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# Tax Morale in Asian Countries

Benno Torgler

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# TAX MORALE IN ASIAN COUNTRIES

by

Benno Torgler\*

*Georgia State University, USA*

*Center for Research in Economics, Management and the Arts (CREMA), Switzerland*

*University of Basel, WWZ, Switzerland*

*Abstract:*

This paper analyses tax morale in several Asian countries. The descriptive analysis indicates that tax morale is very low in the Philippines and relatively high in Japan, China, and Bangladesh. In general Asia has a higher tax morale than OECD countries, which might indicate cultural differences. The paper also analyses tax morale as a dependent variable and thus gives answers to what shapes tax morale. Pooling the Asian countries we find, e.g., that trust in the government and the legal system have a positive effect on tax morale. These results remain robust for India and Japan in a time series analysis.

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\* Andrew Young School of Policy Studies, Georgia State University, International Studies Program, 35 Broad Str., suite 605, Atlanta, GA 30303, USA. E-Mails: [ecobtx@langate.gsu.edu](mailto:ecobtx@langate.gsu.edu), [Benno.Torgler@unibas.ch](mailto:Benno.Torgler@unibas.ch); fax: 0014046513996, phone: 0014046514445. For advice and suggestions thanks are due to Doris Aebi, René L. Frey and two anonymous referees. Financial support from the Swiss National Science Foundation is gratefully acknowledged. – Revised Version, January, 2004.

## 1. Introduction

Since the 1960s Asia has been a rapidly growing area. But the financial crisis of 1997 led to an output “crash”. Thus, structural reforms have been realised in many countries. Some countries have implemented an expanding fiscal policy (see, e.g., Chang et al., 2002 for South Korea). East Asia provided relatively stable institutional structures for many years. Weder (2002, p. 4) characterised the institutional framework as being closely tied with business. Many recent studies stress the relevance of good economic institutions for a good performance. Regarding tax morale and tax compliance, public sector institutions play an essential role. Such institutions include, e.g., a transparent and fair tax system, incorrupt tax officers, and a government taxpayers’ trust. Bureaucrats in East Asia are generally seen as competent, independent and highly motivated, securing property and contract rights (Weder 2002).

Some Asian countries are faced with a redefined state role, setting new constitutional rules. In China, e.g., reforms towards a market economy are in course. In line with these movements, fiscal reforms regarding the design of the taxes and the organisation and administration of tax departments are made. Asian countries have in general a modern tax system but corruption of the tax administration is a common phenomenon.

This paper attempts to analyse tax morale in Asian countries evaluating the World Values Survey (WVS). We are going to work with a pooled sample to get a robust picture of tax morale in Asia and will pay attention to specific cases covering more than one year to undertake a more refined study of the factors that influence tax morale. It is novel in the tax compliance literature to use tax morale as a dependent variable and thus to analyse which factors shape tax morale. Furthermore, only a few papers have focused on tax evasion in Asia (see, for example, Das-Gupta, Lahiri and Mookherjee, 1995; Wong, 2001; Manasan, 2000). Thus, new empirical evidence helps reduce these shortcomings. Many researchers as, e.g., Andreoni, Erard and Feinstein (1998) stress the relevance of enforcing the empirical evidence in the tax compliance literature.

A difficulty with cross-country studies could be that a translation of tax morale questions into different languages and cultures might cause biases in the analysis. However, we believe that this problem can be reduced by focusing on a specific region as Asia and by controlling for possible cultural differences with dummy variables. Furthermore, we do not only compare levels of tax morale but rather seek to identify determinants of tax morale in a multivariate analysis. A broad data set allows to get better insights regarding these determinants, and a time series analysis helps find general tendencies rather than time specific influences.

Section 2 gives a general overview on the concept of tax morale. Section 3 covers the empirical part. We start with a descriptive analysis of the size of tax morale in Asian countries covering the years between 1981 and 1997. The cross-section multivariate analysis works with the broadest data basis (years 1995-1997), differentiating between the countries with dummy variables. Section 4 focuses on India and Japan in a multivariate time series analysis. The paper finishes in Section 5 with some concluding remarks.

## **2. The relevance of tax morale**

Why do people pay taxes? This question has obtained increased attention in the tax compliance literature in the last few years. It can be supposed that nobody likes to pay taxes. One possibility is to “enforce” people to pay their taxes following a deterrence policy. In line with the economic-of-crime approach based on the expected utility maximisation calculus, Allingham and Sandmo (1972) presented a formal model with the insight that the extent of tax evasion is negatively correlated with the probability of detection and the degree of punishment. However, this pathbreaking model has been criticised by many authors (see, e.g., Graetz and Wilde, 1985; Alm, McClelland and Schulze, 1992; Frey and Feld, 2002). A main point, which is connected to the empirical and experimental findings, is that these deterrence models predict too little tax evasion. In many countries the level of deterrence is too low to explain the high degree of tax compliance. Furthermore, there is a big gap between the level of risk aversion that would guarantee such a compliance and the effectively reported degree of risk aversion. For example, for the United States and Switzerland, the estimated Arrow-Pratt measure of risk aversion is between one and two, but only a value of around 30 would explain the observed compliance rate (see Graetz and Wilde, 1985, Alm, McClelland and Schulze, 1992; Frey and Feld, 2002). Furthermore, tax compliance experiments mostly report a higher level of income declaration than the expected utility model would predict (for a survey see Torgler, 2002).

Elffers (2000) points out that “the gloomy picture of massive tax evasion is a phantom” (p. 185). Many researchers stress that a considerable portion of taxpayers are always honest. Some taxpayers are “simply predisposed not to evade” (Long and Swinger, 1991, p. 130) and thus do not even search for ways to cheat at taxes (see Frey, 1999; Torgler, 2003). Furthermore, Elffers (2000) points out that not everyone with “an inclination to dodge his taxes is able to translate his intention into action” (p. 187). Many individuals do not have the opportunity or the knowledge and resources to evade.

Many researchers have argued that tax morale, seen as the intrinsic motivation to pay taxes, can help explain the high degree of tax compliance (see, e.g., Schwartz and Orleans, 1967; Lewis, 1982; Roth, Scholz and Witte, 1989; Alm, McClelland and Schulze, 1992, 1999; Frey, 1997, 2003; Frey and Feld, 2002; Feld and Tyran, 2002). If tax morale is supposed to be an explanation why tax compliance rates are so high, it might be interesting to analyse what shapes tax morale. Surprisingly, hardly any evidence is available. Feld and Tyran (2002, p. 199), for example, argue: “All in all, too little is known as to which motivations of citizens shape tax morale”. In general, Feld and Frey (2002) point out that “Most studies treat „tax morale“ as a black box without discussing or even considering how it might arise or how it might be maintained. It is usually perceived as being part of the meta-preferences of taxpayers and used as the residuum in the analysis capturing unknown influences to tax evasion. The more interesting question then is which factors shape the emergence and maintenance of tax morale” (pp. 88-89).

But how can tax morale be defined? In this paper we define tax morale as the *intrinsic motivation to pay taxes*. It is the individuals’ *willingness* to pay taxes. Contrary to tax evasion, tax morale does not measure individuals’ behaviour, but their *attitude*. Thus, it is not an output variable such as tax evasion or the size of shadow economy. It can be seen as the moral obligation to pay taxes, the belief in contributing to the society by paying taxes.

The proxy of tax morale in our empirical analysis is the *justifiability* of cheating on taxes. The exact question is:

Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: (...) Cheating on tax if you have the chance (% “never justified” – code 1 from a ten-point scale where 1=never and 10=always).

The question is more closely connected to tax evasion than to tax avoidance, as tax evasion might produce higher moral costs than tax avoidance, the latter being more broadly accepted as a fairly legal strategy to escape from tax payments. The ten-point scale has been recoded into a four-point scale (0, 1, 2, 3), with the value 3 standing for “never justifiable”. 4-10 have been integrated in the value 0 due to a lack of variance.

Certainly, subjective surveys are always prone to significant reporting errors. Thus, the way tax morale is measured in this study is not free of biases. It can be argued that a taxpayer who has incurred in some illegal behaviour in the past will tend to excuse this kind of behaviour declaring a high tax morale. Furthermore, people might overstate their willingness to pay taxes, as no sanctions are involved. However, the way we define tax morale is less delicate than if we would ask directly whether a person has evaded taxes or not. The broad range of countries

reduces biases that could arise from a momentary mood at the time of the survey. It can certainly be criticised that a tax morale variable deduced from more than one question would be more reliable and valid. On the other hand, it might be important to focus on a specific tax compliance question to constitute a reliable measure of tax morale. Using a single question has also the advantage that some of the problems associated with the construction of an index can be reduced, such as complexity, especially regarding the measurement procedure, or a feeble correlation between the items.

As analysing tax morale as a dependent variable is rather novel in the tax compliance literature, the purpose of this paper is to identify which factors have an impact on tax morale. For this, the study analyses a micro-data of individuals throughout Asia using the World Values Survey (WVS) data. The World Values Survey (WVS) is a worldwide investigation of socio-cultural and political change collecting comparative data on values and belief systems among people around the world. It is based on representative national samples and has been broadly used by political scientists (see, e.g., Inglehart, 1997, 2000). Economists as, e.g., Knack and Keefer (1997) or Slemrod (2002) have also started to analyse the WVS data. All the World Values Surveys were done by face to face interviews at the respondents' home in the respective national languages, with a sampling universe comprising all adult citizens, ages 18 and older. In general, the sampling design consisted of a multi-stage, random selection of sampling points with a number of points being drawn from all administrative regional units after stratification by region and degree of urbanization. A weighting variable helps approximate national population parameters (for an overview see Inglehart et al., 2000).

### **3. Empirical analysis**

#### *3. 1. Descriptive analysis*

Before starting with the multiple regressions, we present a descriptive analysis of the degree of tax morale in Asian countries. *Table 1* presents the results. Columns 2, 3, 4 show for each country the percentage of individuals saying that tax evasion is never justifiable for different years, and the columns 5, 6, and 7 indicate the mean values for all countries based on a scale from 0 to 3, where 3 is the highest tax morale (value 0 integrates values 4 to 10).

We can observe relatively stable values in Japan, China and India. On the other hand, South Korea's values change strongly, with the peak point in the years 1990-1993. Compared to

the other countries the Philippines have a very low tax morale. Only 38.2 percent of the individuals state that cheating on tax is never justifiable, and the average scale value is only 1.583. These results go in line with the degree of tax evasion reported by Manasan (2000). He reports high individual income tax evasion rates in the years 1985 to 1999, but with a decay over time between these two years. In 1985 the tax evasion rate was 73.10 percent compared to 60.81 in 1999. *Table 1* shows that Taiwan has also a lower tax morale than other Asian countries. Chu (1990, p. 393) reports that in Taipei, 94% of interviewees in a survey admitted having been induced to bribe corrupt tax administrators into colluding in tax evasion. Furthermore, out of 54 certified public accountants 46 admitted having bribed the tax officials in charge.

It might be interesting to compare the degree of tax morale with another region. *Table A1* in the Appendix reports the degree of tax morale in OECD countries. We can observe a significantly higher tax morale in Asian countries. In general, some authors have stressed that in Asian cultures the relevance of not deviating from societal norms is valued very highly. Such norm compliance might also be reflected by a high degree of tax morale. Helliwell (1996), for example, points out that “the development successes in Asia, and especially in South-East Asia, lies in a tighter and more robust set of social institutions than those found elsewhere in the modern world” (p. 13).

Table 1  
Tax morale in Asia

Country	Tax Evasion Is Never Justifiable (%)			Mean		
	1981-1984	1990-1993	1995-1997	1981-1984	1990-1993	1995-1997
Bangladesh			96.3			2.930
China		78.7	79.0		2.619	2.613
India		82.9	77.0		2.614	2.519
Japan	81.8	81.9	80.6	2.603	2.636	2.621
Philippines			38.2			1.583
South Korea	76.4	89.9	71.6	2.560	2.697	2.416
Taiwan			63.7			2.263
<b>Average</b>	79.1	83.4	72.3	2.582	2.641	2.421

Notes: Own calculations from the World Values Surveys. Columns 2, 3 and 4: percentage of individuals saying that tax evasion is “never justified”. Columns 5, 6, 7: mean of the degree of tax morale, scale from 0 to 3, where 3 means the highest tax morale.

In a next step, we are going to check whether a low tax morale goes in line with a big size of shadow economy. *Table 2* presents the size of shadow economy as a percentage of the GDP/GNP. Similar to our findings that the Philippines had the lowest tax morale among the evaluated Asian countries, they also have the biggest size of shadow economy. On the other hand, countries as Japan and China have a high tax morale and a low size of shadow economy. A contradictory result can only be observed for Bangladesh, having a high tax morale but also a relatively high size of shadow economy.

Table 2

Size of shadow economy (as % of GDP and GNP) in Asia

Country	Average 1989-90 (as % of GDP)	Average 1990-93 (as % of GDP)	Average 1999/2000 (as % of GNP)
Bangladesh			35.6
China			13.1
India	22.4		23.1
Japan	13.2	8.5	11.3
Philippines	50.0		43.4
South Korea	38.0	20.3	27.3
Taiwan		16.5	19.6

Source: Schneider (2002, p. 9).

### 3.2. Multivariate analysis: What shapes tax morale in Asia?

#### 3.2.1. Model and Variables

First we are going to focus on our main models and variables:

##### a) Trust

The main model has the following structure:

$$TM_i = \beta_0 + \beta_1 \cdot t_i + \beta_2 \cdot y_i + \beta_3 \cdot CTL_i + \beta_4 \cdot TR_i + \varepsilon_i$$

where  $TM_i$  denotes the individual degree of tax morale.



Among the core variables we analyse *TRUST IN THE GOVERNMENT* and *TRUST IN THE LEGAL SYSTEM* ( $TR_i$ ). The effects of trust on tax morale can be analysed on two different levels: i) at the *constitutional level* (trust in the legal system) and ii) at the *current politico-economic level* (trust in the government). Trust in the legal system and the government have been measured as follows:

#### TRUST IN THE LEGAL SYSTEM

Could you tell me how much confidence you have in the legal system: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4= a great deal to 1=none at all).

#### TRUST IN THE GOVERNMENT

Could you tell me how much confidence you have in the government in your capital: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4= a great deal to 1=none at all).

In a general way, it can be argued that positive actions by the state are intended to increase taxpayers' positive attitudes and commitment to the tax system and tax-payment, and thus enhance compliant behaviour (e.g., Smith, 1992; Smith and Stalans, 1991). If the state acts trustworthily, taxpayers might be more willing to comply with the taxes. On the other hand, perceived unfairness increases the incentive to act against the tax law, as it reduces psychological costs. The relationship between taxpayers and state can be seen as a relational or psychological contract, which involves strong emotional ties and loyalties. Such a psychological tax contract can be maintained by positive actions, based on trust. Thus, one of the most important social psychological reasons for expecting co-operation is reciprocity (see Axelrod, 1984; Cialdini, 1984). Trust especially plays an important role where detection and punishment are stamped by high cost. The tax authority cannot achieve total compliance; they would have to place a tax administrator under every bed. This might indicate that trust is an important institution, which influences citizens' incentive to commit themselves to obedience. And this trust can only be created if the government acts in line with citizens' needs and desires (see Hardin, 1998). Not only trust in the government might have an effect on tax morale, but also trust in the court and the legal system and thus the way the relationship between the state and its citizens is established.

Slemrod (2002) points out that the cost of tax raising and government running is lower if taxpayers are more willing to pay their taxes voluntarily: "It is as if there is a stock of goodwill,

or social capital, the return to which is the more efficient operation of government. This social capital stock may be reduced by a policy change that decreases the incentive to be a law-abiding citizen” (p. 13).

In this light, the following hypothesis is going to be tested:

*Hypothesis 1: The more extensive the citizens' trust in the government and the legal system, the higher the tax morale.*

## b) Pride

Aspects of pride are not discussed intensively in economic literature. Boulding (1992) states:

“The dynamics which governs the creation, destruction, and distribution of various forms of pride and shame in society are very little understood, yet nothing perhaps is more crucial to the understanding of the overall dynamics of a particular society than the marked differences which exist among societies in this regard” (p. 93).

The question that measures national pride is:

How proud are you to be ...? (specific nationality, e.g., ‘Japanese’) (1=not at all proud, 4=very proud)

Pride is a widespread phenomenon. An individual could be proud of her/his country. Pride produces a sense of group identification. Such group identification can be found, for example, in international soccer games as, e.g., the FIFA World Cup. Tyler (2000) argues that pride influences people's behaviour in groups, organizations and societies. It gives a basis for encouraging cooperative behaviour. Interestingly, to the author's knowledge, the effects of pride on tax cheating have not been documented so far in the economic literature. It can be hypothesized that people who are proud to be citizens of their country are more loyal, better identified with the state and have thus a higher tax morale.

*Hypothesis 2: The greater the citizens' national pride, the higher the tax morale.*

## c) Democracy

It might be interesting to analyse whether a pro democratic attitude has a positive effect on tax morale. In general, democracy offers citizens the possibility to express their preferences. A more active role helps citizens to better monitor and control politicians and thus to reduce the asymmetry of information between them and their agents (government), which reduces the discretionary power of the latter. This might influence citizens' tax morale. We have built variables that measure individuals' support for democratic government (PRO DEMOCRACY 1<sup>1</sup> and PRO DEMOCRACY 2<sup>2</sup>).

*Hypothesis 3: A stronger pro democratic attitude leads to a higher tax morale.*

## d) Further variables:

INCOME ( $y_i$ ): In the first estimations where we pool different countries in a cross-section analysis, we will not use the income variable, as it is difficult to compare this variable between different countries. Thus, we analyse a variable that measures the economic situation of an individual, without producing biases for different nations (UPPER CLASS, UPPER MIDDLE CLASS, LOWER MIDDLE CLASS, WORKING CLASS in the reference group: LOWER CLASS). In general, the effects of income on tax morale are difficult to assess theoretically. Depending on risk preferences and the progression of the income tax schedules, income may increase or reduce tax morale. In countries with a progressive income tax rate, taxpayers with a higher income realize a higher dollar return by evading, but with possibly less economic utility. On the other hand, lower income taxpayers might have lower social "stakes" or restrictions but are less in the position to take these risks, because of a high marginal utility loss (wealth reduction) if they are caught and penalized (Jackson and Milliron, 1986).

AGE: Instead of using age as a continuous variable, four classes have been formed: 16-29, 30-49, 50-64, 65+, with 16-29 as the reference group. On the tax compliance of older people Tittle (1980) argues that they are more sensitive to the threats of sanctions and over the years have acquired greater social stakes, as material goods, status, a stronger dependency on the reactions from others, so that the potential costs of sanction increase. If they have been living for a certain time in the same place they are more attached to the community (see Pommerehne and Weck-

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<sup>1</sup> The question is : "Would you say that having a democratic political system is a very good (4), fairly good (3), fairly bad (2) or very bad (1) way of governing this country" (scale 1 to 4).

<sup>2</sup> "Democracy may have problems but it's better than any other form of government" (4=strongly agree, 1=strongly disagree).

Hannemann 1996). Attachment might have a positive effect on tax morale. A further reason for many older people (65+) to have a different attitude towards tax compliance (higher tax morale) might be that they are often no longer subject to income tax. On the other hand elderly people might be more experienced in tax matters, which might reduce their tax compliance.

**GENDER:** Do women have a different tax morale than men? Social psychological research suggests that women are more compliant and less self-reliant than men (e.g., Tittle, 1980). Differences may be due to differences in male and female values or to lower female labour participation rates.

**MARITAL STATUS:** Marital status might influence legal or illegal behaviour depending on the extent to which individuals are constrained by their social networks (see Tittle, 1980). It could be argued that married people are more compliant than others, especially compared to singles because they are more constrained. However, this also depends on the tax system. If dual incomes are treated as one, being thus taxed in a higher bracket than two separate incomes, compliance might be lower.

**OCCUPATION STATUS:** Does the occupation status influence tax morale? The standard argument is that self-employed taxpayers evade more taxes. Lewis (1982) argues that self-employed persons have higher compliance costs and taxes become more visible. Furthermore, tax evasion might depend on the opportunity to evade or avoid taxes. In line with the findings of Schmolders (1960) we would predict that self-employed people have a lower tax morale than employees.

### 3.2.2. *Estimation results*

In the first estimations we analyse tax morale in Asian countries in a cross-section analysis using the World Values Survey wave 3 (1995-1997). We are going to build country dummies to control for different cultures (INDIA in the reference group)<sup>3</sup>. We are not considering Bangladesh in the estimations, as the descriptive results indicate an extremely high average tax morale which might be biased and is in contradiction to the high reported size of shadow economy. *Table 3* presents the results.

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<sup>3</sup> Years of the surveys: Taiwan (1994-1995), China (1995), Japan (1995), India (1995-1996), South Korea (1996) and Philippines (1996).

Table 3  
Determinants of tax morale in Asia

<i>Dependent Variable:</i> <i>Tax Morale</i>	<i>Weighted Least Squares</i> <i>Eq. 1</i>		<i>Weighted Ordered Probit</i> <i>Eq. 2</i>		
<i>Independent Variables</i>	<i>Coeff.</i>	<i>t-Stat</i>	<i>Coeff.</i>	<i>z-Stat.</i>	<i>Marg.</i>
<b>a) Demographic Factors</b>					
AGE 30-49	0.061*	1.947	0.067*	2.096	0.024
AGE 50-64	0.161***	3.948	0.199***	4.777	0.070
AGE 65+	0.067	1.053	0.109*	1.738	0.038
FEMALE	0.008	0.29	0.010	0.383	0.003
<b>b) Marital Status</b>					
MARRIED	-0.002	-0.047	0.010	0.322	0.004
LIVING TOGETHER	0.033	0.289	0.091	0.758	0.032
DIVORCED	0.179	1.558	0.260*	1.670	0.091
SEPARATED	-0.097	-0.54	-0.099	-0.53	-0.035
WIDOWED	-0.037	-0.491	-0.022	-0.31	-0.008
<b>c) Employment Status</b>					
PART TIME EMPLOYED	0.051	1.231	0.098**	2.375	0.035
SELFEMPLOYED	-0.098***	-2.945	-0.118***	-3.585	-0.042
UNEMPLOYED	-0.136**	-2.560	-0.115**	-2.309	-0.041
AT HOME	0.030	0.758	0.044	1.059	0.015
STUDENT	-0.055	-0.97	-0.055	-1.124	-0.019
RETIRED	-0.040	-0.574	-0.076	-1.169	-0.027
OTHER	-0.033	-0.276	-0.031	-0.329	-0.011
<b>d) Regional Variable</b>					
JAPAN	0.089**	2.145	0.144***	3.017	0.050
SOUTH KOREA	-0.070*	-1.751	-0.103*	-1.997	-0.036
TAIWAN	-0.240***	-5.881	-0.316***	-5.823	-0.111
CHINA	0.112***	2.650	0.147***	2.638	0.052
PHILIPPINES	-0.876***	-21.417	-0.909***	-18.135	-0.320
Observations	7421		7421		
Prob(F-statistic)	0.000				
Prob(LM-statistic)			0.000		

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, INDIA. Significance levels: \* 0.05 < p < 0.10, \*\* 0.01 < p < 0.05, \*\*\* p < 0.01. Marginal effect = highest tax morale score (3). Weighting variable: country weight variable was multiplied by a constant for each country, in order to produce an equal weighted N for each survey.

First we have used a weighted least square and a weighted ordered probit model to analyse possible determinants of tax morale. It helps correct the samples and thus to get a reflection of the national distribution. Furthermore, to get an equal number of weighted observations for each country the original weight variable was multiplied by a constant for each country. The least squares estimation measures tax morale as a cardinal variable. The ordered probit models are relevant in such an analysis insofar as they help analyse the ranking information of the scaled dependent variable tax morale. However, as in the ordered probit estimation, the equation has a

nonlinear form, only the sign of the coefficient can be directly interpreted and not its size. Calculating the marginal effects is therefore a method to find the quantitative effect a variable has on tax morale (see, e.g., Frey and Stutzer 2002). In all estimations of this paper we present only the marginal effect for the highest value “tax evasion is never justified”. Most results are quite robust regarding the estimation methods.

The regression results for the country variables are comparable to the descriptive statistics. People from the Philippines have a significantly lower tax morale than people from India. Being Philippine rather than Indian reduces the probability of stating that tax evasion is never justified by 32 percentage points. In the least squares estimation, the Philippines on average report an around 0.88 score points lower tax morale than the reference group. Furthermore, only Japan and China report a higher tax morale than India.

Age groups from 30 to 65+ have the tendency to a higher tax morale than the reference group 16-29. The highest marginal effects can be observed for the category 50-64, having a highly significant coefficient. The proportion of persons in this group who report the highest tax morale is 7 percentage points higher than for the reference age group. The proportion of self-employees (unemployed) who report the highest tax morale is 4.2 (4.1) percentage points lower than the one of full-time employees. The results are in line with the argumentation that higher compliance costs and higher opportunity costs of being honest reduce tax morale. Furthermore, unemployed individuals might have a higher incentive to act in the shadow economy, which might influence their attitude regarding tax evasion.

The intention in the first estimations was to maximise the number of observations, because in the data screening process answers as “don’t know” and missing values have been eliminated in all estimations. In further estimations we are going to control for education and the economic situation.

In a next step we test hypothesis 1 to 3. *Table 4* and *5* present the results, focusing only on weighted ordered probit models. Both trust variables are highly significant. An increase in the trust in government (trust in legal system) scale by one unit increases the share of subjects indicating the highest tax morale by 2.5 (1.9) percentage points. Thus, trust is highly and positively correlated with tax morale. Hypothesis 1 cannot be rejected. Similarly, greater pride leads to a higher tax morale. The marginal effects are even higher (5.4 percentage points).

We also included a proxy for the economic situation. The results indicate that people who defined themselves as members of the upper class, upper middle class and working class have a significantly lower tax morale than the lowest class. Furthermore, it should be noticed that in the

estimations using the trust variables, the coefficients for JAPAN and CHINA are not significant anymore.

Table 4

Tax morale, trust and pride in Asia

<i>Weighted Ordered Probit</i>	<i>Eq. 3</i>		<i>Eq. 4</i>		<i>Eq. 5</i>		<i>Eq. 6</i>	
<i>Dependent V.: Tax Morale</i>								
<i>Independent Variables</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>
<b>a) Demographic Factors</b>								
AGE 30-49	0.054	0.019	0.073*	0.026	0.071*	0.025	0.057	0.020
AGE 50-64	0.209***	0.073	0.249***	0.089	0.253***	0.090	0.189***	0.066
AGE 65+	0.114*	0.040	0.113	0.040	0.089	0.032	0.062	0.022
FEMALE	-0.009	-0.003	0.006	0.002	0.008	0.003	-0.023	-0.008
<b>b) Marital Status</b>								
MARRIED	-0.018	-0.006	-0.026	-0.009	-0.011	-0.004	-0.022	-0.008
LIVING TOGETHER	0.010	0.004	-0.045	-0.016	-0.024	-0.009	0.126	0.044
DIVORCED	0.294	0.103	0.181	0.065	0.162	0.058	0.209	0.073
SEPARATED	-0.196	-0.069	-0.163	-0.058	-0.285	-0.102	-0.147	-0.051
WIDOWED	-0.035	-0.012	-0.073	-0.026	-0.055	-0.020	-0.014	-0.005
<b>c) Employment Status</b>								
PART TIME EMPLOYED	0.090**	0.032	0.093*	0.033	0.096*	0.034	0.069	0.024
SELFEMPLOYED	-0.146***	-0.051	-0.131***	-0.047	-0.131***	-0.047	-0.163***	-0.057
UNEMPLOYED	-0.117**	-0.041	-0.126**	-0.045	-0.141**	-0.050	-0.140***	-0.049
AT HOME	0.046	0.016	0.078	0.028	0.074	0.027	0.080*	0.028
STUDENT	-0.017	-0.006	-0.054	-0.020	-0.054	-0.019	-0.019	-0.007
RETIRED	-0.049	-0.017	-0.084	-0.030	-0.054	-0.019	-0.053	-0.018
OTHER	0.010	0.003	-0.160	-0.057	-0.138	-0.049	0.013	0.005
<b>d) Economic Situation</b>								
UPPER CLASS	-0.480***	-0.168	-0.535***	-0.192	-0.555***	-0.198	-0.516***	-0.181
UPPER MIDDLE CLASS	-0.046	-0.016	-0.064	-0.023	-0.057	-0.020	-0.056	-0.020
LOWER MIDDLE CLASS	0.038	0.013	0.025	0.009	0.030	0.011	0.065	0.023
WORKING CLASS	-0.004	-0.001	0.050	0.018	0.051	0.018	0.001	0.000
<b>e) Regional Variable</b>								
JAPAN	0.112**	0.039	-0.016	-0.006	-0.072	-0.026	0.174***	0.061
SOUTH KOREA	-0.134**	-0.047	-0.279***	-0.100	-0.302***	-0.108		
TAIWAN	-0.303***	-0.106	-0.474***	-0.170	-0.465***	-0.166	-0.214***	-0.075
CHINA	0.108*	0.038					0.113*	0.039
PHILIPPINES	-0.940***	-0.329	-1.001***	-0.394	-1.117***	-0.399	-1.001***	-0.354
<b>f) Trust and Pride</b>								
TRUST IN GOVERNMENT			0.070***	0.025				
TRUST IN THE LEGAL SYSTEM					0.053***	0.019		
PRIDE							0.155***	0.054
Observations	7421		5611		5679		6058	
Prob(LM-statistic)	0.000		0.000		0.000		0.000	

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, LOWER CLASS, INDIA. Significance levels: \* 0.05 < p < 0.10, \*\* 0.01 < p < 0.05, \*\*\* p < 0.01. Marginal effect = highest tax morale score (3). Weighting variable: country weight variable was multiplied by a constant for each country, in order to produce an equal weighted N for each survey.

Table 5  
Democracy and happiness in Asia (1995-1997)

<i>weighted ordered probit</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>
<i>Dependent V.: Tax Morale</i>		<i>Effect</i>		<i>Effect</i>		<i>Effect</i>		<i>Effect</i>		<i>Effect</i>
<i>Independent Variables</i>	<i>Eq. 7</i>		<i>Eq. 8</i>		<i>Eq. 9</i>		<i>Eq. 10</i>		<i>Eq. 11</i>	
<i>a) Demographic Variables</i>	yes		yes		yes		yes		yes	
<i>b) Marital Status</i>	yes		yes		yes		yes		yes	
<i>c) Employment Status</i>	yes		yes		yes		yes		yes	
<i>d) Economic Situation</i>	yes		yes		yes		yes		yes	
<i>e) Regional Variable</i>										
JAPAN	-0.107	-0.038	-0.134	-0.049	-0.082	-0.028	-0.054	-0.019	0.060	0.021
SOUTH KOREA	-0.355***	-0.127	-0.353***	-0.128	-0.316***	-0.108			-0.168***	-0.059
TAIWAN	-0.508***	-0.181	-0.454***	-0.165	-0.495***	-0.170	-0.466***	-0.162	-0.363***	-0.126
CHINA					-0.069	-0.024	-0.049	-0.017	0.072	0.025
PHILIPPINES	-1.144***	-0.408	-1.121***	-0.406	-1.123***	-0.386	-1.110***	-0.385	-1.011***	-0.352
<i>f) Democracy</i>										
PRO DEMOCRACY 1	0.126***	0.045	0.126***	0.046						
PRO DEMOCRACY 2										
<i>e) Satisfaction</i>										
FINANCIAL SATISFACTION					0.016***	0.006				
SATISFACTION							0.024***	0.008		
HAPINESS									0.110***	0.038
Number of observations	5457		5183		7241		6065		7368	
Prob(LM-statistic)	0.000		0.000		0.000		0.000		0.000	

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, LOWER CLASS, INDIA. Significance levels: \*  $0.05 < p < 0.10$ , \*\*  $0.01 < p < 0.05$ , \*\*\*  $p < 0.01$ . Marginal effect = highest tax morale score (3). Weighting variable: country weight variable was multiplied by a constant for each country, in order to produce an equal weighted N for each survey.

In general, as also shown in the estimations in *Table 5*, the results indicate that India is not performing badly compared to other Asian countries. One reason might be that India is a former British colony. The colonies had a more limited government since the victory of the aristocracy over the crown. In line, the Common law allowed greater political freedom and bureaucratic efficiency (La Porta et al. 1999). The tax system of the British colonies was influenced by the British tax structure (e.g., assessment, legal customs, tax administration structure and rules) and such a structure might have a positive effect on tax morale. However, we will see in a time series analysis in the next section that India's tax morale decreased over time.



The results in *Table 5* also indicate that hypothesis 3 cannot be rejected. We observe a significant correlation between a pro democracy attitude and tax morale with almost identical marginal effects. In the pooled country estimations we also explore the effects of satisfaction variables on tax morale. We start with the variable FINANCIAL SATISFACTION<sup>4</sup>, which is more strongly related to tax payments. If the financial situation of a household is bad, the tax payments might be seen as a hard restriction of their possibility set, which might reduce tax honesty. To get a broader view and to consider the fact that in some Asian countries as India or the Philippines a considerable number of citizens have a low living standard, we include the variables SATISFACTION<sup>5</sup> and HAPPINESS<sup>6</sup>. All three variables significantly affect tax morale in a positive way. Interestingly, the variable HAPPINESS has the highest marginal effects

#### **4. Multivariate analysis in India and Japan**

In a further step, the paper looks at two different Asian countries: India, a former British colony with a multiparty democratic policy and with a low average living standard, and Japan, a highly developed and important OECD country. This allows checking to which extent the effects of the independent variables on tax morale are similar, despite institutional and cultural differences.

Furthermore, we are going to analyse the development of tax morale over time and check if the independent variables are robust over time. In India, data are available for the years 1995/1996 and 1990, in Japan for 1981, 1990 and 1995. We analyse the newest data separately before pooling them forming time dummy variables. This allows to undertake a more refined study. However, such a procedure will reduce the number of observable variables as not all mean independent variables have been integrated in all WVS waves.

##### *4.1. India*

Das-Gupta et al. (1995) empirically analysed the development of compliance over time and found that it declined over the period 1971-1990, contrary to the positive trend of the income

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<sup>4</sup> How satisfied are you with the financial situation of your household? (scale 1 = dissatisfied to 10=satisfied).

<sup>5</sup> All things considered, how satisfied are you with your life as a whole these days? (scale 1 = dissatisfied to 10=satisfied).

<sup>6</sup> Taking all things together, would you say you are : very happy (4), quite happy (3), not very happy (2), not at all happy (1).

tax revenues. An increase in the average tax rates reduced tax compliance. On the other hand, tax cuts made in 1974 and 1985 went in line with a higher compliance. Interestingly the authors found that prosecution activities are ineffective for increasing compliance.

In the 90s India reformed the tax rates but relatively few efforts have been made to improve tax administration (see Das-Gupta and Mookherjee 1995). The authors criticised that corruption was widespread at the Indian Income Tax Department and tax procedures imposed high compliance costs on taxpayers. Schneider et al. (2003) report that the size of the hidden economy has strongly increased from 1961-62 (8.99 percent of the GDP) to 1997-98 (23.19 percent of the GDP). Thus, it might be interesting to analyse whether tax morale has also decreased over time in India.

However, we first present some data from a cross-section analysis of the year 1995/96. The results are shown in *Table 6*. Similar to the previous estimations, the coefficient for the variable TRUST IN GOVERNMENT is significant. The marginal effects are also comparable showing that an increase in the trust scale by one unit increases the share of subjects stating that tax morale is never justifiable by 2.2 percentage points. Greater pride leads also to a higher tax morale. An increase in pride by one unit raises the share of persons arguing that tax morale is never justifiable by 6.6 percentage points. Furthermore, *Table 6* indicates that hypothesis 3 cannot be rejected. We find a significant positive correlation between pro democratic attitudes and tax morale.

For the control variables we observe that the variable SELFEMPLOYED has a significant coefficient with a negative sign and a marginal effect of around 5 percentage points. Furthermore, a better economic situation leads to a significantly lower tax morale. We can observe that the marginal effects increase with an increase in the economic class.

*Table 6* also reports the information about individuals' religion. Religion might have an effect on tax morale. In Asia, religion can be seen as a proxy for a specific culture as, e.g., Hinduism, Islam or Buddhism. In literature it has been used as a proxy for work ethic, tolerance, trust and other characteristics (see, e.g., La Porta et al. 1999). Thus, it could be hypothesized that tax morale differs among religions. The descriptive analysis shows that most of the interviewed individuals were Hindus (77.4 percent), followed by Moslems (12 percent). Thus, we use the dummy variable HINDU as reference group. *Table 6* indicates that the minority (religion) groups have a significantly higher tax morale than the reference group. The marginal effects for the groups Moslim, other religion and no religion are relatively high.

Table 6

Tax morale in India 1995/1996

<i>Weighted Ordered Probit</i>	<i>Eq. 1</i>		<i>Eq. 2</i>		<i>Eq. 3</i>		<i>Eq. 4</i>	
<i>Dependent V.: Tax Morale</i>								
<i>Independent Variables</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>
<b>a) Demographic Factors</b>								
AGE 30-49	0.206**	0.054	0.143	0.040	0.110	0.027	0.068	0.016
AGE 50-64	0.179	0.047	0.053	0.015	0.205	0.050	0.132	0.032
AGE 65+	-0.111	-0.029	-0.214	-0.060	-0.081	-0.020	-0.184	-0.044
FEMALE	0.143	0.037	0.149	0.042	0.179	0.044	0.212*	0.051
<b>b) Marital Status</b>								
MARRIED	0.156	0.041	0.162	0.046	0.223*	0.055	0.206	0.050
DIVORCED	-0.293	-0.077	-0.067	-0.019	-0.391	-0.096	-0.572	-0.138
SEPARATED	-1.096**	-0.287	-0.563	-0.159	-0.856*	-0.210	-0.793	-0.192
WIDOWED	0.019	0.005	-0.098	-0.028	0.865*	0.212	0.807	0.195
<b>c) Employment Status</b>								
PART TIME EMPLOYED	-0.097	-0.025	-0.022	-0.006	-0.152	-0.037	0.054	0.013
SELFEMPLOYED	-0.211**	-0.055	-0.350***	-0.099	-0.217*	-0.053	-0.192	-0.046
UNEMPLOYED	-0.164	-0.043	-0.232	-0.065	-0.160	-0.039	-0.083	-0.020
AT HOME	0.041	0.011	-0.161	-0.045	0.022	0.006	0.024	0.006
STUDENT	0.362**	0.095	0.321*	0.090	0.329	0.081	0.321*	0.077
RETIRED	0.084	0.022	0.086	0.024	-0.058	-0.014	0.066	0.016
OTHER	-0.391	-0.102	-0.738	-0.208	-1.516	-0.371	-6.799	16.415
<b>d) Economic Situation</b>								
UPPER CLASS	-0.821***	-0.215	-0.981***	-0.276	-0.823***	-0.202	-0.764***	-0.184
UPPER MIDDLE CLASS	-0.451***	-0.118	-0.637***	-0.180	-0.526***	-0.129	-0.459***	-0.111
LOWER MIDDLE CLASS	0.114	0.030	-0.032	-0.009	0.054	0.013	0.119	0.029
WORKING CLASS	0.035	0.009	-0.304	-0.086	-0.007	-0.002	0.121	0.029
<b>e) Religion</b>								
CHRISTIAN	0.165	0.043	0.219	0.062	0.234	0.057	0.147	0.036
MOSLIM	0.406***	0.106	0.304***	0.086	0.261*	0.064	0.334**	0.081
NO RELIGION	0.504**	0.132	0.501**	0.141	0.513**	0.126	0.718***	0.174
OTHER RELIGION	0.400*	0.105	0.507**	0.143	0.365	0.089	0.365	0.088
<b>f) Further Variables</b>								
TRUST IN GOVERNMENT	0.087**	0.023						
PRIDE			0.234***	0.066				
PRO DEMOCRACY 1					0.105*	0.026		
PRO DEMOCRACY 2							0.226***	0.055
Observations	1595		1830		1494		1402	
Prob(LM-statistic)	0.000		0.000		0.000		0.000	

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, LOWER CLASS, HINDU. Significance levels: \* 0.05 < p < 0.10, \*\* 0.01 < p < 0.05, \*\*\* p < 0.01. Marginal effect = highest tax morale score (3).

Interestingly, compared to other minority religion groups, Christians do not report a significantly higher tax morale than the reference group. Furnham (1982), e.g., found in an empirical analysis that a higher degree of protestant work ethic leads to more opposition to taxation. Martin T. Crowe (1944, pp. 42-88) analysed Christians' moral attitude towards tax evasion focusing on the

question to which extent and under which conditions a just law does bind in conscience. According to Crowe (p. 22-26) a just tax must be: 1) levied by a legitimated legislative authority, 2) for a just cause and not for hindering or helping business in any individual state and 3) in line with a just distribution of the tax burden. Thus, Christians' religion denies the obligation to pay taxes under certain circumstances.

In a next step we are going to pool the data from 1990 and 1995/1996 to obtain a robust picture of what shapes tax morale in India and to check whether tax morale also decreases in line with an increase of the size of shadow economy over time, controlling for additional variables. *Table 7* presents the results. The results indicate the tendency that tax morale has decreased over time. Inhabitants of India had a lower probability of reporting the highest tax morale in 1995/1996 than in 1990, with high marginal effects between 1.6 and 7.2 percentage points. The main variables TRUST IN GOVERNMENT, TRUST IN SYSTEM and PRIDE remain significant. Looking at the religion, Moslms and people without a religion report a significantly higher tax morale than Hindus. On the other hand citizens with another religion report now a significantly lower tax morale than Hindus. The results regarding the economic situation also remain robust, showing that a better economic situation goes in line with a significantly lower tax morale. The coefficient of the variable FEMALE is now highly significant with a positive sign. On the other hand, only the age groups 30-49 and 50-64 indicate a higher tax morale than the reference group while the oldest group surprisingly shows a significantly lower tax morale. Regarding the employment status we observe that part-time employed, retired people and students have a higher, and self-employed a lower tax morale than full-time employed persons. For the marital status we find that separated individuals have a significantly lower and widowed persons a higher tax morale than singles.

Table 7

Tax morale in India over time (1990 and 1995/1996)

<i>Weighted Ordered Probit</i>	<i>Eq. 5</i>		<i>Eq. 6</i>		<i>Eq. 7</i>		<i>Eq. 8</i>	
<i>Variable</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>
<b>a) Demographic Factors</b>								
AGE 30-49	0.081***	0.022	0.148***	0.039	0.116***	0.030	0.113***	0.031
AGE 50-64	0.003	0.001	0.048*	0.013	0.030	0.008	0.038	0.010
AGE 65+	-0.267***	-0.073	-0.220***	-0.058	-0.292***	-0.075	-0.223***	-0.060
FEMALE	0.116***	0.031	0.116***	0.031	0.129**	0.033	0.119***	0.032
<b>b) Marital Status</b>								
MARRIED	0.036	0.010	-0.008	-0.002	0.044	0.011	0.025	0.007
DIVORCED	0.106	0.029	-0.033	-0.009	-0.031	-0.008	0.066	0.018
SEPARATED	-0.640***	-0.174	-0.713***	-0.189	-0.770***	-0.197	-0.457***	-0.124
WIDOWED	0.283***	0.077	0.334***	0.088	0.384***	0.098	0.302***	0.082
<b>c) Employment Status</b>								
PART TIME EMPLOYED	0.114***	0.031	0.105***	0.028	0.131***	0.034	0.131***	0.036
SELFEMPLOYED	-0.140***	-0.038	-0.067***	-0.018	-0.048*	-0.012	-0.112***	-0.030
UNEMPLOYED	0.027	0.008	0.034	0.009	0.029	0.008	0.022	0.006
AT HOME	-0.027	-0.007	0.072**	0.019	0.085***	0.022	0.003	0.001
STUDENT	0.237**	0.064	0.197*	0.052	0.238**	0.061	0.247**	0.067
RETIRED	0.085*	0.023	0.202***	0.054	0.216***	0.055	0.074*	0.020
OTHER	-0.642	-0.174	-0.411	-0.109	6.546	1.677	-0.674	-0.182
<b>d) Economic Situation</b>								
UPPER CLASS	-0.676***	-0.184	-0.580***	-0.154	-0.572***	-0.147	-0.711***	-0.192
UPPER MIDDLE CLASS	-0.298***	-0.081	-0.195*	-0.052	-0.153	-0.039	-0.311***	-0.084
LOWER MIDDLE CLASS	-0.271***	-0.074	-0.196*	-0.052	-0.180*	-0.046	-0.304***	-0.082
WORKING CLASS	-0.155	-0.042	0.038	0.010	0.062	0.016	-0.169*	-0.046
<b>e) Religion</b>								
CHRISTIAN	0.111**	0.030	0.071	0.019	0.061	0.016	0.082	0.022
MOSLIM	0.220***	0.060	0.283***	0.075	0.247***	0.063	0.218***	0.059
NO RELIGION	0.487**	0.132	0.406**	0.108	0.359*	0.092	0.429**	0.116
OTHER RELIGION	-0.221***	-0.060	-0.285***	-0.076	-0.295***	-0.076	-0.232***	-0.063
<b>f) Time</b>								
India 1995/1996	-0.263***	-0.072	-0.059	-0.016	-0.071*	-0.018	-0.215***	-0.058
<b>g) Further Variables</b>								
TRUST IN GOVERNMENT			0.037*	0.010				
TRUST IN LEGAL SYSTEM					0.018**	0.005		
PRIDE							0.119***	0.032
Observations	4328		3959		4080		4255	
Prob(LM-statistic)	0.000		0.000		0.000		0.000	

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, LOWER CLASS, HINDU, INDIA 1990. Significance levels: \* 0.05 < p < 0.10, \*\* 0.01 < p < 0.05, \*\*\* p < 0.01. Marginal effect = highest tax morale score (3).

#### 4.2. Japan

The country had to be reorganised after World War II. In 1949 the National Tax Agency (NTA) was established and a self-assessment system for the main taxes was introduced signalling trust in taxpayers (Okada, 2002). Usui (2002, p. 6) reports that in 1948 around 70 percent of the taxpayers who were required to fill out the tax return had made filling mistakes or had not filled the returns at all. The percentage of tax delinquency exceeded 40 percent. Okada (2002) points out that at present the tax agency makes great efforts to provide the public with tax information via television, radio, internet and newspapers, distributing pamphlets and booklets and organising every November a “Know-Your-Tax” (p. 2) with round-table discussions and essay competitions for students. It is interesting to see how taxpayers are treated by the tax administration. If taxpayers make obvious errors they are informed and the result of the examination is explained to them, to make them understand the errors. Such procedures indicate that the tax administration in Japan tries to be fair to the taxpayers. Institutions and procedures taxpayers perceive as fair and efficient might have a positive effect on tax morale. Interestingly, Frey and Feld (2002) found in an empirical analysis in Switzerland that tax evasion is reduced if the tax administration treats the taxpayers respectfully.

Okada (2002) also gives a broad survey on training programs for tax administrators in Japan. The central organisation is the National Tax College (NTC) including 12 branches nationwide, which work together with academics, among them many university professors giving lectures at the college. Such a structure shows that Japan, contrary to other Asian countries, makes efforts to have a highly trained tax administration. Furthermore, the salaries of the tax administrators according to Okada (2002) are slightly higher than for officials engaged in other government sections, who are paid at a level comparable to the private sector. This reduces the incentive for tax officials to demand bribes.

In a next step we are going to analyse Japan over time, integrating three years (1981, 1990 and 1995) in a time series analysis. However, as the number of observable variables is lower in the years 1981 and 1990, we start with an empirical analysis of the year 1995 before pooling the data set. Instead of trust in the government we use satisfaction with officials<sup>7</sup> as a proxy for trust in the *current politico-economic process*. This is especially interesting, as in the theoretical part a

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<sup>7</sup> How satisfied are you with the way the people now in national office are handling the country's affairs? Would you say you are very satisfied (4), fairly satisfied (3), fairly dissatisfied (2) or very dissatisfied (1) (scale 1 to 4).

strong interaction between tax officials and the taxpayers has emerged. This allows to check the robustness of the trust variable expanding it to other state agents.

In general, the intensive interaction between the tax administration and the taxpayers, based on trust, might be an essential determinant for tax compliance and for the very high tax morale in Japan. We will see in our estimations whether tax morale has been stable over time, controlling for additional variables. In line with the case study in India, we start with a cross-section analysis of the most recent available World Values Survey wave, before conducting a time series analysis.

*Table 8* presents the results. The coefficient for the variable SATISFACTION WITH NATIONAL OFFICERS is highly significant and the marginal effects show that an increase in the level of satisfaction by one unit raises the share of individuals stating that tax morale is never justifiable by 3 percentage points. The coefficient for the variable TRUST IN THE LEGAL SYSTEM is also significant with marginal effects of 4.6 percentage points. The coefficient for a pro democratic attitude is, in line with previous findings, also statistically significant. On the other hand, the coefficient of the variable PRIDE shows a positive sign but without being statistically significant.

In line with the results for India the age group 50-64 has the highest tax morale and self-employed have a significantly lower tax morale than full-time employees. In Japan, married people have a lower tax morale than singles and unemployed people have a lower tax morale than full-time employed. In line with the data evaluation in India we include individuals' religion denomination. As a great number of survey participants (66.2%) do not belong to a religion denomination we use them as the reference group. The number of people without a religion is followed by Buddhism (26.9%). *Table 8* indicates that Buddhists have a significantly higher tax morale than people without a religion. Also in line with findings in India, the coefficient for Christians (here together with Jews ) is not statistically significant.

Table 8

## Tax morale in Japan 1995

<i>Weighted Ordered Probit</i>	<i>Eq. 1</i>		<i>Eq. 2</i>		<i>Eq. 3</i>		<i>Eq. 4</i>	
<i>Variable</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>
<b>a) Demographic Factors</b>								
AGE 30-49	0.115	0.030	0.281**	0.075	0.208*	0.055	0.235*	0.060
AGE 50-64	0.403**	0.105	0.628***	0.167	0.550***	0.145	0.524***	0.135
AGE 65+	-0.066	-0.017	0.477	0.127	0.106	0.028	0.114	0.029
FEMALE	0.035	0.009	-0.011	-0.003	0.029	0.008	-0.020	-0.005
<b>b) Marital Status</b>								
MARRIED	-0.260**	-0.068	-0.268**	-0.071	-0.273***	-0.072	-0.385***	-0.099
DIVORCED	-0.076	-0.020	0.127	0.034	-0.063	-0.017	-0.172	-0.044
SEPARATED	6.343	1.649	6.162	1.639	6.274	1.651	6.228	1.601
WIDOWED	-0.442	-0.115	-0.044	-0.012	-0.424	-0.112	-0.637*	-0.164
<b>c) Employment Status</b>								
PART TIME EMPLOYED	0.081	0.021	-0.068	-0.018	0.032	0.009	0.083	0.021
SELFEMPLOYED	-0.371***	-0.097	-0.238**	-0.063	-0.359***	-0.095	-0.291**	-0.075
UNEMPLOYED	-0.938***	-0.244	-0.946***	-0.252	-0.910***	-0.240	-0.997***	-0.256
AT HOME	0.336**	0.087	0.322**	0.086	0.305**	0.080	0.373**	0.096
STUDENT	-0.289*	-0.075	0.024	0.006	-0.161	-0.042	-0.035	-0.009
RETIRED	-0.014	-0.004	-0.322	-0.086	-0.065	-0.017	-0.041	-0.011
OTHER	-0.439**	-0.114	-0.514**	-0.137	-0.463**	-0.122	-0.466**	-0.120
<b>d) Economic Situation</b>								
UPPER CLASS	-0.038	-0.010	0.074	0.020	-0.005	-0.001	-0.141	-0.036
UPPER MIDDLE CLASS	0.132	0.034	0.238	0.063	0.123	0.032	0.168	0.043
LOWER MIDDLE CLASS	0.119	0.031	0.252	0.067	0.115	0.030	0.183	0.047
WORKING CLASS	0.110	0.029	0.185	0.049	0.060	0.016	0.122	0.031
<b>e) Religion</b>								
BUDDHIST	0.279***	0.073	0.251**	0.067	0.284***	0.075	0.255**	0.066
OTHER RELIGION	-0.167	-0.044	-0.172	-0.046	-0.115	-0.030	-0.073	-0.019
CHRISTIAN/JEW	0.698	0.182	0.743	0.198	0.767	0.202	0.658	0.169
<b>f) Further Variables</b>								
TRUST IN THE LEGAL SYSTEM	0.178***	0.046						
SATISFACTION WITH NATIONAL OFFICERS			0.111***	0.030				
PRIDE					0.043	0.011		
PRO DEMOCRACY 1							0.176***	0.045
Observations	905		829		943		855	
Prob(LM-statistic)	0.000		0.000		0.000		0.000	

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, LOWER CLASS, and NO RELIGION. Significance levels: \* 0.05 < p < 0.10, \*\* 0.01 < p < 0.05, \*\*\* p < 0.01. Marginal effect = highest tax morale score (3).



*Table 9* presents the time series analysis, with dummy variables for the years 1990 and 1995 (1981 in the reference group). Looking at the development of tax morale over time we observe a decay with increasing marginal effects. However, compared to India the coefficients of the time dummy variables are not statistically significant. Thus, Japan has been able to maintain a certain level of tax morale.

Contrary to India the quality of the data does not allow to integrate the religion of the individuals in a time series analysis. Instead we use another proxy: as a religious variable we take the proxy frequency of church attendance (CHURCH ATTENDANCE<sup>8</sup>). This variable shows how much time individuals devote to religion. It is closer to the actual behaviour than, e.g., religious attitudes. Since church attendance involves ties to others, religious activities might support the norms of a larger community. Thus, we are going to check if people with a stronger religiosity have a higher tax morale. *Table 9* shows that a higher church attendance value leads to a higher tax morale. Furthermore, consistent with previous findings, the sign of the coefficient for the variable TRUST IN SYSTEM is positive, being highly significant with marginal effects of 4.7 percentage points. Integrating all three years makes the coefficient of the variable PRIDE highly significant. Looking at the variable AGE, we observe that all age groups from 30 to 65+ have a significantly higher tax morale than the reference group 16-29. Contrary to the findings for the year 1995, married people have a higher tax morale than singles. Furthermore, women have a higher tax morale than men and widowed persons a higher one than singles. Being self-employed or unemployed reduces tax morale compared to full-time employed individuals.

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<sup>8</sup> We have developed a religiosity variable from the following question in the WVS: Independently of whether you go to church or not, would you say you are a religious person (value 3), not a religious person (2), a convinced atheist (1).

Table 9

Tax morale in Japan over time (1981-1995)

<i>Weighted Ordered Probit</i>	<i>Eq. 10</i>		<i>Eq. 11</i>		<i>Eq. 12</i>		<i>Eq. 13</i>		<i>Eq. 14</i>	
<i>Dependent Variable: Tax Morale</i>										
<i>Independent Variable</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>	<i>Coeff.</i>	<i>Marg.</i>
<b>a) Demographic Factors</b>										
AGE 30-49	0.222***	0.058	0.215***	0.056	0.225***	0.059	0.212***	0.055	0.217***	0.056
AGE 50-64	0.318***	0.083	0.268***	0.069	0.275***	0.071	0.285***	0.074	0.295***	0.077
AGE 65+	0.310***	0.081	0.276***	0.071	0.254***	0.066	0.288***	0.075	0.328***	0.085
FEMALE	0.108**	0.028	0.110**	0.029	0.093**	0.024	0.099**	0.026	0.090*	0.023
<b>b) Marital Status</b>										
MARRIED	0.233***	0.061	0.219***	0.057	0.224***	0.058	0.223***	0.058	0.263***	0.068
DIVORCED	0.145	0.038	0.198	0.051	0.160	0.042	0.143	0.037	0.170	0.044
SEPARATED	-0.076	-0.020	-0.059	-0.015	-0.317	-0.082	-0.118	-0.031	-0.250	-0.065
WIDOWED	0.630***	0.164	0.751***	0.195	0.616***	0.160	0.617***	0.160	0.554***	0.144
<b>c) Employment Status</b>										
PART TIME EMPLOYED	-0.111	-0.029	-0.114	-0.030	-0.103	-0.027	-0.102	-0.027	-0.157*	-0.041
SELFEMPLOYED	-0.226***	-0.059	-0.234***	-0.061	-0.176***	-0.046	-0.224***	-0.058	-0.223***	-0.058
UNEMPLOYED	-0.401***	-0.104	-0.374***	-0.097	-0.333***	-0.087	-0.391***	-0.101	-0.332***	-0.086
AT HOME	0.045	0.012	0.059	0.015	0.092	0.024	0.050	0.013	0.069	0.018
STUDENT	0.156*	0.041	0.170*	0.044	0.139	0.036	0.155*	0.040	0.197*	0.051
RETIRED	0.079	0.020	0.066	0.017	0.137	0.036	0.062	0.016	0.038	0.010
OTHER	-0.355*	-0.092	-0.335*	-0.087	-0.346*	-0.090	-0.345*	-0.090	-0.394*	-0.102
<b>d) Economic Situation</b>										
INCOME									-0.013*	0.004
<b>e) Time</b>										
JAPAN 1990	-0.032	-0.008	0.017	0.005	-0.026	-0.007	-0.035	-0.009	-0.022	-0.006
JAPAN 1995	-0.058	-0.015	-0.057	-0.015	-0.058	-0.015	-0.066	-0.017	-0.067	-0.017
<b>e) Further Variables</b>										
TRUST IN SYSTEM			0.182***	0.047						
PRIDE					0.072***	0.019				
CHURCH ATTENDANCE							0.047***	0.012		
Observations	3065		2968		2921		3062		2662	
Prob(LM-statistic)	0.000		0.000		0.000		0.000		0.000	

Notes: Dependent variable: tax morale on a four point scale. In the reference group are AGE 16-29, MALE, SINGLE, FULL TIME EMPLOYED, LOWER CLASS, and JAPAN 1981. Significance levels: \* 0.05 < p < 0.10, \*\* 0.01 < p < 0.05, \*\*\* p < 0.01. Marginal effect = highest tax morale score (3).

## 5. Conclusions

In this paper we have analysed tax morale in Asian countries not only measuring the degree of tax morale but also trying to give an answer to what shapes tax morale. Using tax morale as a dependent variable is novel in the tax compliance literature. The paper furthermore contributes to the empirical findings, which in the past have mostly evaluated U.S. data sets. The empirical part has paid attention to get robust findings not only considering more than one particular time period in the countries India and Japan, but also pooling the Asian countries in a cross-section evaluation. To the author's knowledge there is no study that has empirically analysed tax morale in Asia. In a descriptive analysis we found that tax morale in the Philippines is very low. High tax morale values have been found for Japan, China and India. In general, the tax morale values are higher than for OECD countries, which might indicate that cultural differences have an effect on tax morale. However, such cross-country conclusions should be treated with caution. In the relatively homogenous region of Asia, we have analysed what shapes tax morale in a multiple regression. The multivariate analysis indicates that tax morale strongly varies among Asian countries. The lowest tax morale can be observed in the Philippines, in South Korea and in Taiwan.

The results indicate that trust in government and the legal system and the satisfaction with national officials have a significant positive effect on tax morale. Thus, trust seems to be a key determinant for maintaining and increasing tax morale and thus taxpayers' willingness to contribute to a public good. These findings imply a clear tax policy strategy: to induce trust at the constitutional level as well as at the current politico-economic level. In all the different cultural settings such a strategy has a positive effect on tax morale. If taxpayers trust the government, the legal system, and the national officers, they are more willing to pay taxes. Therefore, these actors must all act trustworthily. The results show that the relationship between them and the taxpayers (relational contract) can be maintained by positive actions, well functioning institutions, and by implementing a positive social capital atmosphere. Such a strategy will be rewarded with a higher tax morale. Thus, building trust might be an alternative strategy to the traditional ones (such as deterrence), as it guarantees that tax morale is not crowded out. The result that in Asia a higher pro democratic attitude leads to a higher tax morale points to the relevance of moving toward more (direct) democracy. A higher democracy level makes government activities more transparent, reducing the asymmetry of information between taxpayers and the government, which is rewarded with a higher tax morale. Thus, democratic institutions help enhance tax morale and civic virtue over time.

The results show also the empirical evidence of a further variable: national pride. Taking into account that this variable, to the author's knowledge, has been completely neglected in the tax compliance literature, the evidence shows that more attention should be paid to the effects of pride on tax morale and tax compliance. In almost all estimations greater pride leads to a significantly better tax morale.

However, this paper cannot give an answer on how tax morale changed after the Asian financial crisis in 1997, which was followed by institutional changes. This can be analysed as soon as further World Values Survey waves are available. Furthermore, it has to be mentioned that the World Values Survey until now covers only a limited amount of Asian countries, which reduces the possibility to compare cultural and institutional differences between Asian countries in a robust manner. Thus, the effects in the pooled regression cannot be representative for the whole continent, but it shows certain tendencies. In a next step it would be important to extend the number of observable countries including, e.g., Indonesia, Thailand or Singapore.

## APPENDIX

Table A1  
Tax morale in Europe 1989-1990

<b>Countries</b>	<i>Tax Evasion Is Never Justifiable (%)</i>	<i>Mean</i>
<i>Northern Countries</i>		
Austria	62.3	2.260
Belgium	33.9	1.276
Denmark	57.3	2.025
Finland	40.3	1.637
West-Germany	40.4	1.659
East-Germany	67.2	2.344
Great Britain	53.9	1.945
Iceland	56.0	2.000
Ireland	48.8	1.798
North-Ireland	69.7	2.248
Netherlands	42.9	1.644
Norway	43.1	1.642
Sweden	56.4	2.013
Switzerland	63.8	2.100
<b>Average</b>	<b>52.6</b>	<b>1.899</b>
<i>Romanic Countries</i>		
France	46.5	1.688
Italy	55.2	1.967
Portugal	39.9	1.483
Spain	58.4	2.021
<b>Average</b>	<b>50.0</b>	<b>1.790</b>
<b>Total Average</b>	<b>52.0</b>	<b>1.875</b>

Notes: Own calculations from the World Values Survey. Second column: percentage of individuals saying that tax evasion is “never justified”. Third column: mean of the degree of tax morale, scale from 0 to 3, where 3 means the highest tax morale.

Table A2

## Derivation of some variables

Variable	Derivation
TAX MORALE (dependent variable)	Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between. Cheating on tax if you have the chance (4=never and 1=always)
CLASS	<p>People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the:</p> <ol style="list-style-type: none"> <li>1. Upper class</li> <li>2. Upper middle class</li> <li>3. Lower middle class</li> <li>4. Working class</li> <li>5. Lower class</li> </ol>
SATISFACTION	All things considered, how satisfied are you with your life as a whole these days? (scale 1 = dissatisfied to 10=satisfied)
HAPPINESS	Taking all things together, would you say you are : very happy (4), quite happy (3), not very happy (2), not at all happy (1)
FINANCIAL SATISFACTION	How satisfied are you with the financial situation of your household? (scale 1 = dissatisfied to 10=satisfied)
PRIDE	<p>How proud are you to be .....? (substitute your own nationality for 'French')</p> <ol style="list-style-type: none"> <li>1. Not at all proud</li> <li>2. Not very proud</li> <li>3. Quite proud</li> <li>4. very proud</li> </ol>
TRUST IN GOVERNMENT	Could you tell me how much confidence you have in the government in your capital: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4= a great deal to 1=none at all)
TRUST IN LEGAL SYSTEM	Could you tell me how much confidence you have in the legal system: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (4= a great deal to 1=none at all)
SATISFACTION WITH NATIONAL OFFICERS	How satisfied are you with the way the people now in national office are handling the country's affairs? Would you say you are very satisfied (4), fairly satisfied (3), fairly dissatisfied (2) or very dissatisfied (1) (scale 1 to 4).
INCOME	<p>Here is a scale of incomes (1-10). We would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that come in. Just give the letter of the group your household falls into, before taxes and other deduction.</p> <p>Japan 1990</p> <ol style="list-style-type: none"> <li>1. Under 2 million yen per year</li> <li>2. 2.00-2.99 million yen</li> <li>3. 3.00-3.99 million yen</li> <li>4. 4.00-4.99 million yen</li> </ol>

	<ol style="list-style-type: none"> <li>5. 5.00-5.99 million yen</li> <li>6. 6.00-6.99 million yen</li> <li>7. 7.00-7.99 million yen</li> <li>8. 8.00-8.99 million yen</li> <li>9. 9.00-9.99 million yen</li> <li>10. More than 10 million yen per year</li> </ol> <p>Japan 1995</p> <ol style="list-style-type: none"> <li>1. Less than 3.00</li> <li>2. 3.00-4.00</li> <li>3. 4.00-5.00</li> <li>4. 5.00-6.00</li> <li>5. 6.00-7.00</li> <li>6. 7.00-8.00</li> <li>7. 8.00-9.00</li> <li>8. 9.00-1.000</li> <li>9. 10.00-12.00</li> <li>10. 12.00 or more</li> </ol>
PRO DEMOCRACY1	Would you say that having a democratic political system is very good (4), fairly good (3), fairly bad (2) or very bad (1) way of governing this country (scale 1 to 4).
PRO DEMOCRACY2	Democracy may have problems but it's better than any other form of government (4=strongly agree, 1=strongly disagree).

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