

The Tax Morale of the Individual Taxpayers in Indonesia by Demographic Factors

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Abstract

The research investigates the tax morale of individual taxpayers in Indonesia by several demographic factors. A self-administered survey is conducted to stratified random samples selected from the individual taxpayers registered at the Indonesian Directorate General of Taxes database. Given the vast geographic condition and in order to achieve sufficient responses, the samples are limited to taxpayers in three largest cities in Indonesia and which registered most individual taxpayers: Jakarta the capital city, Surabaya and Medan. From 750 questionnaires distributed 338 responses are used in the analysis, representing 45.07% of response rate.

The respondents are categorised into the following groups: gender, age group, marital status, educational level, religion, and employment status. The results show that the individual taxpayers in Indonesia have relatively high level of tax morale. Independent t-test and One Way ANOVA tests show that the differences in attitude towards tax morale are statistically significant in age group and educational level groups. The differences in other categories named above are not statistically significant.

Keywords: tax morale, tax compliance, individual taxpayer, Indonesian tax, Independent t-test, ANOVA Test

I. Introduction

Tax morale, frequently cited as the “intrinsic motivation to pay tax” (Frey & Torgler, 2007; Pope & Mohdali, 2010; Torgler, 2007), has been widely advocated to have impact on taxpayers’ compliance (Ronald G Cummings, Martinez-Vazque, McKee, & Torgler, 2005; Kornhauser, 2007). Rather than investigating why people evade or do not evade paying tax as suggested by economic model built by Allingham and Sandmo (Allingham & Sandmo, 1972), tax morale studies attempt to explain why people pay tax despite the slim chance of being audited and the penalty is only a fraction of the evaded amount. As it represents the “motivation to pay tax”, tax morale is more relevant where the enforcement are lacking be it from authority short of resources to detect tax evasion (Luttmer & Singhal, 2014; Pope & McKerchar, 2011) or the large sizes of underground economy which is difficult to seize for tax purposes (Alm & Torgler, 2006; Friedman, Johnson, Kaufmann, & Zoido-Lobaton, 2000). Such two conditions are regarded to be relevant to developing economies with large population like Indonesia.

This research investigates the demographic factors that are considered to have impact on the level of individual taxpayers’ morale (Ramona-Anca & Larissa-Margareta, 2012) according tax morale and tax compliance literature up to date. Such factors are gender, age, marital status, education and religiosity. For example, older age is argued to have positive impact on attitude

towards tax (Kirchler, 2007) as does education (Park & Hyun, 2003) including other demographic factors (Hasseldine & Hite, 2003; Cullis, Jones, & Lewis, 2006). Finding the differences of tax morale level in demographic factors will help tax authority design tax policy strategies and approaches relevant to groups in accordance with their tax morale level.

This research in particular is expected to produce findings of tax morale level differences on factors as follows:

1. Type of Employment (Self-Employed and Employed)
2. Gender
3. Age group
4. Marital Status
5. Educational level
6. Religion

II. What is different in this research

Various methodologies have been used including surveys and experiments (for example (Ronald G. Cummings, Martinez-Vazquez, McKee, & Torgler, 2009; Gërkhani & Schram, 2006; Torgler, 2004a, 2004b). One of the most used methods to measure tax morale is the World Values Survey (WVS) where almost 100 countries are covered with at least 1,000 respondents from each country are presented with a set of questions covering wide range of topics (World Values Survey, 2015). One essential feature of the survey is that it has been conducted in time series, in six waves from 1981 up to the last wave in 2010-2014. It enables investigation on how people's values and perspectives change over time (Torgler & Murphy, 2004).

While research using WVS data is regarded useful for tax morale research given its wide coverage and time span, one critic to it is that it only uses one question to measure tax morale (María-Dolores, Alarcón, & Garre, 2010). Moreover, no indication that all respondents are actually individuals who already pay tax, and to whom the question about their "motivation to pay it" will more accurately addressed. This is more essentially true if the question is presented to individuals who have not had options to pay or not. Therefore, this research where the paying individual taxpayers are involved offers betterment from the earlier studies. Moreover, tax morale in this research is measured through a series of statements.

III. Research Methodology

The sampling framework of this research is the individual taxpayers in three largest cities in Indonesia namely Jakarta, Surabaya and Medan. The samples are gathered using stratified random sampling method based on labour force stratification. The taxpayers are registered at

the Directorate General of Tax of Indonesia (DGT) and paid income tax arrears reported in the tax returns they filed as of 2103 when the data was retrieved. The tax morale is measured using four statements presented to the respondents to be selected with 5 Likert scale options of “Strongly Disagree”, “Disagree”, “Neutral”, “Agree” and “Disagree”. For the purpose of the analysis, the responses are valued to 1, 2, 3, 4 and 5 respectively. The four statements (ST) are as follows:

ST1: Paying tax is the responsibility of any able citizen

ST2: I pay tax willingly without any other’s influence / pressure

ST3: Evading tax obligation is against my principle

ST4: I have willingly paid my taxes so far

The above statements are constructed based on previous tax morale literature (Filippin, Fiorio, & Viviano, 2013; Lubian & Zarri, 2011; Morelo & Pujol, 2012). Most of the statements reflect the “willingness to pay tax” instead of the “attitude towards evading tax” as they resonate more the essence of tax morale spirit. The statements are composed in Indonesian language in as simplest sentence as possible in order to 1) produce high response from the heterogeneous sample respondents, 2) prevent misunderstanding by the respondents on the statements being presented, and 3) avoid difficulty in their retrieving experiences to provide opinions as accurately as possible.

The data obtained is analysed using multivariate analysis which includes independent t-test for groups with two categories and One Way ANNOVA test for the groups with more than two categories. The differences which are statistically significant will be analysed further using post-hoc test. The statistical tests are conducted in order to make inference to larger population of individual taxpayers in Indonesia.

IV. Respondent Profiles

Stratified random sampling is carried out to reflect the labour force proportion in the three cities. As many as 750 self-administered survey forms are distributed to randomly selected respondent samples, from which 392 questionnaires are returned. Following the checking of the completeness and consistency, 338 usable responses are obtained representing 40.57% response rate. The distribution and the response rate are as follows:

Table 1: Labour Force Sample Representativeness by Type of Employment

No	Employment Type	Labour Force*		Respondents of this Research	
		Number	Percentage	Number	Percentage
1	Self Employed	42,795,708	39.02%	131	38.76%
2	Employee	66,874,691	60.98%	207	61.24%
Total		109,670,399	100.00%	338	100.00%

*Source: Central Bureau of Statistic, 2013 pp 94-95

Table 1 shows that the shares of the respondents are reflective to the labour force number as in the Indonesian data of labour force (Central Bureau of Statistic, 2013). As many as 131 respondents are self-employed, representing around 39% of total samples, while 207 employees are involved representing around 61% of the total samples. The larger number of respondents from each group also offers an advantage for statistical analysis.

V. Analysis

5.1. Descriptive Statistics

The four statements score 4 for mode and median, demonstrating strong agreement towards the positive statements on the willingness to pay tax. The mean scores are 3.91, 3.64, 3.55, and 3.68 respectively with standard deviation of 0.79, 0.90, 0.87, and 0.87 consecutively. The grand mean score is 3.70 with standard deviation of 0.86. Overall, the scores display the inclination of a high level of tax morale among the respondents.

Table 2: Mean, Median, Mode, and Standard Deviation of Tax Morale

Item	Statement	Mean	Median	Mode	SD	SD	D	N	A	SA
ST1	Paying tax is the responsibility of any able citizen	3.91	4	4	.79	2	17	59	191	69
						0.6	5.0	17.5	56.5	20.4
ST2	I pay tax willingly without any other's influence / pressure	3.64	4	4	.90	2	40	90	152	54
						0.6	11.8	26.6	45.0	16.0
ST3	Evading tax obligation is against my principle	3.55	4	4	.87	2	38	113	142	43
						0.6	11.2	33.4	42.0	12.7
ST4	I have willingly paid my taxes so far	3.68	4	4	.87	2	34	85	166	51
						0.6	10.1	25.1	49.1	15.1
Tax Morale		3.70	4	4	0.86					

5.2. Reliability test

The responses to the four statements are then analysed in a reliability test. The test results in Cronbach's Alpha score of 0.765 which demonstrates that the responses to all of the four

statements are reliable to form a group. The average of the four statement mean scores then is used as an index for the tax morale level of the respondents.

5.3. Independent t-test and One Way ANOVA test

Independent t-tests are then conducted to groups with two categories, gender, marital status and employment type groups to examine the difference between groups. The tests do not result in the statistically significant difference. So it may be concluded that the tax morale level differences according to gender, marital status and employment type groups are not statistically significant.

Further, One Way ANOVA tests are conducted to investigate the difference in tax morale level of the respondents in factors with more than two groups. The tests show that a difference is not statistically significant religion group. It is observed that the differences in tax morale among the respondents who are Moslem, Catholic, Protestant, Buddha and Hindu are not statistically significant. However, the One Way ANOVA tests show that the differences among other remaining groups are significant. The tests reveal that there are statistically significant differences of Tax Morale in groups of Age ($F(3,334)=8.11$ $p=0.000$) and Education Level ($F(2,335)=17.14$ $p=0.000$).

5.4. Post Hoc tests

Further post-hoc tests are conducted to groups that show statistically significant difference of tax morale within a group. The tests demonstrate that in Age group, the statistically significant differences occur between the respondents aged 50-64 years with those aged under 30 years and with those aged 30-49 years. The summary is as follows:

Table 3: Post Hoc Test of Tax Morale by Age Group

Age Group	Mean	SD	Sig.
50-64 years	3.38	0.68	
Under 30	3.77	0.64	$p < 0.05$
30-49 years	3.79	0.62	$p < 0.005$

Table 3 above shows that the respondents who are in 50-64 years of age group have lower score of mean in tax morale compared to those from under 30 years and 30-49 years age group. Furthermore, it is observed that the difference with the 30-49 age groups is highly significant with $p < 0.005$.

In Education Level, the statistically significant difference appears between the group of respondents who have education up to High School with those who have college level of

education, as well as with the respondents who have Post Graduate Level of education. The summary of the difference is presented in Table 4 as follows:

Table 4: Post Hoc Test of Tax Morale by Education Level

Educational Level	Mean	SD	Sig.
Up to High School	3.29	0.69	
College	3.80	0.62	$p < 0.005$
Post Graduate	3.73	0.53	$p < 0.005$

From Table 4 it is observed that the respondents who have high-school or lower education have mean score less than the other two groups. In addition, the difference is statistically highly significant in both comparisons: Up to High School group with College group, and Up to High School group with Post Graduate group.

VI. Discussion

The descriptive analysis as in Table 2 above shows the inclination of high tax morale level of individual taxpayers in Indonesia. This result is consistent with the finding of Tekeli, investigating tax morale using WVS data, which showed that Indonesia had the 3rd highest level of tax morale among Asian countries surveyed after Japan and South Korea (Tekeli, 2011). However, it is worth noting that as the respondents in this research are actual taxpayers who have paid their taxes, so the result is not surprising despite some statistically significant differences. Those who in practice have registered, paid tax, and filed their tax returns would have high probability being compliant taxpayers who are willingly paying their taxes. However, the results as well show that there is high probability that compliance is related with high level of tax morale.

The independent t-tests show that the tax morale levels are not different in marital status and employment type whether they are employees or self-employed. The latter is particularly interesting as different views from previous studies suggest that the employed individuals have higher voluntary tax compliance than those who are self-employed (for example Daude, Gutiérrez, & Melguizo, 2012; Kirchler, 2007).

The One Way ANOVA tests also show that the difference of tax morale level is statistically different in age group, where it is observed that the respondents who are in age group of 50-64 years of age show lower level of tax morale compared to younger respondents in two groups: 30-49 years and under 30 years brackets. This result is slightly different from some previous studies, for example the research conducted by María-Dolores, Alarcón and Garre on 1,500 respondents in Spain which suggests “the older the respondent, the greater their tax morale tends to be” (María-Dolores et al., 2010).

Furthermore, the tests also result in a statistically significant difference among the educational level group. Those who have education at the level of “high school or below” is observed to score lower in willingness to pay tax compared to their counterparts who have higher level of education, namely graduate and post graduate level. This result is consistent with previous studies which suggest that education relates positively with the level of tax morale and voluntary compliance (for example Torgler, 2003; Torgler & Schneider, 2005).

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