 based on the equation of SEM (Ringle et al., 2005; Ringe et al., 2012).

6.2.3 Results

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 are as follows.

Gender

	11401	
No	Question	Total Responses
1	Male	122
2	Female	63

According to this table, almost 70 percent of respondents are male.

• Last education

No	Question	Total Responses
1	Elementary school	0
2	Junior high school	0
3	Senior high school	2
4	Diploma (below undergraduate level)	10
5	Bachelor	84
6	Master	89
7	Doctoral	6
8	Others	1

Others: Taking bachelor

The table above shows that around 46 percent of the respondents have a Master Degree as the last education.

Occupation

No	Question	Total Responses
1	Civil servant in the central government	96
2	Civil servant in the local government	14
3	Military	0
4	Police	0
5	The central state enterprise employee	26
6	The local state enterprise employee	1
7	Employee in the private company	36
8	Businessman	5
9	Trader	0
10	Others	11

Others: Student, consultant, lecturer, freelance, social entrepreneur.

Almost 60 percent of the respondents come are civil servants, from either central or local government, 14 percent are employed by state enterprises, and 28 percent are from the private sector.

• Province of domicile and/or institution

Aceh, Banten, DI Yogyakarta, DKI Jakarta, Jawa Barat, Jawa Tengah, Jawa Timur, Kalimantan Barat, Kalimantan Tengah, Kalimantan Timur, Kepulauan Riau, Lampung, Sulawesi Tenggara, Sulawesi Utara, Sumatera Barat, Sumatera Selatan. Statistic, total respondents = 184. This means that respondents of the online survey represent 15 different Indonesian provinces.

2. Descriptive analysis

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

• To what extent do you agree with the following statements regarding TAXATION?

No		Q	uestion			SD30	D ³¹	N32	A ³³	SA ³⁴	TR ³⁵	M ³⁶
1	I know that to the citizen th benefit (Q1)					10	33	13	90	43	189	3.65
2	I know that to government development	operations	and in fur	nding		1	5	9	102	72	189	4.26
3	I know that tax identifica				aving a	0	2	4	99	84	189	4.40
4	I know that ta taxpayers wh				(Q4)	1	10	23	109	46	189	4.00
5	I know that the appeal and of			ight to conv	ey the	2	22	20	87	58	189	3.94
6	I know that the supervision/circumstance debts (Q6)	audit towa	rd taxpaye	ers regardin	g	2	10	28	110	39	189	3.92
7	I know that to bookkeeping payable, and	, to fill out	tax forms,	to pay tax	(Q7)	4	9	16	116	44	189	3.99
8	I know that the income as an for the indivi	income th	at is a non		eshold	0	8	18	104	59	189	4.13
9	I know that to comprehensi (Q9)				16	65	60	40	8	189	2.78	
Statisti	ic	Q1	Q2	Q3	Q5		Q6	Q7	Q8		Q9	
Min Va		1	1	2	1		1	1	2		1	
Max Va	alue	5	5	5	5	5	+ ,	5	5	5	2	5
Mean Varian	CO.	3.65 1.36	4.26 0.51	4.40 0.35	4.00 0.63							2.78 1.02
	rd Deviation	1.16	0.51	0.59	0.63	0.97		0.81	0.70	0.5		1.02
	Responses	189	189	189	189	189		189	189	189		189

With an average (Likert) score of 3.9, respondents largely agree with the statements on knowledge regarding taxation.

³⁰ SD = strongly disagree

³¹ D = disagree

³² N = neutral

³³ A = agree

SA = strongly agree

³⁵ TR = total responses

 $^{^{36}}$ M = mean

• To what extent do you agree with the following statements regarding the UNDERSTANDING OF TAX RULES?

No	Q	uestion			S	SD	D	N	Α	SA	TR	M
1	I understand about the circur that are relevant to the perso			egal events	3	6	60	56	62	5	189	3.00
2	I understand that every taxpa non-taxable income is subject					1	26	41	98	23	189	3.61
3	I understand that the personal progressively to ensure the fa			ed		3	25	34	92	35	189	3.69
4	I understand that the government subjects and non-objects of p					3	47	55	68	16	189	3.25
5	I understand that the persona final personal income taxes a			r clearly		3	40	62	70	14	189	3.28
6	I understand all procedures t the personal income tax (Q6)		to pay, and	to report	1	17	67	55	43	7	189	2.77
7		I understand that tax income for a taxpayer who is a full time employee is withheld by the treasurer with the tax withholding									189	3.89
8	I understand that taxpayers v their personal income taxes e recapitulation (08)				rt	7	22	44	93	23	189	3.54
9	I understand that personal in compensations, allowances, a salary, are clearly regulated b		6	32	49	86	16	189	3.39			
	Statistic	Q4		Q5	Q6	Q	7	Q8	Q9			
Min V		1	1		1	1	1		1	1		
Max V	alue	5 3.00	5		5	5	5		5	5		
Mean		3.25	-	3.28	2.77	3.8		3.54	3.39			
Varia	nce ard Deviation	0.95	+	0.87	1.04	0.7		0.95	0.94			
	Responses	0.94 189	0.89 189	0.97 189	189	+	189	1.02	18		189	189
Total	псэронэсэ	107	109	109	109		10)	109	10	,	107	109

With an average (Likert) score of 3.4, it means that respondents are rather neutral in their understanding of tax rules.

• To what extent do you agree with the following statements regarding TAX EXPECTATIONS?

	LAI LCITTIONS.											
No	Questi	on			SD	D	N	Α	SA	TR	M	
1	The government uses the tax reversithout corruption (Q1)	nue to the	right purpos	е	26	32	31	33	67	189	3.44	
2	There is transparency in the mana taxes (Q2)	gement an	d utilization	of	29	36	23	32	69	189	3.40	
3	There are clear, simple and efficient report taxes including feedback m			nd to	18	24	26	52	69	189	3.69	
4	Tax officials work cooperatively a	nd honestl	y (Q4)		14	27	46	37	65	189	3.59	
5	Tax officials facilitate taxpayers in obligations as a taxpayer (Q5)	understan	iding rights a	ınd	10	28	37	57	57	189	3.65	
6	Tax officials take the taxpayer's ob (Q6)	eriously	8	19	60	53	49	189	3.61			
7	Tax officials communicate all tax s	ervices in	the tax office	(Q7)	10	27	41	60	51	189	3.61	
8	Tax offices provide clear informati	on regardi	ing taxation	(Q8)	10	22	45	59	53	189	3.65	
9	Tax officials respect all taxpayers lacilitating them to achieve custon			d	10	19	46	55	59	189	3.71	
	Statistic	Q1	Q2	Q3	Q4	Q5	Q6		Q7	Q8	Q9	
Min V	alue	1	1	1		1	1	1				
Max V	alue	5	5	5		5	5	5				
Mean		3.59	3.65	3.61	-	3.61	3.65	3.71				
Varia	***	1.67	1.45	1.22		1.39	1.35	1.36				
	ard Deviation	1.46	1.51	1.33	1.29	1.20	1.10	_	1.18	1.16	1.16	
Total	Responses	189	189	189	189	189	189		189	189	189	

With an average (Likert) score of 3.6, respondents seem to agree with the statements on expectations regarding the implementation of taxation.

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.

• To what extent do you agree with the following statements regarding REWARD in taxation?

No		Que	estion				SD	D	N	A	SA	TR	M
1	I feel proud at submitting the						3	13	63	80	30	189	3.64
2	I will feel valu financial rewa money, and va	ards such	as incentiv		of		7	33	56	60	33	189	3.42
3	I will be happ such as appre government (ciation ar					8	24	71	71	15	189	3.32
4	Giving financi required to m				is		10	19	38	82	40	189	3.65
5	To taxpayers should be pro of their contri applicable rul	size		8	17	40	90	34	189	3.66			
6	To taxpayers compensation provided (Q6			5	17	43	88	36	189	3.70			
7	To taxpayers the form of su insurance, and (Q7)	bsidy for	housing, h	ealth			5	11	29	81	63	189	3.98
8	To taxpayers form of mone vacation show	y and don	nestic or al	oroad	ie		21	38	49	51	30	189	3.16
9	To taxpayers certification s				11	16	58	77	27	189	3.49		
10	Financial and non-financial rewards are to be given by considering equity without discrimination (Q10)						5	5	31	90	58	189	4.01
	Statistic	Q1	Q2	Q3	Q4	ļ.	Q5	Q6		Q7	Q8	Q9	Q10
N	Min Value	1	1	1	1		1	1		1	1	1	1
	Max Value	5	5	5	5		5	5		5	5	5	5
	Mean	3.64	3.42	3.32	3.6		3.66	3.7		3.98	3.16	3.49	4.01
	Variance	0.78	1.17	0.89	1.1		1.02	0.9		0.96	1.53	1.06	0.82
	lard Deviation	0.89	1.08	0.94	1.0		1.01	0.9		0.98	1.24	1.03	0.91
Tota	al Responses	189	189	189	189	9	189	189	1	189	189	189	189

With an average (Likert) score of 3.6, respondents seem to agree on the statements regarding the use of rewards in taxation.

No						0							CD	-			,	C 4	mp		N /
						Ques				cc			SD	D	N		A	SA	TR		M
1					ed to p								8	52			71	11	189		.13
2		Punishment is one of the tools to educate and is required to create discipline by taxpayers											1	10	30) 1	15	33	189	3.	.89
3	appr	o taxpayers who commit violations, punishments should be imposed opropriate with tax rules, suitable with the size of offences, and applemented strictly											1	14	31	1	09	34	189	3.	.85
4	finar finar	ncial s	anctio anctio	n (fine	mit vio , intere fineme	est, and	increr	nent sa	anction	ı) and ı	non-	d	3	17	37	7 1	07	25	189	3.	.71
5					mit vio nishme				_			d	6	22	42	2 9	99	20	189	3.	.56
6	To ta	axpay	ers wh	io com	mit vio in the f	lations	relate	d to th	e oblig	ation ii	n payin		10	29	43	3 8	38	19	189	3.	.41
7	To ta	axpay amoui	ers what of ta	no do n ix paya	ot provible, the	vide the	e infori hment	nation	neede	d to ca	lculate		4	18	48	3 1	01	18	189	3.	.59
8	To ta	axpay	ers wh	no com	mit min	nor vio	lations						10	56	41	L (54	18	189	3.	.13
9	To ta	axpay ishme	ers wh	10 com	mit cri	minal a	ctivitie	es caus	ing los	s to the	e state		3	11	27	7 1	00	48	189	3.	.95
10	To ta	axpay ctions			mit vio							l	4	21	42	2 9	94	28	189	3.	.64
11	To ta sanc socia supe	axpay ction a al wor ervisio	ers wh and cri ks as ' on" and	minal s "tax off	mit vio sanctio enders in the	n (such " in the	as the morn	offend ing un	ders ca til aftei	rrying rnoon l	out oy stric		11	33	47	7 .	77	21	189	3.	.34
12	To to	ductin	ers wh g a du	ty to cl	mit vio ean-up	inside	and or	ıtside a	area of		m of		3	36	54	1 7	78	18	189	3.	.38
13	To ta prov stud	axpay viding ly and	ers wh a cert to app	no com ificate oly as a	ertain ti mit vio as offer civil se	lations nder ar	, social id prol	sancti sancti	ions in g family	y mem	bers to		22	55	49) !	53	10	189	2.	.86
14	To ta impo arou	axpay osed i ınd, sı	ers wh n the f ich as	orm of workir	mit vio Tcarrying ng in or	ng out	social v	vorkei	s to he	lp peo	ple		6	23	36	5 9	98	26	189	3.	.61
15	To ta	axpay ing a s		no com	mit vio ex-tax								24	73	40) 4	14	8	189	2.	.68
16	To ta	lishing	g recer	nt phot	mit vio o regul	arly in						3	25	61	48	3 4	18	7	189	2.	.74
17	To ta	axpay ting a	ers wh websi	no com ite that	mposec mit vio contai	lations							23	52	46	5 5	59	9	189	2.	.89
18	To ta mak	axpay ing a	ers wh monur	nent w	mit vio rith the								41	74	39	9 2	28	7	189	2.	.40
19	To ta	profiles should be imposed To taxpayers who commit violations, social sanctions in the form of cleaning public facilities such as markets, terminals, sports fields should be imposed									12	42	45	5 7	74	16	189	3.	.21		
20	To ta	To taxpayers who commit violations, financial and non-financial punishment should be imposed by considering equity without discrimination									5	15	38	3 (91	40	189	3.	.77		
atistic		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q 1	Q1 2	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
in Value	+	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ıx Value	#	5	5 3.89	5	5	5	5	5 3.59	5 3.13	5 3.95	5	5	5	5	5	5	5 2.74	5 2.89	5 2.40	5	5 3.77
ean riance	_	3.13 1.04	0.58	3.85 0.67	3.71 0.75	3.56 0.89	3.41 1.07	3.59 0.75	3.13 1.22	3.95 0.77	3.64 0.88	3.34 1.15	3.38 0.91	2.86 1.24	3.61 0.95	2.68 1.20	2.74 1.19	1.26	1.20	3.21 1.17	0.92
		1.02	0.76	0.82	0.87	0.94	1.04	0.87	1.10	0.88	0.94	1.07	0.95	1.11	0.98	1.09	1.09	1.12	1.09	1.08	0.96
indard eviation																					

With an average (Likert) score of 3.3, respondents seem to have a fairly neutral position towards the use of punishment as tax sanctions. 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. Verification Analysis

As explained in the previous chapter, SmartPLS version 2.0 was to assess the overall validity of the framework with the two variables and their dimensions. We 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.

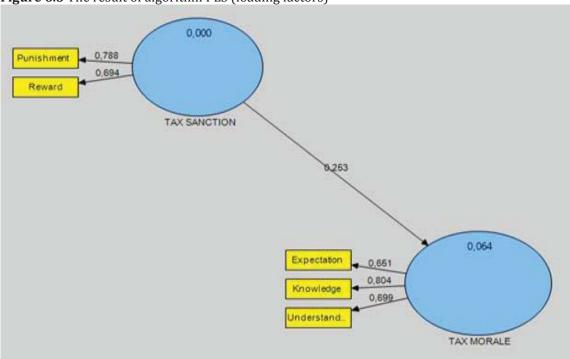


Figure 6.5 The result of algorithm PLS (loading factors)

Source: Primary data were processed with SmartPLS version 2.0

Table 6.1 Outer Loadings

	Tax Morale	Tax Sanction
Knowledge	0.804	
Understanding	0.699	
Expectation	0.651	
Reward		0.694
Punishment		0.788

Source: primary data were processed with SmartPLS version 2.0

Figure 6.5 and table 6.1 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 6.2 Cross Loadings

14510 012 01000 204411160		
	Tax Morale	Tax Sanction
Knowledge	0.8040	0.1933
Understanding	0.6989	0.2146
Expectation	0.6510	0.0843
Reward	0.1728	0.6939
Punishment	0.2023	0.7884

Source: primary data were processed with SmartPLS version 2.0

Table 6.2 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 6.3 Composite Reliability

	Composite Reliability
Tax Morale	0.7629
Tax Sanction	0.7101

Source: primary data were processed with SmartPLS version 2.0

Referring to the result of testing the outer model, in terms of convergent validity, discriminant validity, and composite reliability, we can say that the dimensions of reward and punishment adequately construct the variable of tax sanction: **hypothesis H1**³⁷ **is accepted**. The same is true for the dimensions of knowledge of taxation, understanding rules, and tax expectation for the variable of tax morale: **hypothesis H2**³⁸ **is also accepted**.

 $^{^{}m 37}$ H1: The dimensions of reward and punishment construct the variable of tax sanction.

³⁸ H2: The dimensions of tax knowledge, understanding rules, and tax expectation construct 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, we obtain t-statistics that can be presented in the following figure and table.

Punishment TAX SANCTION Expectation Understand TAX MORALE

Figure 6.6 The result of algorithm PLS (t-values)

Table 6.4 Value of t-table and t-statistics

	t-table (critical point)	t-statistics
Punishment -> Tax Sanction	1.97273	2.600
Reward -> Tax Sanction	1.97273	2.009
Tax Sanction -> Tax Morale	1.97273	2.013
Expectation -> Tax Morale	1.97273	2.084
Knowledge -> Tax Morale	1.97273	2.858
Understanding -> Tax Morale	1.97273	2.120

Source: primary data were processed with SmartPLS version 2.0

Figure 6.6 and table 6.4 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): **hypothesis H3**³⁹ **is accepted**.

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

Table 6.5 R Square

	R Square	
Tax Sanction		
Tax Morale	0.0642	

Source: primary data were processed with SmartPLS version 2.0

Table 6.5 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.

³⁹ H3: Tax sanction is positively associated with tax morale.

6.2.4 Results: comparison between government employees, state enterprise employees, and private workers

Hypotheses 4-12 specify hypotheses 1-3 (which were formulated for the entire group of respondents) for three groups: government employees (GE), state enterprise employees (SEE) and private workers (PW). The results for each group are elaborated below, following the same format as in part 3.

Taxpayers employed as government employees (GE)

Assessing the outer model (measurement model)

Convergent validity

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

Punishment 0,896 0,000 Expectation 0,039 O,403 Feward TAX SANCTION TAX MORALE Understanding

Figure 6.7. The result of algorithm PLS (loading factors)

Source: Primary data were processed with SmartPLS version 2.0

Table 6.6. Outer Loadings

	Tax Morale	Tax Sanction
Knowledge	- 0.646	
Understanding	- 0.824	
Expectation	0.403	
Reward		0.376
Punishment		- 0.896

Source: primary data were processed with SmartPLS version 2.0

Figure 6.7 and table 6.6 illustrate that all dimensions have factor loading of less than 0.50 so it can be said that all dimensions lack convergent validity.

Discriminant validity

Table 6.7 Cross Loadings

	Tax Morale	Tax Sanction
Knowledge	-0.6461	0.0603
Understanding	-0.8236	0.1647
Expectation	0.4026	-0.1136
Reward	-0.0831	0.3760
Punishment	0.1735	-0.8962

Source: primary data were processed with SmartPLS version 2.0

Table 6.7 shows that for GE, the values of the loading factors of almost all dimensions on their "own" variable are lower the value of these loading factors on the "other" variable. For GE, only the dimensions of expectation (tax morale) and reward (tax sanction) have discriminant validity.

Composite reliability

The result of the composite reliability test shows that variables of tax morale and tax sanction do not have sufficient composite reliability because for both variables the internal consistency is below 0.60.

Table 6.8 Composite Reliability

	Composite Reliability	
Tax Morale	0.3953	
Tax Sanction	0.2041	

Source: primary data were processed with SmartPLS version 2.0

Based on the results of the assessment of the outer model, we reject hypotheses $H4^{40}$ and $H5^{41}$.

Assessing the inner model (structural model) for GE

Given the results of the test of the outer model, it does not come as a surprise that, for GE, the effect of tax sanction on tax morale is very low. It is 3.9 percent based on the value of R-square, as presented in the following table (with 96.1 percent being explained outside of the model).

Table 6.9 R Square

Â	R Square
Tax Sanction	
Tax Morale	0.0393

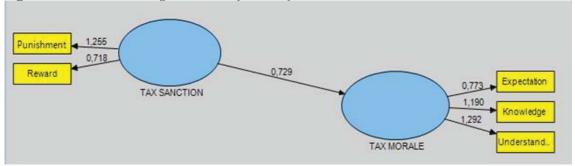
Source: primary data were processed with SmartPLS version 2.0

⁴⁰H4: The dimensions of reward and punishment construct the variable of tax sanction, for government employees.

⁴¹H5: The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale, for government employees.

By using SmartPLS version 2.0, we obtain t-statistics for the model for GE that are presented in the following figure and table.

Figure 6.8 The result of algorithm PLS (t-values)



Source: Primary data were processed with SmartPLS version 2.0

Table 6.10 Value of t-table and t-statistics

	T table (critical point)	T Statistics
Punishment -> Tax Sanction	1.66	1.255
Reward -> Tax Sanction	1.66	0.718
Tax Sanction -> Tax Morale	1.66	0.729
Expectation -> Tax Morale	1.66	0.773
Knowledge -> Tax Morale	1.66	1.190
Understanding -> Tax Morale	1.66	1.292

Source: primary data were processed with SmartPLS version 2.0

Table 6.10 indicates the significance level of influence among dimensions and variables and then between variables. All relationships have a t-value under the t-table or critical point. This means that there is no significant relationship between tax sanction and tax morale for GE: **hypothesis** $\mathbf{H6^{42}}$ is rejected.

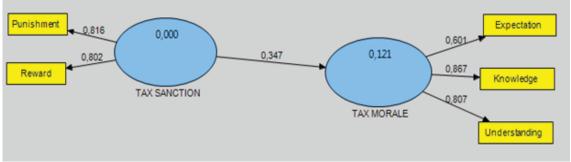
Taxpayers employed as state enterprise employees (SEE)

Assessing the outer model (measurement model)

Convergent validity

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

Figure 6.9 The result of algorithm PLS (loading factors)



Source: Primary data were processed with SmartPLS version 2.0

 $^{^{\}rm 42}$ H6: Tax sanction is positively associated with tax morale of government employees.

Table 6.11 Outer Loadings

	Tax Morale	Tax Sanction
Knowledge	0.867	
Understanding	0.807	
Expectation	0.601	
Reward		0.802
Punishment		0.816

Source: primary data were processed with SmartPLS version 2.0 M3

Figure 6.9 and table 6.11 show that all dimensions have factor loadings of more than 0.50 so it can be said that for SEE all dimensions have convergent validity.

Discriminant validity

Table 6.12 Cross Loadings

	Tax Morale	Tax Sanction
Knowledge	0.8672	0.2898
Understanding	0.8069	0.2385
Expectation	0.6010	0.2595
Reward	0.2761	0.8018
Punishment	0.2854	0.8159

Source: primary data were processed with SmartPLS version 2.0

Table 6.12 shows that for SEE, 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

The result of the composite reliability test shows internal consistencies greater than 0.60, for SEE (table 6.13).

Table 6.13 Composite Reliability

	Composite Reliability
Tax Morale	0.8073
Tax Sanction	0.7910

Source: primary data were processed with SmartPLS version 2.0

On the basis of these results, **hypotheses H7**⁴³ and **H8**⁴⁴ are accepted.

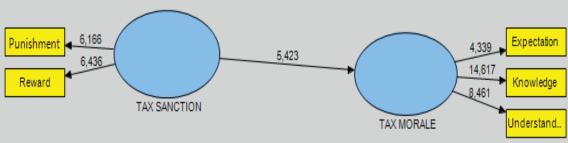
⁴³ H7: The dimensions of reward and punishment construct the variable of tax sanction, for state enterprise employees.

⁴⁴ H8: The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale, for state enterprise employees.

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), for SEE. By using SmartPLS version 2.0, we obtain t-statistics that can be presented in the following figure and table.

Figure 6.10 The result of algorithm PLS (t-values)



Source: Primary data were processed with SmartPLS version 2.0

Table 6.14 Value of t-table and t-statistics

	T table (critical point)	T Statistics
Punishment -> Tax Sanction	1.71	6.166
Reward -> Tax Sanction	1.71	6.436
Tax Sanction -> Tax Morale	1.71	5.423
Expectation -> Tax Morale	1.71	4.339
Knowledge -> Tax Morale	1.71	14.617
Understanding -> Tax Morale	1.71	8.461

Source: primary data were processed with SmartPLS version 2.0

Figure 6.10 and table 6.14 clarify that the values of t-statistics for the relationship between the dimensions of punishment and reward toward tax sanction, for the relationship between knowledge of taxation, understanding tax rules, and tax expectation toward tax morale, and for relationship between tax sanction and tax morale are all higher than the value of t-table at 1.71. This means that **hypothesis H9**⁴⁵ is accepted. The effect of this relationship can be shown in the following table:

Table 6.15 R Square

Table 0:13 K Square		
	R Square	
Tax Sanction		
Tax Morale	0.1205	

Source: primary data were processed with SmartPLS version 2.0

Table 6.15 shows that the effect of tax sanction on tax morale for SEE is 0.1205 or 12.05 percent, in which 87.95 percent is explained by other variables outside the model.

⁴⁵ H9: Tax sanction is positively associated with tax morale of state enterprise employees.

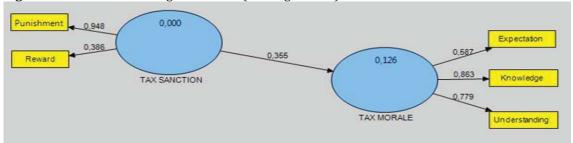
Taxpayers employed as private workers (PW)

Assessing the outer model (measurement model)

Convergent validity

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

Figure 6.11 The result of algorithm PLS (loading factors)



Source: Primary data were processed with version 2.0 M3 SmartPLS

Table 6.16. Outer Loadings

	Tax Morale	Tax Sanction
Knowledge	0.863	
Understanding	0.779	
Expectation	0.587	
Reward		0.368
Punishment		0.948

Source: primary data were processed with SmartPLS version 2.0

Figure 6.11 and table 6.16 indicate that almost all dimensions have factor loadings of more than 0.50. For PW, only the dimension of reward has a loading factor of less than 0.50. It means that the dimensions of punishment, knowledge of taxation, understanding of tax rules, and tax expectations have convergent validity.

Discriminant validity

Table 6.17 Cross Loadings

	Tax Morale	Tax Sanction
Knowledge	0.8631	0.3437
Understanding	0.7788	0.1513
Expectation	0.5874	0.2354
Reward	0.1187	0.3855
Punishment	0.3431	0.9477

Source: primary data were processed with SmartPLS version 2.0

Table 6.17 shows that the value of the loading factors for the dimensions of tax morale are higher than the value of these loading factors of the dimensions of tax morale within tax sanction, and vice versa. It means that the dimensions of both tax morale and tax sanction have discriminant validity.

Composite reliability

As shown in table 6.18 for PW, both variables have sufficient composite reliability, with internal consistencies greater than 0.60.

Table 6.18 Composite Reliability

	Composite Reliability
Tax Morale	0.7922
Tax Sanction	0.6509

Source: primary data were processed with SmartPLS version 2.0

Based on these results, we conclude that **hypothesis H10**⁴⁶ **has to be rejected**, and **hypotheses H11**⁴⁷ **can be accepted**.

Assessing the inner model (structural model) for PW

By using SmartPLS ver.2.0, we obtain the following t-statistics.

Figure 6.12 The result of algorithm PLS (t-values)

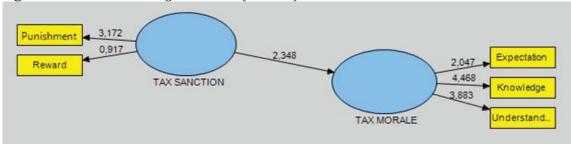


Table 6.19 Value of t-table and t-statistics

	t- table (critical point)	t-Statistics
Punishment -> Tax Sanction	1.68	3.172
Reward -> Tax Sanction	1.68	0.917
Tax Sanction -> Tax Morale	1.68	2.348
Expectation -> Tax Morale	1.68	2.047
Knowledge -> Tax Morale	1.68	4.468
Understanding -> Tax Morale	1.68	3.883

Source: primary data were processed with SmartPLS version $2.0\,$

Table 6.19 shows that all dimensions have t-statistics, which are larger than t-table, except for the dimension of reward this result is in line with the test of convergent validity. Overall, for PW, tax sanction is positively associated with tax morale: **hypothesis H12**⁴⁸ **is accepted**. The magnitude of the effect is presented in the following table.

⁴⁶ H10: The dimensions of reward and punishment construct the variable of tax sanction, for private workers.

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⁴⁷ H11: The dimensions of tax knowledge, understanding rules, and tax expectation construct the variable of tax morale, for private workers.

⁴⁸ H12: Tax sanction is positively associated with tax morale of private workers.

Table 6.20 R Square

	R Square
Tax Sanction	
Tax Morale	0.1263

Source: primary data were processed with SmartPLS version 2.0

Table 6.20 shows that the effect of tax sanction on tax morale for PW is 0.1263 or 12.63 percent, in which 87.37 percent is explained by other variables outside the model.

Referring the results for the verification analysis for the three groups and especially to effects (3.9 percent for GE, 12.05 percent for SEE and 12.63 for PW, see table 7.21 for a recap), we have to reject hypotheses H13⁴⁹, H14⁵⁰ and H15⁵¹.

 Table 6.21 Comparison of effect of tax sanction on tax morale among government employees,

state enterprise employees, and private workers

	Effect of tax sanction on tax morale	
Government Employees	3.93%	
State Enterprise Employees	12.05%	
Private Workers	12.63%	

6.3 In-depth face-to-face interviews

6.3.1 Data collection and instrument development

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 reproduced in Annex 4. 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.

6.3.1 Data analysis technique

For the in-depth face-to-face interviews, the data collected are analyzed by frequency analysis.

6.3.2 Results

We 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, we give an overview of the main findings, following (but not literally reproducing) the format of the (semi-structured) questionnaire in Annex 4. The consensus among the respondents in answers was very large; that is why we cannot and will not split up the answers for the three groups: government employees, state enterprise employees, and workers in the private sector.

⁴⁹ H13: Government employees show a more positive impact of tax sanction on their tax morale than private workers.

⁵⁰ H14: State enterprise employees show a more positive impact of tax sanction on their tax morale than private workers.

⁵¹ H15: Government employees show a more positive impact of tax sanction on their tax morale than state enterprise employees.

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 as 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, we 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.

6.4 Simulation game

6.4.1 Data collection and instrument development

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:

We 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:

We 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:

We 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 dis-honestly** 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.

The instrument of this game is further elaborated upon in Annex 5.

6.4.2 Data analysis technique

For the simulation game, the data collected are analyzed by frequency analysis.

6.4.3 Results

For the simulation game, we used 135 respondents, from the School of Public Administration Bandung, West Java, Indonesia. The 135 respondents were divided over three groups ("classes") of 45 respondents each. We conducted the simulation game in March 2015. The results and analysis can be presented as follows.

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:

```
⇒ IDR 200 million (S) a year
                                                                                   28 (62.22 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
                                                                                   1 (2.22 percent)
    IDR 800 million [200 (S)+500 (B)+100 (L) million] a year
                                                                                   1 (2.22 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
                                                                                   1 (2.22 percent)
    IDR 700 million [200 (S)+300 (C)+200 (SP) million] a year
                                                                                   0 (0.00 percent)
    IDR 500 million [200 (S)+ 100 (L)+200 (SP) million] a year
                                                                                   0 (0.00 percent)
\Rightarrow
    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
                                                                                   1 (2.22 percent)
    IDR 1.3 billion [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year =
                                                                                   7 (15.56 percent)
                                                                                   45 (100 percent)
```

Based on the result above, we 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:

```
⇒ IDR 200 million (S) a year
                                                                                     25 (55.56 percent)
\Rightarrow IDR 700 million [200 (S)+500 (B) million] a year
                                                                                    1 (2.22 percent)
    IDR 500 million [200 (S)+300 (C) million] a year
                                                                                     2 (4.44 percent)
    IDR 300 million [200 (S)+100 (L) million] a year
                                                                                     2 (4.44 percent)
    IDR 400 million [200 (S)+200 (SP) million] a year
                                                                                    2 (4.44 percent)
    IDR 1 billion [200 (S)+500 (B)+ 300 (C) million] a year
                                                                                    0 (0.00 percent)
\Rightarrow
    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
                                                                                    1 (2.22 percent)
     IDR 700 million [200 (S)+300 (C)+200 (SP) million] a year
                                                                                    0 (0.00 percent)
     IDR 500 million [200 (S)+ 100 (L)+200 (SP) million] a year
                                                                                    1 (2.22 percent)
\Rightarrow
    IDR 1.1 billion [200 (S)+500 (B)+300 (C)+100 (L) million] a year
                                                                                    1 (2.22 percent)
\Rightarrow
     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 =
                                                                                     9 (20.00 percent)
                                                                                     45 (100 percent)
```

Based on the result above, we 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. It means the **hypothesis H16** 52 is accepted.

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) = 1 (2.22 percent) = 0 (0.00 = 0 (0.00 percent)IDR 800 million [200 (S)+500 (B)+100 (L) million] a year IDR 900 million [200 (S)+500 (B)+200 (SP) million] a year ⇒ IDR 600 million [200 (S)+300 (C)+100 (L) million] a year 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)

⁵² H16: The existence of reward reduces cheating in annual tax return.

```
⇒ 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)

45 (100 percent)
```

Based on the result above, we conclude that 67 percent of the respondents tend to cheat in reporting their incomes in their annual tax returns, when government provides punishment for dis-honest respondents. If we 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. **Hypothesis H17**⁵³ is rejected.

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.

6.5 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 indepth face-to-face interviews, and the simulation game. Based on literature review, we first developed a conceptual framework regarding sanctions, rewards, punishment, morale, knowledge, understanding of rules, and expectations. We subsequently developed the analytical framework for the empirical research and formulated hypotheses. We elaborated on each part of the follow-up research, i.e. the on-line

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⁵³ H17: The existence of punishment decreases cheating in annual tax return.

survey, the in-depth face-to-face interviews, and the simulation game, and discussed methodological issues as well as the findings.

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

Results of the on-line survey (all respondents)

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, we 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 we 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, we 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, we 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 on-line survey (differentiation between GE, SEE and PW)

Subsequently we ran the similar assessments (of the outer and inner model) for the three groups of respondents: government employees, state enterprise employees, and employees from the private sector. In terms of the outer model, we found that for GE the model lacked discriminant validity and composite reliability. For SEE all outer model tests were positive. For PW we found problems with convergent validity (but only for the dimension of rewards). In testing the inner model we found interesting differences between the three groups, in terms of the overall effect of tax sanctions on tax morale. This effect (which was 6.4 percent for the overall group) was very low for GE (3.9 percent, with no significant correlation between tax sanctions and tax morale), 12.1 percent for SEE (with significant correlations between the two variables), and even higher, 12.6 percent, for PW (also with significant correlations between the variables).

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 6.22 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 6.22 Comparison of inclination to cheat for three treatments in the simulation game

	Inclination to cheat
Treatment 1 – actual conditions + no rewards or punishment	62.22%
Treatment 2 – actual conditions + rewards	55.56%
Treatment 3 – actual conditions + punishment	66.67%

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, we 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. We found that the model performed especially badly for government employees, but less so for state enterprise employees and private workers. This shows that -contrary to the initial findings for the larger model of tax compliance in chapter 5-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). The follow-up research 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.

CHAPTER 7 Epilogue

This chapter serves as the concluding part of the thesis, which first summarizes the findings, then addresses the contributions of these findings to research, and –finally-discusses potential further tax reform in Indonesia.

7.1 Summary of research findings

The main research question was formulated as follows.

"How can Indonesia increase its tax compliance by focusing on public officials?"

The sub-research questions derived from the main research question were:

- 1. What is the current state of affairs regarding tax compliance and tax reforms in Indonesia, compared to other countries?
- 2. What does the literature tell us about underlying factors for tax compliance, generally and specifically tax compliance by public officials?
- 3. How do public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale?
- 4. What are the key factors for improving tax compliance focusing on public officials?

The first question "What is the current state of affairs regarding tax compliance and tax reforms in Indonesia, compared to other countries?" was addressed particularly in chapter 2. Tax compliance and tax compliance problems in Indonesia are inseparable from the larger tax system. Indonesia faces structural problems with low tax compliance, as shown by its relatively low tax ratio (i.e. the ratio of tax revenues to GDP). Problematic tax compliance mainly occurs because of a difference between the availability of public goods-needed by taxpayers and public goods-actually provided by the state. This situation is exacerbated by tax corruption involving taxpayers and tax officials. As a consequence, the trust of taxpayers in government is low and this encourages non-compliance. Indonesia's efforts to improve its tax system have been realized by various tax reforms, which started in 1983, by changing the tax collection system from official assessment to self-assessment. Subsequently, tax reforms have included the reform of tax rates and tax bases of various taxes, as well as tax administrative reform. Unfortunately, these reforms have not improved tax compliance. Indonesia's tax ratio is still low, at around 12 percent. This means that the potential for improving tax compliance is still very large.

The second question "What does the literature tell us about underlying factors for tax compliance, generally and specifically tax compliance by public officials?" was mainly addressed in chapter 3. We first discussed various perspectives on tax compliance problems, such as the economics of crime, tax morale and ethics, the relevance of a psychological contract, the importance of fair treatment of taxpayers, issues of democracy and tax compliance, tax compliance as social norms, and the so-called slippery-slope model. We were able to link most of these perspectives to four main factors affecting tax compliance: modernized tax administration system (MTAS),

tax sanctions, tax services, and tax morale. We had a closer look at what the literature has to say about these four factors, how they have been subject to changes as part of tax reform in Indonesia, and how the relationship between each factor and tax compliance has been evaluated in the Indonesian context, in academic research. Subsequently, we focused on the role of public officials. In the scope of Indonesia's laws and social system, public officials are viewed as representatives of government and as role models ("father-figures") and change agents. We briefly discussed some literature on role models and change agents, such as social learning theory, according to which the behavior of public officials will influence the behavior of society, for example in fulfilling tax obligations. We found that to date no research has been done on tax compliance by public officials specifically.

The third question "How do public officials in Indonesia perceive their tax compliance being influenced by underlying factors such as the level of modernization of the tax administration system, tax sanctions, tax services and tax morale?" was addressed in chapters 4 and 5. This question was answered mainly by means of a survey study, involving 400 respondents working in the public sector (as government employees and state enterprise employees). We found that public officials perceive their tax compliance as good, even though it public officials behave far from perfect: over the last two years 27 percent did not submit the annual tax return in time, and nearly 24 percent of the respondents indicated that they had been late in paying the income tax. We tested for differences in perception of tax compliance between various sub-samples (based on gender, age, educational level, and province of origin), but no significant differences were found.

The perception of public officials of the extent to which the Indonesian tax administration is modernized and of the level of tax services, was sufficient, but the perception of the two other main factors was bad. This can be linked to their views on the tax system in Indonesia. The majority of respondents indicated the importance of paying taxes, and the vast majority of respondents acknowledged their obligation to be compliant with tax laws, but the survey results also showed considerable dissatisfaction with the way the tax system is implemented in Indonesia. Respondents mentioned the government's failure in properly developing Indonesia, the misuse of tax revenues, failing tax reforms, and the gap between intentions as laid down in tax laws and actual implementation. Still, a large majority acknowledged that as public officials they are role models for other taxpayers.

In terms of correlations between the four variables and tax compliance, we found rather low (but significant) correlations with tax compliance for MTAS, tax services and tax morale, but no significant correlation for tax sanctions. Overall, the model performed in a limited way: the combined effect of the four variables on tax compliance was low. We found similar results when we looked at the two groups of public officials involved: government employees and state enterprise employees. Overall, state enterprise employees had lower scores on their perception of the five variables, but not all differences between government employees and state enterprise employees were significant.

The final question "What are the key factors for improving tax compliance focusing on public officials?" was addressed in chapters 6, by means of follow-up research. This follow-up research focused on two variables: tax sanctions and tax morale. It consisted of an on-line survey, in-depth face-to-face interviews, and a simulation game. The survey and interviews included respondents from the private sector. For the follow-up research an analytical model was developed, with the two

variables (tax sanctions and tax morale) and various dimensions of these variables (knowledge, understanding, and expectations for tax morale; rewards and punishment for tax sanctions).

We found that this model worked quite well, in terms of the model as a measurement model. However, as a structural (explanatory) model the captured effect was rather low, and further improvements and extensions are needed. We found that the model performed especially badly for government employees, but less so for state enterprise employees and private workers. This implies that –contrary to the findings for the larger model of tax compliance in chapter 5- 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). The follow-up research also showed that rewards are potentially more effective in increasing tax compliance than punishment. Moreover, 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.

7.2 Contributions, limitations, and implications for further research

This thesis contributes to both theory and practice. It has implications for the research community in the field of taxation as well as for practitioners and decision makers in Indonesia involved in future tax reforms. The academic dimension is discussed in this section, the policy implications are discussed in the next section.

The thesis presents an exploration of perceptions of public officials regarding tax compliance and factors underlying tax compliance. The main contributions of the thesis are the following:

- by means of extensive literature research it has identified four main factors for tax compliance: modernized tax administration system, tax sanctions, tax services, and tax morale. These factors have been put into coherent and comprehensive analytical frameworks or models. This was done first for the four independent variables and the dependent variable, and then for two selected variables (tax sanctions and tax morale). These models were tested (as measurement models and explanatory models) with large groups of respondents;
- it focused on the role of public officials as taxpayers, by looking at two specific groups: government employees and state enterprise employees (also in comparison to employees from the private sector);
- as far as tax sanctions are concerned, by means of the simulation game, the thesis looked into the difference in potential impact (on tax compliance) between rewards and punishment.

Obviously, the thesis has limitations, which imply further research along the line of the three main contributions. First, the developed models performed in a limited way in terms of overall explanation of tax compliance. This implicates further research into potential underlying factors, as well as into improvement of measurement (that should go beyond the use of perceptions). Secondly, the thesis made clear that there are differences in tax compliance behaviour and factors underlying that behaviour between the groups of public officials and private workers, but further research is needed to clarify these differences. Thirdly, more research can be done into the potential difference between the use of rewards and punishment in raising tax compliance.

7.3 Recommendations for future tax reform in Indonesia

This thesis provides information on how public officials, as role models and change agents in the tax system, perceive their tax compliance, as well as factors that potentially contribute to higher tax compliance, such as modernization of the tax administration, better tax services, more effective tax sanctions, and better tax morale. It is important that the Indonesian government, in its efforts to increase tax compliance, finds its own way to regularly monitor and evaluate these factors, not just for public officials as taxpayers, but for all taxpayers.

Based on the findings of the thesis, on our own observations, but also on specific input from respondents during the implementation of the research, there are numerous recommendations to be made for each main factor. We here highlight the most important ones.

Regarding the modernization of the tax administration, we recommend further refinement of the tax administration system, especially in terms of e-reporting/e-annual tax return with good data cooperation between banks, institutions/companies, and the tax offices. This would include the obligation to submit annual tax returns only for personal taxpayers with independent work and private companies so that the administration process is more efficient; if there is sufficient cooperation between the various institutions, self-assessment and annual tax returns for taxpayers with salaries only are no longer necessary. This also implies that control processes can increasingly be done by means of data base analysis and comparison. Specifically for public officials, we recommend more transparency regarding their incomes; in principle, tax officials should publicly declare their incomes; assessment of their incomes should be done by external auditors and not by colleagues in the tax office.

Regarding tax services, we suggest to improve the one-gate service by computerization and connection by internet, and integrated e-annual tax returns. Basically, all tax services should be computerized and brought further in line with modern practices, following other sectors in society.

As far as tax morale is concerned, tax education could be integrated into all levels of education, and should also be part of employee training. Public officials, and tax officials more specifically, should be targeted more intensively in order to enhance integrity.

Regarding tax sanctions, we recommend a better use of (financial) rewards for compliant taxpayers, and rewards can best be linked to expenditure for public services, such as housing, education and health services. Basically, we suggest a better link between paying taxes and enjoying public services, or a reversed type of benefit taxation. Traditionally, with benefit taxation, the tax burden is determined by the level of benefits received from government expenditure. Here we suggest to make benefits from public services more dependent on (properly) paying taxes. Additionally, in terms of negative sanctions, we recommend better and more equitable implementation of the current set of sanctions, a progressive system for recurrent tax sanctions as well as the introduction of social sanctions.

Finally, this thesis has made clear that tax compliance issues cannot be separated from the overall public finances of Indonesia and the performance of the Indonesian government in terms of bringing welfare to its people. Tax compliance would benefit from more information on how taxes are used and from better use of taxes as such. To start with, the government (and the Indonesian tax authorities) should provide regular and transparent information on how tax revenues are used. A better and more transparent use of tax resources does require strong commitment from the government, and such commitment is the primary tool to achieve a better tax system and more voluntary tax compliance in Indonesia.

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Annex 1 – Questionnaire used for the survey study (chapters 4 and 5)

The formulation of this questionnaire was started by generating a pre-instrument based on the analytical framework and the operationalization of the variables. We tested the draft on 8 people who have similar characteristics as the respondents of the survey study. They were public officials from Indonesia who have been studying in University of Twente, the Netherlands (at both master and doctoral level). The findings of test were then analysed by the Cronbach Alpha test to examine the validity and reliability of questionnaire. The result is the following questionnaire (which is here presented as the English translation of the Indonesian original).

QUESTIONNAIRE

THE IMPACT OF APPLYING MODERNIZED TAX
ADMINISTRATION SYSTEM, TAX SANCTION, TAX MORALE,
AND TAX SERVICE ON TAX COMPLIANCE

Respondents are State enterprise and Government Employees Registered as Student in School of Administration in Jakarta, Bandung, and Makassar 2014

Abdul Rahman

Supervisor: Prof. Dr. Nico S. Groenendijk

NID			
ININ			

Dear all public officials of both government employees and state enterprise employees,

This research concerns about tax reform, in particular the impact of applying modernized tax administration system, tax sanction, tax service, and tax morale on tax compliance. In general, **modernized tax administration system** is the manifestation of tax reform in the form of applying the tax administration system that is improved its performance comprehensively, transparently and be accountable covering directly the three of pillars, namely 1) administration;2) supervision; and 3) regulation. The modernized tax administration system uses the reliable and latest information technology through the aspect of software, hardware and man-ware. The modernization process has conducted since 2002 of either individual, group, or institution in order to achieve more efficient, economical and fast administration services for taxpayers and to achieve the voluntary tax compliance and high productivity performance of tax officials, which is expected to reduce the practice of corruption, collusion and nepotism.

Furthermore, tax compliance is a condition in which the taxpayer fulfills consciously all tax obligations in accordance with tax laws, which is reflected in situations where the taxpayer understands or try to understand all the provisions of tax laws by: 1) registering to get the tax identification number; 2) filling out completely and clearly tax forms:3) calculating correctly the amount of tax payable; 4) paying taxes; 5) reporting timely the annual and monthly tax return without the need to be audited, investigated, and threatened by both criminal and administrative sanctions. Then, tax sanction is a punishment given to those who break the tax law as an attempt to force the taxpayer to comply with all the tax regulations and as a tool to prevent the violating behavior; tax morale is the intrinsic motivation within the individual to pay taxes as a result of the existence of awareness, readiness, and willingness to contribute to the country and as part of a moral obligation; and **tax service** is the performance of tax official in services of both quantity and quality within a certain period to fulfill all the taxpayer needs based on four main elements, namely: 1) equality (the same treatment in providing services); 2) equity (the fair treatment in providing services); 3) loyalty (loyalty to the constitution, laws, leaders, subordinates and co-workers in providing services); 4) and responsibility (readiness to accept risks as a result of activities).

To measure the variables above, we expect, you could participate in filling out this questionnaire. The answer can be given by providing a cross (X) on a scale of 1-5 and 8 including write down the answers to the essay questions.

The questionnaire is used for academic purposes, therefore honesty in filling in the questionnaire is highly appreciated. To maintain confidentiality, the writing of the name does not exist on the identity sheet in this questionnaire. Thank you for your willingness to provide your time to fill in this questionnaire. Hopefully, your participation to be beneficial for the knowledge development, especially in the field of taxation in Indonesia.

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		the questions given relate to the data of respondent identity such as arital status, institution, education, and others.
SECTION	A.	QUESTIONS AS A TAXPAYER In this sub section, respondents will get questions regarding with their experiences as a taxpayer toward the application of modernized tax administration system, tax sanction, tax morale, tax service and tax compliance.
		EXPERIENCE IN FULFILLING TAX OBLIGATION In this sub section, the questions given relate to the experience of the respondent in fulfilling tax obligations in general such as the number of visit to the tax office, the purpose of visit, submitting the annual tax return, and others.
		INFORMATION REGARDING THE SMALL TAX OFFICE VISITED AND FACILITIES
		INFORMATION ABOUT COST In this sub section, the questions given relate to the costs when respondents spend some money in the process of administration in the tax office
SECTION	В.	QUESTIONS AS A PROFESSIONAL
		A. General questions B. Specific questions C. Suggestion/feedback/objection

IDENTITY OF RESPONDENTS

IR	IDENTITY OF RESPO	NDENT					
IR01	Gender	1. Male	2. Female				
IR02	Age	1. 18 -28 years old 2. 29 - 39 years old 3. 40 - 50 years old 4. 51 - 61 years old 5. ≥ 62 years old					
IR03	Marital Status	1. Unmarried	2. Married	3. Div	orce		
IR04	Institution of workplace						
IR05	Unit of workplace and position	1. Unit:					
IR06	Address of institution						
IR07	Province of institution						
IR08	Duration of work in the last institution	year month					
IR09	Last education finished	1. Senior high school 3. Bachelor 2. Diploma 4. Master					
IR10	Education program taken	1. Bachelor 2. Master 3. Doctoral					
IR11	Source of tax knowledge (allowed to choose more than one)	 Tax training Tax dissemination Guidance book for f Internet Nothing Others 					
IR12	Sources of income besides salary	a. Structural/function b. Honor from internation c. Lecturer d. Speaker in a semin e. Employee in a priv f. Consultant for othe g. Others	al activities ar/course at company er instutions	1. Yes 1. Yes 1. Yes 1. Yes 1. Yes 1. Yes	2. No 2. No 2. No 2. No 2. No 2. No		

SECTION A: QUESTION AS A TAXPAYER

This section provides questions to know your **EXPERIENCE** towards the application of modernized tax administration system, tax sanction, tax morale, and tax service in the tax office including your tax compliance. Therefore, we hope, you could give the appropriate answers with **the situation truly experienced**. Thank you for your willingness in answering the questions.

Tax Compliance

Prologue: tax compliance covers aspects: of registering compliance, filling compliance, paying compliance, and reporting compliance by indicators namely register voluntarily; register as a role model; recording and bookkeeping transactions of incomes; filling out tax forms; accuracy in filling out tax forms; calculating all incomes; honesty in calculating all incomes; accuracy in using tax rate; calculating and paying taxes in line with applicable rules; paying taxes for all incomes; paying without cheating; submitting annual tax return; submitting itself annual tax return; and submitting timely annual tax return.

1. To what extent do you think about your tax compliance in the modernized tax administration era?

(1) To what extent do you agree with your REGISTERING COMPLIANCE?

(1) To what extent do you agree with y	Jul ILLUI	O I LIVING	COM	DIMINOL.		
I have not registered voluntarily the tax identification number to the tax office	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
I have registered the tax identification number because of my job as a role model for the society	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

(2) To what extent do you agree with your FILLING COMPLIANCE?

I record all my transactions and save their proofs	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
I provide the bookkeeping for all received incomes because a bookkeeping is made to facilitate taxpayers in calculating tax payables for the annual tax return	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
I fill out the annual tax return forms	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
In addition, to my obligatory annual tax return, I fill out the monthly tax return	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Regarding with tax forms, I fill out them with completeness and correctness	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
I calculate all my incomes	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
I am honest in calculating all my incomes	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

I use the correct tax rate when I calculate the taxable income	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
I just filled the income from salary in my annual tax return because the tax officials are not strict in checking annual tax returns of public officials	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
I'm not going to report my income for tax If I received the income before tax	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know

(3) To what extent do you agree with your PAYING COMPLIANCE?

(5) To what extent do you agree with y	our rilli	110 001:17	- BIIII			
I calculate my tax payables	1.	2.	3.	4.	5.	8.
	Strongly	Disagree	Neutral	Agree	Strongly	Don't
	disagree				agree	know
I pay taxes appropriate with the	1.	2.	3.	4.	5.	8.
	Strongly	Disagree	Neutral	Agree	Strongly	Don't
applicable rules	disagree	_		_	agree	know
	J				Ü	
I would not pay the tax If I received the	1.	2.	3.	4.	5.	8.
income before tax of both large and	Strongly	Agree	Neutral	Disagree	Strongly	Don't
9	agree				disagree	know
small						
		_			_	
I cheat in paying taxes because my	1.	2.	3.	4.	5.	8.
salary is small and the possibility to be	Strongly	Agree	Neutral	Disagree	Strongly	Don't
1	agree				disagree	know
audited is also small too						
	1					

(4) To what extent do you agree with your REPORTING COMPLIANCE?

(i) Is write sites in a year agree with y						
I submit the annual tax return	1.	2.	3.	4.	5.	8.
	Strongly	Disagree	Neutral	Agree	Strongly	Don't
	disagree			-	agree	know
I submit the annual tax return by myself	1.	2.	3.	4.	5.	8.
Todomic die dimidde dan Foder is by my bon	Strongly	Disagree	Neutral	Agree	Strongly	Don't
	disagree				agree	know
I submitted late the annual tax return	1.	2.	3.	4.	5.	8.
	Strongly	Agree	Neutral	Disagree	Strongly	Don't
	agree				disagree	know

2. All things considered, HOW SATISFIED are you with your tax compliance?

an tillings considered, now samismi	ib aic y	ou with	your	ax com	phanee	•
Toward the implementation of your tax compliance	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the ownership, utility, and benefit your tax identification number	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward your knowledge and ability to calculate your income and fill out your annual tax return form	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward your tax payable and process in paying taxes	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the timeliness in submitting your annual tax return	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know

Modernized Tax Administration System

Prologue: modernized tax administration system covers aspects of modernization of organizational structure, modernization of organizational procedure, modernization of organizational strategy, and modernization of organizational culture, by indicators namely the formation of organization based on function; the organizational structure simplifies the bureaucracy flow; the organizational structure produces more structured and more focused administrative services; the existence of account representatives that handle information and solve taxpayers' problems; the organizational structure has clear distinction between functions and responsibilities; standard operational organizational procedures; simplified administrative procedures and communication; administrative procedures that are appropriate with the taxpayer requirements; implementation of one-gate for all administrative processes; computerization of tax administration; simplification of tax payment; the availability of a complaint center for taxpayers; the existence of standard behavior in line with taxpayer needs; the culture to serve by heart; and the existence of a code of conduct.

3. To what extent do you think about the application of modernized tax administration system?

(1) To what extent do you agree with the MODERNIZATION OF ORGANIZATIONAL STRUCTURE?

STRUCTURE:						
The formation of organization based on the function at the current tax office could not simplify the bureaucracy flow and could not make administrative services more structured and more focused	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Account Representative could not play an active role in giving information of all tax matters and could not give a guidance to solve all tax problems	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Organizational structure is set up to facilitate administration process by clear distinction between the functions and responsibilities of the service, audit, billing, supervision, and consultation	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

(2) To what extent do you agree with the MODERNIZATION OF ORGANIZATIONAL PROCEDURE?

Modernization guarantees all activities in tax offices have standard operational procedures	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Simplified administration procedure and communication	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Administration procedure is not suitable with the taxpayer needs	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know

(3) To what extent do you agree with the MODERNIZATION OF ORGANIZATIONAL STRATEGY?

One-gate service could not provide an easiness even though all administration services integrated in the one unit	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Computerization of tax administration such e-registration, e-filling, and electronic waiting line could not simplify the administration process	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Simplicity tax payment through teller- bank, internet banking, and ATM provides the security for taxpayers	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The available of complaint center such help desk and tax corner improve the consumer satisfaction	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

(4) To what extent do you agree with the MODERNIZATION OF ORGANIZATIONAL CULTURE?

Modernization of culture provides a standard behavior corresponding with taxpayer necessity	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	1. Strongly disagree
Modernization of culture provides the organizational culture that commits to serve by heart in achieving the consumer satisfaction	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	1. Strongly disagree
The existence of code of conduct could not succeed to improve the behavior of tax offices	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know

4. Overall, HOW SATISFIED are you with the application of modernized tax administration system?

udilililisti deloli systelli.						
Toward the implementation of modernized tax administration		2. Dissatisfie	3. Neutral	4. Satisfied	5. Extremely	8. Don't know
Toward all changes that occur in the	dissatisfied 1. Extremely dissatisfied	2. Dissatisfie	3. Neutral	4. Satisfied	satisfied 5. Extremely satisfied	8. Don't know
Toward the process of modernized tax administration system by strengthening structure based on a function of service, inspection, billing, monitoring, and consulting	1. Extremely dissatisfied	2. Dissatisfie d	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the procedure of tax administration	1. Extremely	2. Dissatisfie	3. Neutral	4. Satisfied	5. Extremely	8. Don't know
Toward the application of one-gate service, computerization of tax administration, payment system, and the existence of complaint center in the tax office	1.	2. Dissatisfie	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the work culture based on code of conduct in the tax office	1. Extremely dissatisfied	2. Dissatisfie d	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know

Tax Sanction

Prologue: tax sanction covers aspects of tax administrative sanction and tax criminal sanction by indicators consist of tax administrative sanction as a tool to educate and to prevent deviations; imposing fairly and reasonably fines for late report; imposing fairly and reasonably interest for lateness and incorrect payment; appropriateness with size of offences; imposing fairly and reasonably the imprisonment sanctions for state losses; imposing imprisonment sanctions in accordance with the level of violations; and tax criminal sanction as a tool to educate and to prevent deviations

5. To what extent do you think about the application of tax sanction in the modernized tax administration system era?

(1) To what extent do you agree with the application of TAX ADMINISTRATIVE SANCTION? 3. 4. 5. The imposition of tax administrative 8. Strongly Disagree Neutral Strongly Agree Don't sanction is effective to educate the disagree agree know discipline and to prevent taxpayers in conducting deviations from tax laws 8. 1. 5. Nowadays, the imposition of fine and Neutral Disagree Strongly Agree Strongly Don't interest sanction is not fair and is not agree disagree know reasonable 2. 3. 4. 5. 8. The current imposition of fine and 1. Neutral Strongly Agree Disagree Strongly Don't interest sanction is not appropriate agree disagree know with the size of offenses

(2) To what extent do you agree with the application of TAX CRIMINAL SANCTION?

2) To what extent do you agree with the application of TAX CRIMINAL SANCTION?									
The imprisonment sanction is not fair and is not reasonable	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know			
The imprisonment sanction is not appropriate with the size of offenses	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know			
The imposition of tax criminal sanction is effective to educate the discipline and to prevent taxpayers in conducting deviations from tax laws	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know			

6. All things considered, HOW SATISFIED are you with the application tax sanction?

Toward the implementation of tax sanction	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the magnitude of fine and interest sanction	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the magnitude of imprisonment sanction for tax evasion caused the state loses	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the fairness in the application of fine and interest sanction	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the fairness in the application of the imprisonment sanction	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know

Tax Morale

Prologue: tax morale covers aspects of tax knowledge, tax fairness, and trust in government by indicators namely knowledge of tax laws and tax function; knowledge of the rights and obligations as taxpayer; knowledge of use of tax revenues (instead of knowing the fairness in tax allocation); fairness in application of tax system; benefit approach; ability to pay approach; horizontal equity; vertical equity; trust in use of tax revenue without corruption; trust in equal treatment of taxpayers; and trust in tax collection without discrimination.

7. To what extent do you think about your tax morale in the modernized tax administration system era?

(1) To what extent do you agree with your TAX KNOWLEDGE?

1) To what extent uo you agree with your TAX KNOWLEDGE:									
I think it is important to know comprehensively tax laws and the function of taxation	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know			
I don't know all tax laws related to the right and obligation in aspects of income tax, final income tax, tax rate, non-taxable income, and tax sanction, including filling and reporting system	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know			
I know that taxation has allocated actively to finance the operational government greater than the public expenditure	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know			

(2) To what extent do you agree with the application of TAX FAIRNESS?

I think, the current tax system is not fair	1.	2.	3.	4.	5.	8.
, , , , , , , , , , , , , , , , , , , ,	Strongly	Agree	Neutral	Disagree	Strongly	Don't
	agree				disagree	know
Tax system guarantees imposing taxes based on the principle of the greater the benefits received by the taxpayer, the greater the tax burden paid	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax system guarantees imposing taxes based on the principle of the higher the individual's ability to pay taxes, then the greater the tax burden paid	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax system guarantees imposing taxes based on the principle of the same tax to the same income	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax system guarantees imposing taxes based on the principle of the amount of tax according to the amount of income or progressive system	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

(3) To what extent do you agree with your TRUST IN GOVERNMENT?

(-/						
I don't trust that government has	1.	2.	3.	4.	5.	8.
allocated the tax revenue for the right	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Don't know
purposes without corruption	ugree				alsagree	iniow
*						

I don't trust that tax officials have provided the same treatment for all administrative services for all taxpayers	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
I trust that government has attempted to rise the tax revenue by collecting taxes without discrimination	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

8. All things considered, HOW SATISFIED are you with your tax morale in fulfilling your tax obligations?

your tax obligations:						
Toward the implementation of your tax morale	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward your knowledge about tax laws and the application of tax income	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward your perception on the application of principle of benefit, ability to pay, equality and progressive in imposing taxes	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward your trust in government in allocating the tax revenue	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward your trust on the fairness in the tax service	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know

Tax Service

Prologue: tax service covers aspects of tangibility, reliability, responsiveness, assurance, and empathy by indicators namely appropriateness of physical facilities in tax offices; appropriateness of appearance of tax officers; the availability of means of communication; timely services; capability to solve problems; consistency in service hours; appropriateness in skill and knowledge; responsible attitude; rapidness in handling; easiness to be found; assurance of free services; security for taxpayers in tax offices; trustworthiness and courtesy of tax officials; assurance of non-discrimination in providing tax services; understanding taxpayer needs; attention from service officers; understanding the privacy of taxpayers; providing best solution; clear communication with easy language; and attention from other officers

9. To what extent do you think about the tax service in the modernized tax administration system era?

(1) To what extent do you agree with the TANGIBILITY in the tax office?

2) 10 what ontone do you agree with the finital billing in the tan office.									
Waiting room is good, clean, modern and comfortable	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know			
Consultation room is good, clean, modern and comfortable	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know			

Service room is good, clean, modern and comfortable	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Toilet is good, clean, and comfortable	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The appearance of tax officials on duty is not neat and is not clean	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
The existence of tax brochures could not provide needed information to fulfill all tax obligations	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
The existence of tax posters could not provide needed information to fulfill all tax obligations	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
The existence of website of directorate general of taxes including all links for the different operational programs could not provide needed information to fulfill all tax obligations	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know

(2) To what extent do you agree with the RELIABILITY of tax officials?

Services in the current tax office are be finished on time and appropriate with the necessity	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax officials able to issue the recommendation to solve tax problems	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax offices don't have the clear announcement about the service hours and the office open late	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Tax officials don't have skill and knowledge to facilitate administration process	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know

(3) To what extent do you agree with the RESPONSIVENESS of tax officials?

Tax officials don't have a responsive manner in assisting all taxpayers including providing accurate data	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Tax officials could not provide quick services to facilitate taxpayers in the tax administration process	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Tax officials are easy to be found or contacted in receiving the complaints	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

(4) To what extent do you agree with the ASSURANCE in the tax office?

All services are free for charge	1.	2.	3.	4.	5.	8.
This services are free for charge	Strongly	Disagree	Neutral	Agree	Strongly	Don't
The officer of the officer of the officer of	disagree 1	2.	3.	4.	agree 5.	know 8.
Tax offices ensure the safety and comfort for taxpayers	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Don't know
Tax offices could not ensure the honest and courtesy behavior of tax officials including in examining all tax reports	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know
Tax offices could not ensure all administration services without discrimination	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know

(5) To what extent do you agree with the EMPATHY of tax officials?

5) To what extent do you agree with the EMPATHY of tax officials?								
Tax officials show the attitude to know the taxpayer needs	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know		
Tax officials pay constant attention to taxpayers	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know		
Tax officials don't have the empathy to understand the necessity and the privacy of taxpayers	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know		
Tax officials could not find the best solution for taxpayers	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know		
Tax officials could not communicate with the easy and clear language	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know		
Other officers (besides service personnel) don't have the attention to assist taxpayers	1. Strongly agree	2. Agree	3. Neutral	4. Disagree	5. Strongly disagree	8. Don't know		

10. All things considered, how satisfied are you with the tax service?

Toward the implementation of tax service in the tax office	1.	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the tangibility of facilities in tax offices and appearance of tax officials	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the reliability of tax officials	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the responsiveness of tax officials	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the assurance in the tax offices	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know
Toward the empathy of tax officials	1. Extremely dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. Extremely satisfied	8. Don't know

PE	EXPERIENCE IN FULFILLING	TA	X OBL	IGATION			
PE01	Since 2012 until 2014, how many times do you visit the local Small Tax Office (STO)?	 1. 1 – 5 times 2. 6 – 10 times 3. > 10 times 4. Never, because all administrations are handled by the corporate treasure 5. Never, because I submit the annual tax return by the drop box 					
PE02	What is the your purpose to visit the local STO?	c. d.	and monthly tax return To submit the individual annual and monthly tax return To consult To register the tax identification number To deliver complaints			1. Yes	2. No 2. No 2. No 2. No 2. No 2. No
PE03	Do you submit routinely the annual tax return?	1.	Yes	2. No	3. Don't Know	l	1
PE04	In the last 2 years, have you ever been late in paying the personal income tax?	1.	Yes	2. No	3. Don't Know		
PE05	In the last 2 years, have you ever been late in submitting the annual tax return?	2.	Yes	2. No	3. Don't Know		
PE06	In the last 2 years, have you ever been imposed by tax sanction (tax administrative sanction and/or tax tax criminal sanction) for the personal income tax?	1.	Yes	2. No	3. Don't Know		

IT	INFORMATION OF TAX OFFI	CE A	ND FACILITIES		
IT01	Name of the small tax officelast visited				
IT02	Address of the small tax officelast visited				
IT03	Kind of facilities	a. b. c. d. e. f. g. h. i. j. k.	Parking space Waiting room Electronic board (digital signage) Toilet Television, newspaper Electronic queue The availability of tax forms Help desk Air Condition (AC) Free hotspots (wifi) Others	1. Yes 1. Yes 1. Yes 1. Yes 1. Yes 1. Yes 1. Yes 1. Yes 1. Yes	2. No 2. No 2. No 2. No 2. No 2. No 2. No 2. No 2. No 2. No

IC	INFORMATION ABOUT COST	•		
IC01	Do you expend COSTS along getting services from the tax officer in the visited tax office?	 Yes→continue to the question inIC02 and IC03 No → STOP, continue to the question in number 11 		
IC02	For what is the cost?	a. Administration of services b. Consultation fees c. Tip for service d. Negotiation cost e. Others		
IC03	HOW MUCH is the cost?	Amount in IDR		

SECTION B.QUESTIONS AS A PROFESSIONAL

This section provides questions to know your <u>PERCEPTION</u> as a professional towards the application of modernized tax administration system, tax sanction, tax morale, and tax service in the tax offices. In addition, we also asked your perception towards the problems and your <u>EXPECTATION</u> for change in the future to the application of modern tax administration system, tax sanction, tax morale, and tax service in order to achieve better tax compliance. Thank you for your willingness in answering the questions.

A. GENERAL QUESTION

Prologue: general question provides to examine the knowledge and perception of government and state enterprise employees as a professional regarding with the tax circumstances. As a professional, it means as a person who works from salary paid by the societies through taxes to serve them, either directly or indirectly.

Do you understand with modernized tax administration system?	1. Yes	2. No	3. Don't Know
Do you understand with tax sanction?	1. Yes	2. No	3. Don't Know
Do you understand with tax morale?	1. Yes	2. No	3. Don't Know
Do you understand with tax service?	1. Yes	2. No	3. Don't Know
Do you understand with tax compliance?	1. Yes	2. No	3. Don't Know
	Do you understand with tax sanction? Do you understand with tax morale? Do you understand with tax service?	Do you understand with tax sanction? 1. Yes Do you understand with tax morale? 1. Yes Do you understand with tax service? 1. Yes	Do you understand with tax morale? Do you understand with tax service? 1. Yes 2. No 1. Yes 2. No

6. What do you think in the **FIRST TIME** when someone says about taxation?

An	swer:
a.	Reducing income
b.	Getting sanction
c.	Inspection/audit
d.	Welfare for poor people
e.	Helping a fellow/others
f.	One of government income
g.	For economic development
h.	For improving general facilities
i.	Responsibility for all citizens who have taxable income
j.	Complexity
Otl	hers:
k.	
l.	
m.	
n.	
0.	

7. How **INTERESTED** would you say, you are in taxation – are you?

An	swer:
1.	Very interested
2.	interested
3.	usual
4.	uninterested
5.	Very uninterested
6.	Don't know

- 8. Do you think that you have a responsibility to pay taxes? 1. Yes 2. No 3.Don't Know
- 9. In your opinion, what are currently the **RESPONSIBILITY** as a taxpayer?

a.	Having tax identification number	1. Yes	2. No	3. Don't know
b.	Paying timely tax payables	1. Yes	2. No	3. Don't know
c.	Filling annual tax return and submitting it	1. Yes	2. No	3. Don't know
d.	Submitting the annual tax return on time	1. Yes	2. No	3. Don't know
e.	Conducting bookkeeping	1. Yes	2. No	3. Don't know
f.	Reporting all taxable incomes	1. Yes	2. No	3. Don't know
g.	Reporting correctly data of tax object	1. Yes	2. No	3. Don't know
h.	Implementing properly all tax laws	1. Yes	2. No	3. Don't know
Ot	hers, please specify:			
i.				
j.				
k.				
l.				
m.				

10. Do you think that changes have been made by the tax offices after modernized tax administration in period of 2002-2012?	1. Yes	2. No	3. Don't know					
10a. if YES , changes have occurred?								
a. Applying tax system based on Information and	1. Yes	2. No	3. Don't know					
b. Information and technology for tax services	1. Yes	2. No	3. Don't know					
c. More accountable employees	1. Yes	2. No	3. Don't know					
d. Easiness to know the wealth	1. Yes	2. No	3. Don't know					
e. Time for service more rapidly	1. Yes	2. No	3. Don't know					
f. More transparent	1. Yes	2. No	3. Don't know					
g. Reducing significantly the illegal charges	1. Yes	2. No	3. Don't know					
h. Dissemination is more better	1. Yes	2. No	3. Don't know					
i. Improvement of procedure in tax offices	1. Yes	2. No	3. Don't know					
j. Existence of identity in e-FIN	1. Yes	2. No	3. Don't know					
k. Submitting the annual tax return by online facilitates	1. Yes	2. No	3. Don't know					
 Facilities in tax offices are more complete and convenient like bank 	1. Yes	2. No	3. Don't know					
m. Fulfilling and reporting taxes are more effective and	1. Yes	2. No	3. Don't know					
n. All activities are conducted suitable with the	1. Yes	2. No	3. Don't know					
o. Services are more fast and comfortable	1. Yes	2. No	3. Don't know					
 p. Submitting the annual tax return is more flexible of both attending tax offices or by online 	1. Yes	2. No	3. Don't know					
Other changes, please specify:								
r.								
S.								
t.								
u.								

11. Changes that YOU ARE NEEDED for tax administration?						
a. Online system for all services	1. Yes	2. No	3. Don't know			
b. Not necessary to come directly into tax offices	1. Yes	2. No	3. Don't know			
c. Strict sanction for tax evaders	1. Yes	2. No	3. Don't know			
d. Services are more fast and practical	1. Yes	2. No	3. Don't know			
e. Tax system is more simple	1. Yes	2. No	3. Don't know			
f. Managing tax is more transparent	1. Yes	2. No	3. Don't know			
g. Services are more friendly and more responsive	1. Yes	2. No	3. Don't know			
h. Strict sanction for tax officials making irregularities	1. Yes	2. No	3. Don't know			
 i. Imposing taxes on salary and allowance enter automatically to each account of employees 	1. Yes	2. No	3. Don't know			
j. Changing identity by online	1. Yes	2. No	3. Don't know			
k. Tax applications are more user-friendly	1. Yes	2. No	3. Don't know			
l. Transparency in collecting data	1. Yes	2. No	3. Don't know			
m. Transparency in using tax revenue	1. Yes	2. No	3. Don't know			

n. Transparency in law enforcement for tax evaders	1. Yes	2. No	3. Don't know
o. Online payment system	1. Yes	2. No	3. Don't know
Others, please specify:			
a.			
b.			

12. In the modernized tax administration system era, what are factors driving you to pay taxes and to submit the annual tax return?

a.	Factor 1: modernization of organizational structure, procedure, strategy, and culture makes the administration process to be simple and facilitates me to fulfilling my tax obligation	1. Yes	2. No	3. Don't know
b.	Factor 2: the existence of administrative and tax criminal sanction as a tool to educate and to create the discipline to all taxpayers makes me to be careful and to be afraid to do mistakes	1. Yes	2. No	3. Don't know
C.	Factor 3: tax knowledge, tax fairness perception, and trust in government motivate me to pay taxes and to submit the annual tax return	1. Yes	2. No	3. Don't know
d.	Factor 4: the existence of tangibility, reliability, responsiveness, assurance, and empathy in tax services at the tax offices is really facilitating me in the administration process	1. Yes	2. No	3. Don't know
e.	Factor 5: only to fulfill my tax obligations	1. Yes	2. No	3. Don't know
f.	Other factors, please specify:			

13. In the modernized tax administration system era, have you had UNPLEASANT EXPERIENCE when you conducted administration process in the tax office?	1. Yes	2. No	3. Don't know
13a. If YES , the reason is			
a. Tax administration process was complex or not straightforward	1. Yes	2. No	3. Don't know
b. Tax service process was not similar for all	1. Yes	2. No	3. Don't know
c. Tax service process was too long and took more times to be finished	1. Yes	2. No	3. Don't know
d. I have to pay for several services	1. Yes	2. No	3. Don't know
e. Service is not friendly	1. Yes	2. No	3. Don't know
f. Service is less informative	1. Yes	2. No	3. Don't know
g. Service is not responsive	1. Yes	2. No	3. Don't know
h. Other reasons, please specify:			

13h	if NO , the reason is			
130.	a. I conducted all administration processes honestly, voluntarily, correctly, and timely by myself	1. Yes	2. No	3. Don't know
	b. All administration processes were conducted by my tax consultant	1. Yes	2. No	3. Don't know
	c. All administration processes were conducted by my tax colleague in the tax office	1. Yes	2. No	3. Don't know
	d. All administration processes were conducted by my staff in the my unit	1. Yes	2. No	3. Don't know
	e. All administration processes were conducted by my colleague	1. Yes	2. No	3. Don't know
	f. All administration processes were conducted by the corporate treasure	1. Yes	2. No	3. Don't know
	g. Other reasons, please specify:			
14.	In the modernized tax administration system era, have you got the TAX ADMINISTRATIVE SANCTION?	1. Yes	2. No	3. Don't know
14a.	If YES , the reason is			
	a. I got the fine sanction because I am late to submit my annual tax return	1. Yes	2. No	3. Don't know
	b. I got the interest sanction because I am late to pay my tax payable	1. Yes	2. No	3. Don't know
	c. I got the interest sanction because I am incorrect in amount of my tax payable	1. Yes	2. No	3. Don't know
	d. Other reasons, please specify:			
14b.	if NO , the reason is		,	
	a. I conducted all my tax obligations in accordance with the applicable rules	1. Yes	2. No	3. Don't know
	b. all administration processes were conducted by the corporate treasure	1. Yes	2. No	3. Don't know
	c. I have paid the tax payable through the corporate treasure without submit my annual tax return	1. Yes	2. No	3. Don't know
	d. I haven't got sanction although I never pay taxes and submit the annual tax return	1. Yes	2. No	3. Don't know
	e. Other reasons, please specify:			
15.	In the modernized tax administration system era, have you got the TAX CRIMINAL SANCTION?	1. Yes	2. No	3. Don't know
15a.	If YES , the reason is			
	a. I got the sanction because I conducted the tax evasion	1. Yes	2. No	3. Don't know
	b. I got the sanction because I bribed tax officials	1. Yes	2. No	3. Don't know
	c. I got the sanction because I conducted tax corruption	1. Yes	2. No	3. Don't know
	d. Other reasons, please specify:			

15b. if N	15b. if NO , the reason is					
a.	I conducted all my tax obligations in accordance with the applicable rules	1. Yes	2. No	3. Don't know		
b.	I haven't got sanction although I never pay taxes and submit the annual tax return	1. Yes	2. No	3. Don't know		
C.	All administration processes were conducted by the corporate treasure	1. Yes	2. No	3. Don't know		
d.	I am sure that I have paid the tax payable through the corporate treasure but I don't submit my annual tax return	1. Yes	2. No	3. Don't know		
e.	Other reasons, please specify:					

16. Do you think that you could take an active role in fulfilling your tax obligations? 17. How difficult or easy do you find it to fill out the annual tax return? 18. Whatever the circumstances, the tax laws should always be obeyed 19. Tax noncompliance always ends up reducing the tax revenue 20. Simultaneous application of modernized tax administration system, tax sanctions, tax services, and tax system as a whole nowadays? 21. All things considered, how satisfied are you with the tax system as a whole nowadays? 22. The application of modernized tax administration system by considering the aspect of tax sanction, tax morale, tax service has improved the tax compliance of public officials 23. The simultaneous application of modernized tax administration system, tax sanctions, tax morale, and tax service will affect the tax compliance of society as a whole 24. Regarding with the public perception, the government officials are very great in making rules but also government officials who violate them. This opinion is true.	No	Question	Answer
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20. Simultaneous application of modernized tax administration system, tax sanctions, tax services, and tax morale can reduce the tax noncompliance problem 21. All things considered, how satisfied are you with the tax system as a whole nowadays? 22. The application of modernized tax administration system by considering the aspect of tax sanction, tax morale, tax service has improved the tax compliance of public officials 23. The simultaneous application of modernized tax administration system, tax sanctions, tax morale, and tax services will affect the tax compliance of society as a whole 24. Regarding with the public perception, the government officials are very great in making rules but poor realization, very great in making rules but also government officials who violate them. This opinion is 3. No 1. Extremely dissatisfied 2. Dissatisfied 3. Neutral 4. Satisfied 5. Extremely Satisfied 5. Extremely Satisfied 5. Extremely Satisfied 7. Yes 2. No 3. Don't Know 7. Yes 2. No 3. Don't Know 7. Yes 7. No 7. No 7. No 7. Don't Know		revenue	
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system as a whole nowadays? dissatisfied 2. Dissatisfied 3. Neutral 4. Satisfied 5. Extremely Satisfied 5. E		morale can reduce the tax noncompliance problem	3. No
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whole 24. Regarding with the public perception, the government officials are very great in making rules but poor realization, very great in making rules but also government officials who violate them. This opinion is 3. Don't Know 2. No 3. Don't Know 3. Don't Know			2. No
24. Regarding with the public perception, the government officials are very great in making rules but poor realization, very great in making rules but also government officials who violate them. This opinion is 3. Don't Know			3. Don't Know
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government officials who violate them. This opinion is			
1 1 3 Don't Know		realization, very great in making rules but also	2. No
Li uc		government officials who violate them. This opinion is true	3. Don't Know

25.	According to the Law No.8 1974 juncto No.43 1999	1. Yes
	article 5, a public official is an implementer rules and be a role model for the public. Do you agree with that?	2. No
	1 3 0	3. Don't Know
26.	Based on the social cognitive theory and social learning theory, the behavior of a role model would be a model for	1. Yes
	the behavior of other people. As a role model, my behavior becomes a model for the public including in	2. No
	fulfilling all my tax obligations	3. Don't Know
27.	Tax compliance behavior should be started from the	1. Yes
	leaders	2. No
		3. Don't Know
28.	Behavior of the leader becomes a role model for staff	1. Yes
	included in the tax matters	2. No
		3. Don't Know
29.	My tax compliance behavior follows my leaders	1. Yes
		2. No
		3. Don't Know
30.	I proud to be a role model for the public in fulfilling tax	1. Yes
	obligations	2. No
		3. Don't Know
31.	I proud to pay taxes because public facilities are now	1. Yes
	adequate with the paid taxes	2. No
		3. Don't Know
32.	I am happy if my incomes are imposed by taxes	1. Yes
		2. No
22		3. Don't Know 1. Yes
33.	Paying tax is one of the burdens in my life	2. No
		3. Don't Know
2.4	The consumer the cold and one the terror to an impossing	1. Yes
34.	The government should reduce the tax rate on income of	2. No
	public officials	3. Don't Know
35.	Do you agree if the magnitude of tax rate between	1. Yes
	government employee and state enterprise employee is different because of the differences of salaries?	2. No
2.5		3. Don't Know
36.	Do you agree with the slogan "pay taxes, supervise their	1. Yes
	utilities"?	2. No
		3. Don't Know
37.	Do you agree with the slogan "pay taxes, supervise their	1. Yes
	collection processes"?	2. No
		3. Don't Know
38.	Do you agree if the state audit agency has an authority to	1. Yes
	examine the tax collection process and to audit the	2. No
	annual tax returns of all tax officials?	3. Don't Know
39.	Other incomes received by public officials should not be	1. Yes
	reported	2. No
	1000.000	
		3. Don't Know

No	Question	Answer
40.	Public officials should just report their payroll taxes	1. Yes
	, 1 1 3	2. No
		3. Don't Know
41.	Are you sure that the failure of the current development	1. Yes
	because of lack of received tax revenue?	2. No
	because of facility of received tax revenue.	3. Don't Know
42.	Are you sure that the failure of the current development	1. Yes
	because of mismanagement of tax money?	2. No
	2000 01 monumegement 01 tuni money .	3. Don't Know
42	Besides as an employee in the government sector, do you h	ave other jobs?
43.	1. No 2. Yes, namely	

The certain questions for the respondent from tax officials:

No	Question Question	Answer
1	After the tax reform and modernization of tax	1. Yes
1		2. No
	administration, do you have difficulty in collecting taxes?	3. Don't Know
2	After the tax reform and modernization of tax	1. Yes
		2. No
	administration, do you think the compliance of taxpayer	
	increased?	3. Don't Know
3	Problems that occur in the collection of taxes in the era of r	nodernized tax
	administration system	
	•	
	Taxpayers tend to cheat in the tax report	1. Yes
		2. No
		3. Don't Know
	Taxpayers tend to bribe tax officials in order to get the	1. Yes
	lower paid tax	2. No
	•	3. Don't Know
	Taxpayers tend to evade in reporting all their wealth	1. Yes
		2. No
		3. Don't Know
	Taxpayers tend to do the miscalculation of amount of tax	1. Yes
	payable	2. No
		3. Don't Know
	Taxpayers tend to evade in paying tax payable	1. Yes
		2. No
		3. Don't Know
	Taxpayers tend to exploit loopholes/grey area of tax laws	1. Yes
		2. No
		3. Don't Know
	Taxpayers tend to evade in submitting the annual tax	1. Yes
	return	2. No
		3. Don't Know
	Taxpayers tend to use a tax consultant in handling tax	1. Yes
	administration process	2. No
		3. Don't Know
	Tax consultants tend to use a variety of ways to help	1. Yes
	taxpayers	2. No
		3. Don't Know

	Audit on annual tax returns just focus on employees in private sectors and corporate taxpayers (not for public	1. Yes 2. No
	officials)	3. Don't Know
	Overall, taxpayers tend to not comply towards all tax laws	1. Yes
		2. No
4	There is a similiar to be a sufficient of the state of th	3. Don't Know 1. Yes
4	There is a significant change from the directorate general	2. No
	of taxes after the tax reforms	3. Don't Know
5	There is a significant change from the directorate general	1. Yes
	of taxes after modernizing the tax administration system	2. No
		3. Don't Know
6	As a tax collector, do you agree that the slogan "pay taxes,	1. Yes
	supervise their utilities" is replaced by "pay taxes,	2. No
	supervise their collection processes"	3. Don't Know
7	In terms of integrity and morals, there is a significant	1. Yes
	change for tax officials after tax reform and modernization	2. No
	of tax administration system	3. Don't Know
8	Overall, my tax compliance enhances significantly after	1. Yes
	the tax reform and modernization of tax administration	2. No
	system	3. Don't Know

B. SPECIFIC QUESTION

Prologue: specific question provides to find out the perception of government and state enterprise employees regarding with obstacles in tax compliance and changes that should be made towards modernized tax administration system, tax sanction, tax morale, and tax service in order to improve tax compliance.

1. To what extent do you think about obstacles for change in the tax compliance in the modernized tax administration era?

(1) To what extent do you agree with these problems?

The government still has not committed to prevent/overcome the corruption in tax sectors	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The important government official has a problem of integrity	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The government spending is not efficiency (i.e. large portion in administrative expenses such as government officials salary)	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The tax revenue is not spent properly on improving people's livelihood	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
There is an opinion, directorate general of taxes is the directorate general of 'exploiter'	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
There is an opinion, tax officials obey towards exploitation	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

Having tax identification number, instead pursued as corruptors	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Boycott to pay taxes and to submit the annual tax return is needed because of utilizing tax revenue deviated	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Taxpayers cheat on tax if they have the chance and there are loopholes in tax laws	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax evasion is ethical although the most of the money collected is spent wisely	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax evasion is ethical if the probability of getting caught is low	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax evasion is ethical if everyone is doing it	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax evasion is ethical even though a large portion of the money collected is spent on worthy projects	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax evasion is ethical if a large portion of the money collected is spent on projects that do not benefit to you	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Other problems		ı				ı
1.						
2.						
3. 4.						
5.						
0.						

(2) How often does the application of modernized tax administration, tax sanction, and tax service seems complicated that you can't really understand what is going on?

Physical facilities are not working/broken	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
E-registration is very difficult to operate	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
E-filling is very difficult to operate	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
Inconsistent magnitude of tax administrative sanction for the same offences	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
Discrimination in administrative service based on the close relationship and the size of tax payable	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
The more offences causing state losses, the lower sanction	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know

You have to pay to get the lower tax payables	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
You have to pay to get the quick service	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
You have to pay to get the small penalty	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know
Taxation seems so complicated that I can't really understand what is going on	1. Always	2. Often	3. Now and then	4. Seldom	5. Never	8. Don't know

2. To what extent do you agree about the changes should be made to the current of modernized tax administration, tax sanction, tax morale, and tax service to improve tax compliance?

(1) To what extent do you agree the following changes in the modernized tax administration?

administration?						
Directorate General of Taxes should be an independent institution separated from the Ministry of Finance	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Clear distinction between the responsibilities of servicing authority, managing authority, and monitoring	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Clearly defined role of a service officer	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax collection should be conducted by the private sector, with the strict supervision from the tax office and state auditor. Private parties are selected through competitive and fit and proper tests including open to the public	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Simplified communication procedure	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
High flexibility in the procedure of administration	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Process of tax collection should be supervised by the public	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax collection process should be supervised by an external party consisted of representation of government, community, business/ private sector, Parliament, and academics	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
It is necessary to improve the modernized tax administration system, mainly, efilling/annual tax return by the good data cooperation between banks, institutions and tax offices, so that the income data can be obtained and the tax payable can be calculated automatically by the certain tax application	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

By more modern of e-SPT, the mandatory to deliver the annual tax return is intended only for individual taxpayers with independent work and corporate taxpayers, so that the administration process is more efficient	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
By IT, has been made, all the controls are conducted via a computer. Therefore, the number of employees in the center office can be reduced and be spread to remote areas including be focused on the Small Tax Office. Recruitment of new employees is also be stopped. With these steps, the tax administration cost can be reduced, so tax revenue can be increased	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Implementation of the drop box method for the annual tax return of employee should be conducted for all institutions in the public sector	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax dissemination should be conducted routinely and continuously for all segments in the society	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Government should give a reward for taxpayers who pay correctly the tax payable and submit timely the annual tax return in the form of restitution, reduction of tax, discount for several products, and others	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Allocation of government operations should come from non-tax revenues such as state enterprise profits, domestic loans, natural resource revenues, and others, so that 100% of tax revenue will be allocated for the development, maintenance and other circumstances related directly to the public interest	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Stronger monitoring and evaluation on the operational administration in tax offices	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The focus on the performance of supervision	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The more that government supervision in the tax office, the better it is for this institution	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The entire income tax of officials should be audited by the state audit agency	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The financial statements of the directorate general of taxes should be examined by external auditors (private auditor)	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

The principle of reverse disclosure for tax officials should be conducted. It means that the entire tax officials should report their incomes and annual tax returns to the public as a media to examine the honesty of tax officials, and then an external auditor will supervise and examine regularly	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Government should evaluate regularly the application of modernized tax administration system	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Other needed changes: 1.						
2. 3.						
4.						
5.						

(2) To what extent do you consider the following changes in the tax sanction?

(2) To what extent do you consider the lo		8				
Tax sanction should be focused on the tax administrative sanction than the tax criminal sanction	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Increasing the fine sanction for deviations in submitting the annual tax return until 1 million IDR for personal taxpayers and 10 million IDR for corporate taxpayers to make taxpayers be deterrent and be cautious	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Increasing the interest sanction for deviations in the tax payment until 10% to make taxpayers be deterrent and be cautious	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Increasing the imprisonment for deviations causing state loses until 30 years to make taxpayers be deterrent and be cautious	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Imposing tax sanction should more severe for tax officials	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Imposing tax sanction should more severe for public officials namely civil servants and state enterprise employees	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Law enforcements from all sides should be started from tax officials	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Law enforcements should be started from public officials	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Fine and interest sanctions could be paid by online	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

Tax corruption that harms the public trust should be overcome by imposing the severe sanction through a prison sanction, a fine of four times from the corrupted money, and paying taxes from the corrupted money	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
To reduce the number of tax corruption, besides severe punishment, It is needed to announce the actors in a special newspaper, then to confiscate all their properties and to give the corruption certification for the entire family	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Existence of whistleblower should be supported and protected in order to overcome the culture of corruption in the tax office	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Becoming a whistleblower should be one of the achievements for tax officials	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Corruption money should be determined as the tax object, so the government receives the additional tax revenue from the corrupted money	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The existence of tax evaders being audited in more detail in the next years would deter people from evading tax	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The existence of tax evaders being prosecuted in court would deter people from evading tax	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Directorate general of taxes should publish all taxpayers who have not paid taxes and have not submitted their annual tax returns	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Other needed changes:						
1. 2.						
3.						
4.						
5.						

(3) To what extent do you agree the following changes in the tax morale aspect?

(e) 10 minut on to your mgree one remains		B			1	
Tax education should be started earlier	1. Strongly	2. Disagree	3. Neutral	4. Agree	5. Strongly	8. Don't
from the elementary school	dicagroo	3.8		8	agroo	know
Tax education should be a mandatory lesson for all level of education	1. Strongly	2. Disagree	3. Neutral	4. Agree	5. Strongly	8. Don't
1633011 101 all 16 vel 01 cadeation	disagree				agree	know
Tax education should be conducted comprehensively to improve tax knowledge and to increase voluntary tax compliance	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Employees need the intense morale lesson and the intense integrity lesson to protect their working from corruption	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

Employees need the intense religion lesson to protect their working from	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Delivering lessons about morale by multilevel system, in which top management educate middle management, middle educate lower management with the same materials	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
In order to improve the tax compliance, there are just two things: being a role model in taxes and providing the evidence of using tax revenue for the community	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The voluntary tax compliance should be started from the government	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax officials in specific and public officials in general should be a role model in applying voluntary tax compliance without corruption	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Positive behavior of government officials in taxation activities will give a positive impact on the tax compliance behavior of	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Government should provide an evidence through using tax revenue just for the public prosperity to enhance the tax compliance	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Utility of tax revenue should be supervised by the society	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Tax revenue should be allocated by subsidy mechanism such for housing, education, health, allowance for unemployed people, elderly, poor people, and others	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Other needed changes: 1.						
2. 3.						
4.						
5.						

(4) To what extent do you agree the following changes in the tax service?

(4) To what extent do you agree the follow	villg cii	anges i	n the tax se	i vice:		
Improving one-gate service by computerization and connection by internet	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
All aspects in the tax service should be computerized by focus on consumer satisfaction	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
E-annual tax return integrated with the bank, company, government, and others	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The progress of using tax revenue should be informed through signage media/electronic board at the tax offices	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know

Creating a website that highlights a happiness if someone pay taxes to help a fellow, to give welfare for poor people and the result of allocation tax revenue to build bridges, street, hospital, market, school, and others	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The website of directorate general of taxes should inform violations conducted by the tax officials	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
High flexibility in the services	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
The focus on the performance services rather than administrative bureaucracy	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Service authority should monitor actions as a result of implementation of the program	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Simplifying process of communication	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree	8. Don't know
Other needed changes:		'				
1.						
3.						
4.						
5.						

C. SUGGESTION/CRITICISM/OBJECTION

What suggestions/criticisms/objections do you want to be conveyed regarding with the modernized tax administration system, tax sanction, tax morale, tax service, and tax compliance?					

Annex 2 – Survey study: Test of dimensions as constructing variables (chapters 4 and 5)

The verification analysis of the results of the survey study consists of various steps, which involve PLS. The analysis was implemented using SmartPLS version 2.0. The analysis here is limited to the assessment of the so-called outer model (measurement model). The outer model (or: measurement model) defines how each (observed) dimension is associated with its (latent) variable. In this context, a dimension can construct a variable if it has convergent validity, discriminant validity and composite reliability.

Test of convergent validity

The convergent validity can be seen from the loading factor of dimensions for each variable. If the loading factor value or lambda value (λ) of each dimensions of a variable is above 0.7, it means that the dimensions meets the test for convergent validity and the dimensions are highly recommended for the variable. If the loading factor is in the interval of 0.50 - 0.60, the dimension can be tolerated as an element forming a variable when the model is still in the development stage (Ghozali, 2006).

Test of discriminant validity

The test of discriminant validity is conducted by comparing the value of loading factors of the dimensions on the variable involved with the value of loading factors of these dimensions on the other (non-involved) variable. If the value of loading factors of the dimensions on the variable is higher than those on the other variable, it is said that the dimensions have high discriminant validity.

Test of composite reliability

A variable is considered to be reliable if the composite reliability values are above 0.60 (Ghozali, 2006). It means that the dimensions are also reliable to construct the variable.

The findings of these tests are presented below.

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.

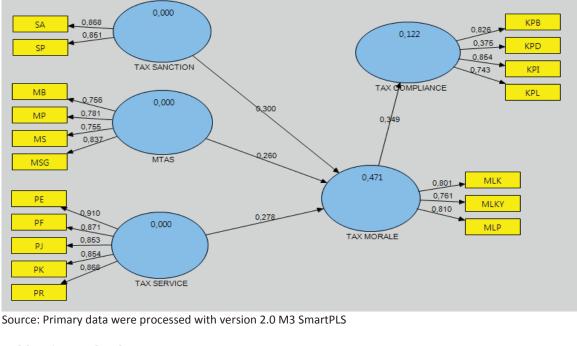


Figure of the result of algorithm PLS (loading factors)

Table of outer loadings

Dimensions	MTAS	Tax Sanction	Tax Service	Tax Morale	Tax Compliance
Modernizing structure (MS)	0.755				
Modernizing procedure (MP)	0.781				
Modernizing strategy (MSG)	0.837				
Modernizing culture (MB)	0.756				
Administrative sanction (SA)		0.868			
Criminal sanction (SP)		0.851			
Tangible (PF)			0.871		
Reliability (PK)			0.854		
Responsiveness (PR)			0.868		
Assurance (PJ)			0.853		
Empathy (PE)			0.910		
Tax Knowledge (MLP)				0.810	
Perceived tax fairness (MLK)				0.801	
Trust on government (MLKY)				0.761	
Register compliance (KPD)					0.375
Filling compliance (KPI)					0.854
Payment compliance (KPB)					0.826
Reporting compliance (KPL)	1 11	O PLO	2.0.142		0.743

Source: primary data were processed with SmartPLS version 2.0 $\mbox{M3}$

The figure of algorithm PLS and table outer loadings show that almost all indicators have factor loadings of more than 0.50, so it can be said that almost all indicators have sufficient convergent validity. Only the dimension of register compliance has a loading factor value of 0.375, which is below 0.50. This can be explained by pointing out that employees in the public sectors already have the obligation to register and get a tax identification number (TIN). As a result, register compliance is not a good dimension constructing tax compliance of public officials.

Discriminant Validity

Discriminant validity is assessed by comparing the value of the loading factors of the dimensions of the variables with the value of the loading factors of these dimensions regarding the other variable (cross loadings). The results are presented below.

Table of cross loadings

DIMENSIONS	MTAS	TAX SANCTION	TAX SERVICE	TAX MORALE	TAX
					COMPLIANCE
MS	0.7550	0.3526	0.3632	0.4111	0.2801
MP	0.7813	0.3965	0.3635	0.4255	0.3023
MSG	0.8366	0.4814	0.4308	0.4572	0.3100
MB	0.7558	0.3974	0.3938	0.4420	0.3487
SA	0.4966	0.8681	0.5174	0.5057	0.2629
SP	0.3980	0.8509	0.3231	0.4780	0.2090
PF	0.4170	0.4645	0.8713	0.4853	0.2741
PK	0.4525	0.4192	0.8540	0.5042	0.2828
PR	0.4395	0.4056	0.8678	0.4355	0.2723
PJ	0.4456	0.4333	0.8526	0.4945	0.2899
PE	0.4085	0.4188	0.9104	0.4922	0.3118
MLP	0.4160	0.4238	0.4293	0.8105	0.3223
MLK	0.4629	0.4766	0.4305	0.8013	0.2810
MLKY	0.4375	0.4579	0.4582	0.7608	0.2243
KPD	0.1872	0.0468	0.1271	0.1101	0.3747
KPI	0.2746	0.2194	0.2194	0.2693	0.8540
KPB	0.3808	0.2844	0.3366	0.3402	0.8258
KPL	0.2731	0.1647	0.2177	0.2259	0.7426

Source: primary data were processed with SmartPLS version 2.0 M3

The table of cross loadings shows that the value of loading factors of dimensions of MTAS is higher than the value of loading factor of dimensions of MTAS within other variables such tax sanction, tax service, tax morale, and tax compliance. This condition is also true for the dimension of tax sanction, tax service, tax morale, and tax compliance. It means that all dimensions of each variable have good discriminant validity.

Composite Reliability

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

Table with values of composite reliability for each variable

Variables	Composite Reliability
MTAS	0.8634
Tax Sanction	0.8498
Tax Service	0.9404
Tax Morale	0.8338
Tax compliance	0.8049

Source: primary data were processed with SmartPLS version 2.0 M3

From the verification analysis of the outer (or measurement model), we conclude that all dimensions construct each variable. This is because each dimension has good convergent validity, good discriminant validity, and good composite reliability.

Annex 3 – Questionnaire used for the on-line survey (chapter 6)

The on-line survey uses a questionnaire that is presented below. The answer categories to the statements follow a five-point Likert scale. The draft questionnaire was developed in English, translated into Indonesian, and then tested on five people with similar background and characteristics as the targeted respondents, and adapted according to their input. The questionnaire presented here is the English translation of the definite Indonesian version. The on-line questionnaire was turned into an on-line survey by means of Qualtrics software, and can be accessed at:

https://gtrial2014az1.az1.gualtrics.com/SE/?SID=SV_3JlwIkxL8ePBnO5.

Respondents were invited by emails, Facebook, and other social media such as WhatsApp and messenger.

1. Introduction

QUESTIONNAIRE STUDY OF TAX MORALE AND TAX SANCTION

Dear respondents who I respect. My name is Abdul Rahman. I am PhD student at Institute for Innovation and Governance Studies (IGS), Public Administration Department, University of Twente, The Netherlands. This questionnaire is part of my research, entitled, "The impact of Modern Tax Administration System, Tax sanction, Tax Morale, and Tax Service on Tax Compliance". In this questionnaire, the questions mentioned focus on aspects of tax morale and tax sanction, in term of reward and punishment. The aim of this study is to obtain experiences and perceptions about the implementation of tax morale and tax sanction. All data from this study will be used only for academic purposes and will be used as an input to the government for the implementation of optimal taxation system. Therefore, the honesty in answering this questionnaire would be highly appreciated. Thank you for your willingness for taking the time to complete this questionnaire. Every answer gives an invaluable aid for this research.

For attention and your assistance, I thank you.

Note:

You require less than 10 minutes in filling out this questionnaire. Make sure you answer all questions.

2. Identity of respondent

2. Identity of respondent	
Gender	1. Male
	2. Female
Last education	Elementary school
	2. Junior high school
	3. Senior high school
	4. Diploma
	5. Bachelor
	6. Master
	7. Doctoral
	8. Others

Occupation	 Civil servant in the central government Civil servant in the local government Military Police The central state enterprise employee The local state enterprise employee Employee in the private company Businessman Trader Others
Province of institution	
Province of residence	

3. Question about Tax Morale

To what extent do you agree with the following statements regarding TAXATION? Note: All questions provide to obtain the knowledge of respondents as a taxpayer

regarding with taxation

I know that tax is the mandatory contribution from the citizen that can be coerced without direct benefit	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that tax collection is intended for financing government operations and for funding development to enhance the welfare of people	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that taxpayers have an obligation in having a tax identification number (TIN)	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that tax sanctions are provided for taxpayers who do not fulfill their obligations	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that the taxpayer has the right to convey the appeal and objection	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that the tax officer has the right to conduct supervision/audit toward taxpayers regarding circumstances, actions and events relevant to tax debts	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that taxpayers have an obligation to bookkeeping, to fill out tax forms, to pay tax payable, and to submit the annual tax return	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that the taxpayer has the non-taxable income as an income that is a non-taxable threshold for the individual taxpayer	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I know that tax laws have been disseminated comprehensively by the tax office to all taxpayers	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

To what extent do you agree with the following statements regarding the UNDERSTANDING OF TAX RULES?

Note: All questions provide to obtain the understanding of respondents as a taxpayer

regarding with income tax rules

regarding with income tax rules					_
I understand about the circumstances, actions, and legal events that are relevant to the personal income tax	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that every taxpayer who has income above the non-taxable income is subject to personal income tax	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that the personal income tax is calculated progressively to ensure the fairness	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that the government has arranged clearly non-subjects and non-objects of personal income tax	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that the personal income tax laws cover clearly final personal income taxes and their tariffs	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand all procedures to calculate, to pay, and to report the personal income tax	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that tax income for a taxpayer who is a full time employee is withheld by the treasurer with the tax withholding proof	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that taxpayers with independent work must report their personal income taxes every month and every year as recapitulation	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I understand that personal income tax rules related to compensations, allowances, and other honorariums outside salary, are clearly regulated by the government	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

To what extent do you agree with the following statements regarding TAX EXPECTATIONS?

Note: All questions provide to obtain the expectation of respondents as a taxpayer

Note. An questions provide to obtain the expectation of respondents as a taxpayer					
The government uses the tax revenue to the right purpose without corruption	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
There is transparency in the management and utilization of taxes	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
There are clear, simple and efficient procedures to pay and to report taxes including feedback mechanisms	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Tax officials work cooperatively and honestly	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

Tax officials facilitate taxpayers in understanding rights and obligations as a taxpayer	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Tax officials take the taxpayer's objections and appeals seriously	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Tax officials communicate all tax services in the tax office	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Tax offices provide clear information regarding taxation	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Tax officials respect all taxpayers by serving equitably and facilitating them to achieve customer satisfaction	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

4. Question about Reward

To what extent do you agree with the following statements regarding REWARD in taxation?

Note: All questions provide to obtain the feel of respondents as a taxpayer in reality

regarding the reward in the tax sector

I feel proud and satisfied after paying and submitting the annual tax return	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I will feel valued as a taxpayer when I get financial rewards such as incentives, prize of money, and vacation	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
I will be happy if I get non-financial rewards such as appreciation and empathy from the government	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Giving financial and non-financial rewards is required to motivate taxpayers	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers that pay correctly, rewards should be provided in accordance with the size of their contributions and in line with the applicable	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers that pay correctly, tax compensation and tax refund should be provided	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers that pay correctly, incentives in the form of subsidy for housing, health insurance, and education should be provided	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers that pay correctly, prizes in the form of money and domestic or abroad vacation should be provided	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers that pay correctly, special certification should be provided	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Financial and non-financial rewards are to be given by considering equity without discrimination 2	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

I feel proud and satisfied after paying and submitting the annual tax return	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Other financial rewards suggested:	1. 2. 3. 4. 5.				
Other non-financial rewards suggested:	1. 2. 3. 4. 5.				

5. Question about Punishment

To what extent do you agree with the following statements regarding PUNISHMENT in taxation?

Note: All questions provide to obtain the feel of respondents as a taxpayer in reality regarding punishment in the tax sector

Punishments are applied to prevent violations or repeat offences	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Punishment is one of the tools to educate and is required to create discipline by taxpayers	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, punishments should be imposed appropriate with tax rules, suitable with the size of offences, and implemented strictly	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, punishments in the form of financial sanction (fine, interest, and increment sanction) and non-financial sanction (confinement, imprisonment, social sanction) should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations related to the obligation in reporting taxes, the punishment in the form of fines should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations related to the obligation in paying taxes, the punishment in the form of interests should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

To taxpayers who do not provide the information needed to calculate the amount of tax payable, the punishment in the form of increment of the amount of tax should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit minor violations causing the state loss, the punishment in the form of confinement sanction should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit criminal activities causing loss to the state punishment in the form of imprisonment sanction should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, punishment in the form of social sanctions should be imposed to give a sense of shame and to give a deterrent effect	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, the combination of both social sanction and criminal sanction (such as the offenders carrying out social works as "tax offenders" in the morning until afternoon by strict supervision and then, in the evening, they return to the prison) should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions in the form of conducting a duty to clean-up inside and outside area of their workplaces within a certain time should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions in the form of providing a certificate as offender and prohibiting family members to study and to apply as a civil servant or an employee in the government sectors should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions should be imposed in the form of carrying out social workers to help people around, such as working in orphanages, nursing homes, and other social institutions	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions in the form of putting a statement of ex-tax offender on the identity card should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree

To taxpayers who commit violations, social sanctions in the form of publishing recent photo regularly in TV, mass media, streets including the boards should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions in the form of creating a website that contains all data about offenders and their families should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions in the form of making a monument with the names of offenders and their complete profiles should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, social sanctions in the form of cleaning public facilities such as markets, terminals, sports fields should be imposed	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
To taxpayers who commit violations, financial and non-financial punishment should be imposed by considering equity without discrimination	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	5. Strongly agree
Other financial punishments suggested:	1. 2. 3. 4. 5.				
Other non-financial punishments suggested:	1. 2. 3. 4. 5.				

Annex 4 – Semi-structured questionnaire for the indepth face-to-face interviews (chapter 6)

The in-depth face-to-face interviews were conducted using the semi-structured questionnaire reproduced below. The questionnaire was drafted in English, translated into Indonesian; the version presented here is the final Indonesian version, translated back into English. The interviews were semi-structured in the sense that they followed a fixed set of questions; in some cases (categories of) answers were fixed (see for instance the first question) and respondents had to choose; in other cases we had identified potential answers beforehand but respondents were not informed about these possibilities, and were expected to provide answers themselves.

Ouestions regarding the tax morale

Questions regarding the tax morale	
Detail of questions	Possible/predicted answers
What do you think about the current tax compliance performance of society looks like? Why?	1. Increase 2. Stagnant 3. Decrease 4. Don't know The reasons:
What do you think about factors that affect the tax morale as the intrinsic motivation to pay taxes?	 Tax knowledge Understanding of tax income rules Tax expectation as a good perception toward tax system An exemplary of tax officials The easiness in paying tax Don't know The reasons:
What do you think about your knowledge regarding with taxation in general in the era of tax reform? Why?	1. Increase 2. Stagnant 3. Decrease 4. Don't know The reasons:
What do you expect toward the implementation of tax system nowadays?	
Do you think that reward and punishment can influence the tax morale from the external? Why?	1. Yes 2. No 3. Don't know The reasons:

Specific questions relating to the reward

Specific questions relating to the rewa	
Detail of questions	Possible/predicted answers
What do you think about the purpose of reward in the field of taxation?	 To increase intrinsic motivation To maintain intrinsic motivation To appreciate intrinsic motivation To return public money As a manifestation of reciprocal benefit Don't know The reasons:
What do you think about factors that affect the magnitude of reward?	 The types of taxpayer Competition among taxpayers Contribution or the magnitude of tax paid The neatness of tax administration of both paying taxes and submitting the annual tax return The accuracy of tax administration of both paying taxes and submitting the annual tax return Don't know The reasons:
In your opinion, what rewards should be given to motivate the taxpayer in other to having the voluntary tax compliance?	 Incentive in the form of reducing tax payable Incentive in the form of compensation such free from tax for the next 1-3 months Incentive in the form of tax refund Subsidy for housing Subsidy for insurance Subsidy for education A prize of money for the achiever taxpayer A prize of domestic or abroad vacation for the achiever taxpayer Constructing schools as a form of benefit program for public Constructing hospitals as a form of benefit program for public Constructing roads as a form of benefit program for public Constructing bridges as a form of benefit program for public Modern office facilities that are directly related to the service for taxpayers A special certificate for the achiever taxpayer Comfortable situations along taxpayers conduct their tax liability in the tax office

	 16. Reliable tax officials of both knowledge and skills in order to give the satisfaction for taxpayers 17. Responsive tax officials in order to give the satisfaction for taxpayers 18. A high empathy tax officials in order to give the satisfaction for taxpayers 19. The assurance that all services in the tax office are free of charge 20. Don't know The reasons:
Do you think that, nowadays, there is a special reward for achiever taxpayers?	1. No The reasons: 2. Yes In the form of: a. Certification b. Compensation c. Discount of tax payable 3. Don't know
Is the reward given at this time suitable with the magnitude of achievement of taxpayers?	1. Yes 2. No 3. Don't know The reasons:

Specific questions relating to punishment

Detail of questions	Possible/predicted answers
What do you think about the purpose of punishment in the field of taxation?	 To increase intrinsic motivation To maintain intrinsic motivation To create the discipline of taxpayer To educate taxpayers To give a sense of shame To give a deterrent effect To prevent the recurrence of violations To prevent offences Don't know The reasons:
What do you think about factors that affect the magnitude of punishment?	1. The size of offences 2. The kind of offences 3. The magnitude of the state loss 4. Type of offender 5. Don't know The reasons:
In your opinion, what punishments should be imposed to provide the deterrent effect and make the taxpayers behave cautiously?	 Fine sanction Interest sanction Increment sanction Confinement sanction Imprisonment sanction Social sanction Don't know The reasons:
Do you think that the administrative sanctions such as fine, interest, and increment sanction have provided a deterrent effect?	1. Yes 2. No 3. Don't know The reasons:

Do you think that the administrative sanctions such as fine, interest, and increment sanction have been imposed in accordance with the size of the violation?	1. Yes 2. No 3. Don't know The reasons:
Do you think that the criminal sanctions such as confinement and imprisonment sanction have provided a deterrent effect?	1. Yes 2. No 3. Don't know The reasons:
Do you think that the criminal sanctions such as confinement and imprisonment sanction have been imposed in accordance with the size of the violation?	1. Yes 2. No 3. Don't know The reasons:
Besides the administrative and criminal sanction, do you think that is needed the other sanction such as social sanctions for tax offender?	1. Yes 2. No 3. Don't know The reasons:
In your opinion, what social sanctions should be imposed to provide the shame and deterrent effect including make the taxpayers behave cautiously?	 Carrying out social work, inside and/or outside of the workplace Carrying out "rough" work Publicly naming-and-shaming tax offenders Limited use or prohibition of use by tax offenders of certain public services Prohibiting family members of violator to apply as a civil servant or an employee in the government sectors Don't know The reasons:

Annex 5 - The simulation game (chapter 6)

The simulation game is conducted to establish the effect of 'reward' and 'punishment' on the tax compliance of employees in public sector. 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:

We 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:

We 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:

We 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 dis-honestly** 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.

The material used to instruct the participants is reproduced (in English) below.

1. Questionnaire For The First Class

Institution:

Province of institution:

QUESTIONNAIRE (1)

Condition of Tax Collection

- ✓ Examination of the annual tax return which is carried out routinely by the tax officials, and especially for the annual tax returns of employees in the public sectors, it is not a priority for review.
- ✓ The annual tax returns of employees in the public sector are not a priority to be audited by the tax official because of the reason that employees working in the public sector might not have high income and generally their tax payables have already been paid by the government (especially from salary). So, the tax payment for them was never a problem.

As a taxpayer, you have an income of IDR 1.3 billion a year by the details:

✓ Salary (S) = IDR 200 million a year (tax is covered by the government)
✓ Income from business (B) = IDR 500 million a year
✓ Income from consultancy (C) = IDR 300 million a year
✓ Income as a lecturer (L) = IDR 100 million a year
✓ Income as a speaker (SP) = IDR 200 million a year
Total income = IDR 1.3 billion a year

With that income, you are faced with a choice of income that will be reported on your annual tax return, as below:

- ⇒ If you report your total income only from the salary of IDR **200 million** (S) a year, tax payable must be paid at **'ZERO'** (tax has already been paid by the government)
- ⇒ If you report your total income to be IDR **700 million** [200 (S)+500 (B) million] a year, tax payable must be paid at around **124 million**

- ⇒ If you report your total income to be IDR **500 million** [200 (S)+300 (C) million] a year, tax payable must be paid at around **74 million**
- ⇒ If you report your total income to be IDR **300 million** [200 (S) +100 (L) million] a year, tax payable must be paid at around **24 million**.
- ⇒ If you report your total income to be IDR **400 million** [200 (S)+200 (SP) million] a year, tax payable must be paid at around **49 million**
- ⇒ If you report your total income to be IDR **1 billion** [200 (S)+500 (B)+ 300 (C) million] a year, tax payable must be paid at around **209 million**
- ⇒ If you report your total income to be IDR **800 million** [200 (S)+500 (B)+100 (L) million] a year, tax payable must be paid at around **149 million**
- ⇒ If you report your total income to be IDR **900 million** [200 (S)+500 (B)+200 (SP) million] a year, tax payable must be paid at around **179 million**
- ⇒ If you report your total income to be IDR **600 million** [200 (S)+300 (C)+100 (L) million] a year, tax payable must be paid at around **99 million**.
- ⇒ If you report your total income to be IDR **700 million** [200 (S)+300 (C)+200 (SP) million] a year, tax payable must be paid at around **124 million**
- ⇒ If you report your total income to be IDR **500 million** [200 (S)+ 100 (L)+200 (SP) million] a year, tax payable must be paid at around **74 million**
- ⇒ If you report your total income to be IDR **1.1 billion** [200 (S)+500 (B)+300 (C)+100 (L) million] a year, tax payable must be paid at around **239 million**
- ⇒ If you report your total income to be IDR **1.2 billion** [200 (S)+500 (B)+300 (C)+200 (SP) million] a year, tax payable must be paid at around **269 million**
- ⇒ If you report your total income to be IDR **1.3 billion** [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year, tax payable must be paid at around **300 million**

Question:

With the tax collection conditions as explained above, how much income will you report on your annual tax return? (circle one)

- 1. IDR **200 million** (S) a year
- 2. IDR **700 million** [200 (S)+500 (B) million] a year
- 3. IDR **500 million** [200 (S)+300 (C) million] a year
- 4. IDR **300 million** [200 (S)+100 (L) million] a year
- 5. IDR **400 million** [200 (S)+200 (SP) million] a year
- 6. IDR **1 billion** [200 (S)+500 (B)+300 (C) million] a year
- 7. IDR **800 million** [200 (S)+500 (B)+100 (L) million] a year
- 8. IDR **900 million** [200 (S)+500 (B)+200 (SP) million] a year
- 9. IDR **600 million** [200 (S)+300 (C)+100 (L) million] a year
- 10. IDR **700 million** [200 (S)+300 (C)+200 (SP) million] a year
- 11. IDR **500 million** [200 (S)+ 100 (L)+200 (SP) million] a year
- 12. IDR **1.1 billion** [200 (S)+500 (B)+300 (C)+100 (L) million] a year
- 13. IDR **1.2 billion** [200 (S)+500 (B)+300 (C)+200 (SP) million] a year
- 14. IDR **1.3 billion** [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year

2. Questionnaire For The Second Class

Institution:

Province of institution:

QUESTIONNAIRE (2)

Condition of Tax Collection

- Examination of the annual tax return which is carried out routinely by the tax officials, and especially for the annual tax returns of employees in the public sectors, it is not a priority for review
- ✓ The annual tax returns of employees in the public sector are not a priority to be audited by the tax official because of the reason that employees working in the public sector might not have high income and generally their tax payables have already been paid by the government (especially from salary). So, the tax payment for them was never a problem
- ✓ If the incomes and the amount of tax payable are **reported honestly** then the government, in this case, the Directorate General of Taxes, will provide rewards to such taxpayers and these rewards include:
 - 1. Cash money worth almost 50% of tax payable.
 - 2. Government would bear expenses of holidays abroad worth almost 50% of tax payable.
 - 3. Government would bear expenses of domestic tourism worth almost 50% of tax payable.
 - 4. Tax refund worth almost 50% of tax payable.
 - 5. Tax discount for the next month worth almost 50% of tax payable.
 - 6. Shopping voucher worth almost 50% of tax payable.
 - 7. Certificate of appreciation would be directly by the president and pinned the eagle gold pin.
 - 8. Subsidy for housing worth almost 50% of tax payable.
 - 9. Subsidy for health worth almost 50% of tax payable.
 - 10. Subsidy for education worth almost 50% of tax payable.
 - 11. Subsidy for health insurance worth almost 50% of tax payable.

As a taxpayer, you have an income of IDR 1.3 billion a year by the details:

✓	Salary	=	IDR 200 million a year (tax is covered by the
	government)		
\checkmark	Income from business	=	IDR 500 million a year
\checkmark	Income from consultancy	=	IDR 300 million a year
\checkmark	Income as a lecturer	=	IDR 100 million a year
\checkmark	Income as a speaker	=	IDR 200 million a year
	Total income	=	IDR 1.3 billion a year
			J

With that income, you are faced with a choice of income that will be reported on your annual tax return, as below:

- ⇒ If you report your total income only from the salary of IDR **200 million** (S) a year, tax payable must be paid at **'ZERO'** (tax has already been paid by the government)
- ⇒ If you report your total income to be IDR **700 million** [200 (S)+500 (B) million] a year, tax payable must be paid at around **124 million**
- ⇒ If you report your total income to be IDR **500 million** [200 (S)+300 (C) million] a year, tax payable must be paid at around **74 million**
- ⇒ If you report your total income to be IDR **300 million** [200 (S) + 100 (L) million] a year, tax payable must be paid at around **24 million**.

- ⇒ If you report your total income to be IDR **400 million** [200 (S) +200 (SP) million] a year, tax payable must be paid at around **49 million**
- ⇒ If you report your total income to be IDR **1 billion** [200 (S) + 500 (B) + 300 (C) million] a year, tax payable must be paid at around **209 million**
- ⇒ If you report your total income to be IDR **800 million** [200 (S) + 500 (B)+100 (L) million] a year, tax payable must be paid at around **149 million**
- ⇒ If you report your total income to be IDR **900 million** [200 (S) + 500 (B)+200 (SP) million] a year, tax payable must be paid at around **179 million**
- ⇒ If you report your total income to be IDR **600 million** [200 (S) + 300 (C) + 100 (L) million] a year, tax payable must be paid at around **99 million**.
- ⇒ If you report your total income to be IDR **700 million** [200 (S) + 300 (C) + 200 (SP) million] a year, tax payable must be paid at around **124 million**
- ⇒ If you report your total income to be IDR **500 million** [200 (S) + 100 (L) + 200 (SP) million] a year, tax payable must be paid at around **74 million**
- ⇒ If you report your total income to be IDR **1.1 billion** [200 (S)+500 (B)+300 (C)+100 (L) million] a year, tax payable must be paid at around **239 million**
- ⇒ If you report your total income to be IDR **1.2 billion** [200 (S)+500 (B)+300 (C)+200 (SP) million] a year, tax payable must be paid at around **269 million**
- ⇒ If you report your total income to be IDR **1.3 billion** [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year, tax payable must be paid at around **300 million**

Question:

- A. With the tax collection conditions as explained above, how much income will you report on your annual tax return? (circle one)
 - 1. IDR 200 million (S) a year
 - 2. IDR **700 million** [200 (S)+500 (B) million] a year
 - 3. IDR **500 million** [200 (S)+300 (C) million] a year
 - 4. IDR **300 million** [200 (S)+100 (L) million] a year
 - 5. IDR **400 million** [200 (S)+200 (SP) million] a year
 - 6. IDR **1 billion** [200 (S)+500 (B)+ 300 (C) million] a year
 - 7. IDR **800 million** [200 (S)+500 (B)+100 (L) million] a year
 - 8. IDR **900 million** [200 (S)+500 (B)+200 (SP) million] a year
 - 9. IDR **600 million** [200 (S)+300 (C)+100 (L) million] a year
 - 10. IDR **700 million** [200 (S)+300 (C)+200 (SP) million] a year
 - 11. IDR **500 million** [200 (S)+ 100 (L)+200 (SP) million] a year
 - 12. IDR **1.1 billion** [200 (S)+500 (B)+300 (C)+100 (L) million] a year
 - 13. IDR **1.2 billion** [200 (S)+500 (B)+300 (C)+200 (SP) million] a year
 - 14. IDR **1.3 billion** [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year
- B. If you are required to choose **five rewards** given by the government, please choose the rewards by the priority scale: (just write the number)
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.

3. Questionnaire For The Third Class

Institution:

Province of institution:

QUESTIONNAIRE (3)

Condition of Tax Collection

- ✓ Examination of the annual tax return which is carried out routinely by the tax officials, and especially for the annual tax returns of employees in the public sectors, it is not a priority for review.
- ✓ The annual tax returns of employees in the public sector are not a priority to be audited by the tax official because of the reason that employees working in the public sector might not have high income and generally their tax payables have already been paid by the government (especially from salary). So, the tax payment for them was never a problem
- ✓ If the incomes and the amount of tax payable are **reported dis-honestly** then the government, in this case, the Directorate General of Taxes, would punish such taxpayers and these punishments include:
 - 1. Paying payable amount of tax plus interest of 50% per month.
 - 2. Paying tax payable plus a fine of amount, which would be 10 times the tax payable.
 - 3. For mild cases, confinement sanction for around 5 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.

As a taxpayer, you have an income of IDR 1.3 billion a year by the details:

✓	Salary	=	IDR 200 million a year (tax is covered by the
	government)		
\checkmark	Income from business	=	IDR 500 million a year
\checkmark	Income from consultancy	=	IDR 300 million a year
\checkmark	Income as a lecturer	=	IDR 100 million a year
\checkmark	Income as a speaker	=	IDR <u>200 million a year</u>
	Total income	=	IDR 1.3 billion a year

With that income, you are faced with a choice of income that will be reported on your annual tax return, as below:

- ⇒ If you report your total income only from the salary of IDR **200 million** (S) a year, tax payable must be paid at **'ZERO'** (tax has already been paid by the government)
- ⇒ If you report your total income to be IDR **700 million** [200 (S)+500 (B) million] a year, tax payable must be paid at around **124 million**
- ⇒ If you report your total income to be IDR **500 million** [200 (S)+300 (C) million] a year, tax payable must be paid at around **74 million**
- ⇒ If you report your total income to be IDR **300 million** [200 (S) + 100 (L) million] a year, tax payable must be paid at around **24 million**.

- ⇒ If you report your total income to be IDR **400 million** [200 (S) + 200 (SP) million] a year, tax payable must be paid at around **49 million**
- ⇒ If you report your total income to be IDR **1 billion** [200 (S) + 500 (B)+ 300 (C) million] a year, tax payable must be paid at around **209 million**
- ⇒ If you report your total income to be IDR **800 million** [200 (S) + 500 (B)+100 (L) million] a year, tax payable must be paid at around **149 million**
- ⇒ If you report your total income to be IDR **900 million** [200 (S) + 500 (B)+200 (SP) million] a year, tax payable must be paid at around **179 million**
- ⇒ If you report your total income to be IDR **600 million** [200 (S) + 300 (C) + 100 (L) million] a year, tax payable must be paid at around **99 million**.
- ⇒ If you report your total income to be IDR **700 million** [200 (S) + 300 (C) + 200 (SP) million] a year, tax payable must be paid at around **124 million**
- ⇒ If you report your total income to be IDR **500 million** [200 (S)+ 100 (L)+200 (SP) million] a year, tax payable must be paid at around **74 million**
- ⇒ If you report your total income to be IDR **1.1 billion** [200 (S)+500 (B)+300 (C)+100 (L) million] a year, tax payable must be paid at around **239 million**
- ⇒ If you report your total income to be IDR **1.2 billion** [200 (S)+500 (B)+300 (C)+200 (SP) million] a year, tax payable must be paid at around **269 million**
- ⇒ If you report your total income to be IDR **1.3 billion** [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year, tax payable must be paid at around **300 million**

Question:

- A. With the tax collection conditions as explained above, how much income will you report on your annual tax return? (circle one)
 - 1. IDR 200 million (S) a year
 - 2. IDR **700 million** [200 (S)+500 (B) million] a year
 - 3. IDR **500 million** [200 (S)+300 (C) million] a year
 - 4. IDR **300 million** [200 (S)+100 (L) million] a year
 - 5. IDR **400 million** [200 (S)+200 (SP) million] a year
 - 6. IDR **1 billion** [200 (S)+500 (B)+ 300 (C) million] a year
 - 7. IDR **800 million** [200 (S)+500 (B)+100 (L) million] a year
 - 8. IDR **900 million** [200 (S)+500 (B)+200 (SP) million] a year
 - 9. IDR **600 million** [200 (S)+300 (C)+100 (L) million] a year
 - 10. IDR **700 million** [200 (S)+300 (C)+200 (SP) million] a year
 - 11. IDR **500 million** [200 (S)+ 100 (L)+200 (SP) million] a year
 - 12. IDR **1.1 billion** [200 (S)+500 (B)+300 (C)+100 (L) million] a year
 - 13. IDR **1.2 billion** [200 (S)+500 (B)+300 (C)+200 (SP) million] a year
 - 14. IDR **1.3 billion** [200 (S)+500 (B)+300 (C)+100 (L)+200 (SP) million] a year
- B. If you have to choose **three punishments**, which punishments do you think should be imposed to tax offenders in providing a deterrent effect? (just write the number)
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.

Annex 6 - Descriptive statistics (chapter 5)

Descriptive Statistics for ALL RESPONDENTS

	N	Minimum	Maximum	Mean	Std. Deviation
Tax_Compliance	400	.63	4.89	3.4858	.63520
MTAS	400	.00	5.00	3.3382	.68189
Tax_Sanction	400	.00	5.00	3.0039	.84409
Tax_Morale	400	.00	5.00	3.0425	.71486
Tax_Service	400	.00	5.00	3.2846	.81947
Valid N (listwise)	400				

Descriptive Statistics for GOVERNMENT EMPLOYEES (GE)

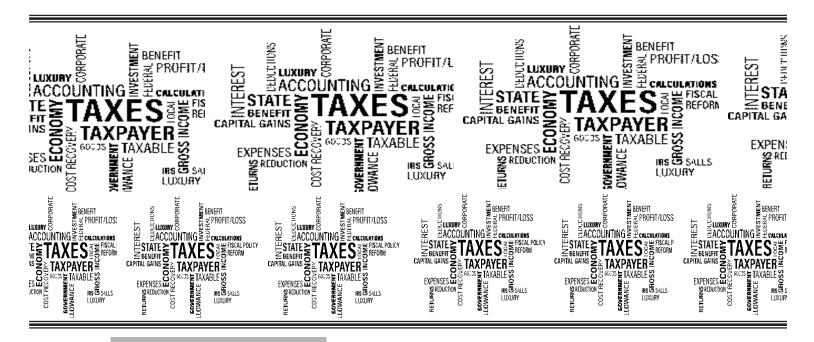
	N	Minimum	Maximum	Mean	Std. Deviation
Tax_compliance	360	.63	4.89	3.4871	.63262
MTAS	360	.00	5.00	3.3595	.68505
Tax_sanction	360	.00	5.00	3.0294	.83436
Tax_morale	360	.00	5.00	3.0659	.71105
Tax_service	360	.00	5.00	3.3064	.82751
Valid N (listwise)	360				

Descriptive Statistics for STATE ENTERPRISE EMPLOYEES (SEE)

					Std.
	N	Minimum	Maximum	Mean	Deviation
Tax_compliance	40	1.47	4.68	3.4740	.66622
MTAS	40	1.69	4.46	3.1470	.62885
Tax_sanction	40	.00	4.00	2.7745	.90616
Tax_morale	40	.45	4.09	2.8325	.72386
Tax_service	40	.80	4.00	3.0880	.72302
Valid N (listwise)	40				

Comparison between GE and SEE

	GE	SEE
Tax_compliance	3.4871	3.4740
MTAS	3.3595	3.1470
Tax_sanction	3.0294	2.7745
Tax_morale	3.0659	2.8325
Tax_service	3.3064	3.0880



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