

# Determinants of Tax Morale in Spain and Turkey: An Empirical Analysis

Bilgin, Cevat

Cukurova University

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# A COMPARISON OF TAX MORAL BETWEEN SPAIN AND TURKEY

# Dr. Cevat Bilgin

Cukurova University, Faculty of Economics and Administrative Sciences

Department of Econometrics

cbilgin@cu.edu.tr

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#### **ABSTRACT**

Tax moral as an important issue in public finance is defined an intrinsic motivation of paying taxes, and it is closely related to tax compliance. Determinants of tax moral are needed to be investigated for a much comprehensive understanding of tax compliance. In this paper, determinants of tax moral in Turkey and Spain are searched based on World Values Survey data. Firstly, descriptive statistics of the variables used the models are provided. Tax moral is an ordered categorical dependent variable. Therefore, ordered probit models are estimated separately for Turkey and Spain to derive the relations between tax moral and relevant variables in these countries. Marginal effects are computed since the coefficients of the models cannot be interpreted because of the nonlinearity of the estimated models. Marginal effect indicates the change in the probality of specific tax moral category when an independent variable increases by one unit. In practice, only marginal effects related to the top level of tax moral category are being evaluated. Demographic factors (gender, age, marital status), employing status, economic status (income level, finance satisfaction) and social capital variables (religiosity, confidence in government, confidence in justice system, confidence in parliament, confidence in civil services, education levels) are the independent variables that are used in the models. The effects of these variables on tax moral are searched in this paper. The findings from the estimated model suggest that social capital variables and some of the demographic factors have important effects on tax moral in Turkey. Confidence variables have positive effect on tax moral; if taxpayers feel confidence in political entities they would be willing to pay taxes. Religion and national pride affect tax moral positively. On the other hand, things are somewhat different in Spain; generally speaking social capital variables do not have effects on tax moral, specifically confidence variables are found to be statistically insignificant. Age, education level and income level have significant effects on tax moral in Spain; level of tax moral increases as people gets older, the most educated individuals have higher tax moral than the least educated ones have, there is inverse relation between tax moral and income level, those who have high level of income has lower tax moral.

#### Introduction

Tax evasion is an important issue in almost all countries. While some taxpayers seek the ways of evasion, the others are not eager to evade. Tax moral is, to large extent, to do with the physiological background of these behaviors. Arguably, tax moral is concerned with why people do not evade. There has been much in common between tax moral and tax compliance. Tax compliance is an observable action, that is most people pay their taxes. Tax compliance is not only a function of tax ratios and probability of detection, but also a function of an individual's willingness to comply with and to evade. As Torgler (2007) pointed out, level of tax compliance is relatively high when tax moral is high; therefore tax moral is needed for providing on an account of the puzzle of tax compliance.

Determinants of tax moral are needed to be investigated for a much comprehensive understanding of tax compliance. Nevertheless, there is a limited work on the issue in the existing literature. (Torgler, 2004, 239). As Feld and Frey (2002, 88) suggest "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" Indeed, a few scholars conducted researches on tax moral in details.

By definition, tax moral is an intrinsic motivation of paying taxes. (Torgler, 2007, 4). Morality could be defined as an individual's internalization of such concept and legal rules to perform his or her social duties in a proper way. Hence, individuals' general attitude (or tax mentality) towards taxation and specific liabilities imposed by the related legislation is substantial to the debate. From this perspective, tax moral is largely framed in the general concept of tax mentality. (Schmölders, 1976, 107).

For Torgler (2004), tax moral measures taxpayers' attitudes while tax evasion measures taxpayers' behaviors. In other words, tax moral is not an outcome variable, like tax evasion. Tax moral can, hence, be defined as a moral obligation of paying taxes; it is, in turn a belief of contributing to society by paying taxes.

#### **Determinants of Tax Moral**

Tax compliance and tax moral are affected by social and physiologic factors. Therefore increasing the level of tax moral and tax compliance depends heavily on these factors. Legal infrastructure and state's enforcement power, to some extent, raise the level of tax compliance. Social and physiological factors are still decisive factors to change tax moral. For instance, social capital takes an important role part in this part. In other words, social capital evokes individuals' economic and cultural capitals; perceptions on income distribution, on fairness in the society, trust on others and institutions, confidence in government and government policies are some of examples of social capital variables.

Socio-demographic variables affect tax moral substantially. The first of them is the variable of age. Relatively older people are more vulnerable to threats of sanctions, suggested by the relevant studies. As Torgler (2007) points out, the reason is that people are attaining new social characteristics, such as property, status, dependency on others' behaviors as they get older. Therefore the potential costs of penal sanctions for older people seem to be relatively greater. In consequence, there might be a significant relation between tax moral and age. Furthermore, socio-physiological studies reveal that females are more compliant and less selfish than males. Nevertheless, it should be noted that the traditional role of females is substantially different from the role of females in a modern society. Moreover, females have more risk averse behaviors than males have. Due to these reasons, tax moral might be higher for females than males. Marital status is another individualistic variable that might affect tax moral. The more social ties the individual has, the more restrictions imposed on her or his behavior. Thus married individuals are more prone to exhibit legal behaviors and hey might have higher level of tax moral.

For Torgler (2007), employment status is another important factor for tax moral. It might be argued that self employed persons have lower tax moral than full time and part time employees. This might explained by the fact that self employed persons have more opportunities to evade tax. The relation between education level and tax moral is not clear. According to Torgler ve Schneider (2006), educated taxpayers are thought to have more information about tax regulations and fiscal relations. Besides, they might be aware of civil services provided by state, and so they might have high level of tax compliance. On the other hand, they seemingly have knowledge of public corruption and thereby they might have

critical perception on how tax revenues are used by government. Moreover, they know a lot about the opportunities to evade tax. As a result of these factors, it is assumed that they have a low level of tax moral. Consequently, there have been different kinds of relations between education level and tax moral. The relation between level of income and tax moral is a bit complicated and thus depends on some conditions. When people are not satisfied with their financial situation, they might tend to be evader. If a taxpayer feels a gap between his current and desired financial situation, he would be unwilling to pay taxes. Moreover, they would be more reluctant to pay taxes if they feel they have less when they compare their income and their wealth with others'. On the contrary, Duch, Palmer and Anderson (2000) claim that people who have low level of income are willing to pay taxes since they think they have benefit form public goods and services more than people having high level of income have benefit from. Wealthy people, on the other hand, would be less willingly pay taxes by the perception of having benefited from public goods and services less than others.

Taxpayers' confidences in parliament, government, justice system, tax administration have a valuable relation with tax moral. If the levels of these confidences are high enough, individuals' loyalty to public administration would increase and so they would be more willingly to pay taxes. In most of the empirical studies, these variables turn out to have significant relation with tax moral. Montero and Torcal, (2006) defines political disaffection as the subjective feeling of powerlessness, cynicism, lack of confidence in the political process, in politicians and in democratic institutions. In this context, political disaffection is expected to have negative effect on tax moral. In addition, importance of politics and perception on democracy are important factors for explaining tax moral. People seem to be complying more in democratic countries, as they have the ability to affect tax and expenditure policies in these countries. National pride is another interesting factor that should be taken into account on the analyses about tax moral. When people are happy with their national identity, they would be more loyal to their countries, and therefore tax moral would be high. Religiosity is also affecting tax moral; indeed, positive relations between tax moral and religiosity have been found in some researches. As Frank (1996) points out; tax compliance is more common among the people whose perception depends on moral and ethic codes. Religious people are so interested in what is right and what is wrong; therefore they believe that people have some duties to be performed: paying taxes is one of these duties.

# **Previous Empirical Literature**

Studies on tax moral can be evaluated in two categories. The studies in the first group have focused on only one country; they have analyzed regional discrepancies and changes in time. (Torgler (2005), Martinez-Vazquez adn Torgler (2009), Prieto, J., Sanzo, M. J. and Suarez-Pandiello, J. (2006)) For the second group of studies, studies conducted in a comprehensive perspective with more countries included (Torgler and Schneider (2006), Alm and Torgler (2006), Cummings, Martinez-Vazquez, McKee and Torgler (2006)). In these articles two or three countries were taken into account. Torgler (2006), Alm and Torgler (2006) have used wider set of data with many countries.

All studies on tax moral and its determinants used the international databases such as International Social Survey Programme (ISSP), World Values Survey (WVS), European Values Survey (EVS) and African Opinion Survey (Afrobarometer).

Alm and Torgler (2005) compared tax moral levels of USA with Spain by using 1990 and 1995 WVS data that concluded that tax moral level in USA is higher. An explanation of their result might be that "compliance" as a social norm is better in USA when compared in Spain. A further comparative study conducted by Alm ve Torgler (2006) analyzed tax moral in 14 European countries and USA by using WVS data in 1990-1993; they still found that the highest tax moral is in USA. In both of these articles, weighted ordered probit model was estimated to get the results.

Torgler and Schneider (2006) have a similar research analyzing Spain, Switzerland and Belgium, by using the 1995-1997 WVS and 1999-2000 EVS data. They estimated weighted ordered probit model in which the variables of gender, age, marital status, education, employment status, social class, income level, attendance to church, direct democracy, national pride, confidence in political institutions and government, participation in democracy, income tax rate, fine rate and probality of detection are used as independent variables. The regional discrepancies in Spain and Switzerland affect tax moral, females have higher tax moral than males. They concluded that confidence in justice system, confidence in government, confidence in parliament, national pride, attitudes supporting democracy have positive effect on tax moral.

Torgler (2006) looked at the determinants of tax moral in 32 (including Spain countries by using the WVS data of 1995-1997. The included variables into the weighted ordered probit model are gender, age, marital status, education, employment status, social class, financial situation, risk averness, religiosity, corruption and credibility. The author found out that religiosity in particular for the Catholics, Hindus, and Buddhists increases tax moral. Risk averness and financial satisfaction positively affect tax moral. Tax moral is low for the high-class, and it is high for the retired, housewives, and the part-time employed. In addition, females and married people have high tax moral. On the contrary, there is a negative relation between education and tax moral; perception on level corruption decreases tax moral.

Similar researches were conducted by Cummings et al (2006) analyzing Botswana an South Africa by using Afronarometer data of 1999 and 2000; Gokbunar, Selim ve Yanıkkaya (2007) on Turkey by using EVS data of 2002; Martínez-Vázquez ve Torgler (2009) on Spain by using WVS and EVS data of 1981,1990,1995 and 1999-2000. These scholars provided similar results about the determinants of tax moral; tax moral level heavily depends on sociodemographic and social capital factors.

Kaynar-Bilgin (2011) searched for the determinants of tax moral in Turkey by using the WVS data of 2005-2008. The included variables for probit model are gender, age, marital status, education, employment status, income level, financial satisfaction, religiosity, national pride, confidence in government, justice system and parliament, importance of politics and religiosity. The author found out that religiosity, importance of religiosity, importance of politics, national pride, confidence in government positively affect tax moral. Tax moral is low for the unemployed.

#### The Model

The methods used by the empirical studies are fairly similar since tax moral is a categorical variable. In general, ordered probit models were preferred to use in determining the relations and the interactions between tax moral and personal, socio-economic factors. Ordered probit models are very useful to analyze dependent variable of tax moral containing ordering information. Therefore, the same estimation method is used in this paper.

The magnitudes of estimation are not interpreted, only the signs are analyzed because equation in ordered probit model is in the nonlinear form. Thus marginal effects should be derived to determine the effect of each variable on tax moral. Marginal effect indicates the probality of specific tax moral category when an independent variable increases by one unit. In practice, only marginal effects related to the top level of tax moral category have been evaluated.

For this paper, WVS database is used to analyze the level of tax moral and its determinants in Turkey and Spain. The fifth wave of the WVS is used for this aim.

WVS is a survey which researched socio-cultural and political changes in a global base. The fourth and fifth waves have more than 50 countries representing approximately 80 % of the world population. In this survey, individuals are asked to respond the following question to evaluate level of tax moral;

Please tell me for the following statement whether you think it can always be justified, never be justified, or something in between: ... 'Cheating on tax if you have the chance'. The question leads to a ten-scale index of tax morale with the two extreme points 'never justified' and 'always justified'.

In the ten-scale index "1" refers to "never justified" and "10" refers to "always justified". The responds close to "1" can be thought as respectively high level of tax moral while the ones close to "10" indicate low level of tax moral. The ten-scale index of tax moral is transformed into four-scale index (0,1,2,3) by the same method used in the related studies. In the transformed scale "0" implies "always justified" and "3" implies "never justified" The responds in the interval 4-10 in the original scale become "0" in the new scale since they imply that people justify tax cheating anyhow. Besides "never justified" option "1" in the original scale now is "3"

# **Determinants of Tax Moral in Spain:**

First of all, the descriptive statistics of all variables used in the model are derived. Table 1 shows these statistics. The rates of persons having specific properties in the whole population are as follows; female 50 %, married 58 %, age interval of 30-49 36 %, age interval of 50-98 40 %, age interval of 16-29 24 %. Education level 2 is 20 %, education level 3 is 16 %, education level of 4 is 8 %. Of the respondents 3.9 % is the part time employed, 7.7 % is the self employed, 19 % is the retired, 17 % is housewife, 7 % is student, 4.6 % is unemployed. When it comes to the variable of tax moral, 63 % of the individuals have the highest tax moral level. These individuals respond as cheating on tax is never justifiable. The rates of the levels 3 and 2 are 10 % and 6 % respectively. The rate of people saying cheating is always justifiable is 19 %. The rates of income levels are 34% for level 1, 43% for level 2, 21% for level 3, 3% for level 4. The rates of financial satisfaction for the level 1, 2, 3 and 4 are 10%, 30%, 43% and 17% respectively. The variables of religiosity and national pride give the relatively high values as 44% and 92%. Besides 14% of them thinks that religion is important. The ratio of respondents considering politics is an important issue is relatively low, 7.7%. Other figures are as follow; confidence in justice system 54%, confidence in government 44% and confidence in parliament 49% and confidence in civil services %39. Among the social capital variables, national pride has the highest figure; 92 % of the respondents proud of their national identity. Confidences in entities of the political system are relatively high; from 39% to 54%.

Table 2 gives the results of the estimated ordered probit model for Spain. In this estimation, the dependent variable is tax moral variable as defined earlier. The independent variables are social capital variables, demographic variables, variables related to employment status, and economic situation variables. The second column indicates the estimated coefficient for each independent variable. The coefficients cannot be directly interpreted since the model is nonlinear. Yet the signs of each coefficient can be evaluated. In the third and fourth column, there are associated standard errors and z-statistics for each variable respectively. The statistical significances of the variables are determined by using the z-statistics. In the last column, the marginal effects of the independent variables on the dependent variable are given. These effects are the ones related to the top level of tax moral category (Y = 3). Moreover, the specification test statistics are given at the end. The results points out that the model is statistically significant.

**Table 1: Descriptive Statistics of the Variables for Spain** 

Vowiebles	Maan	Standard	Minimum	Marrimanna
Variables	Mean	Deviation	Minimum	Maximum
Tax Morale (level 1)	0.195833		0	1
Tax Morale (level 2)	0.064416		0	1
Tax Morale (level 3)	0.102500		0	1
Tax Morale (level 4)	0.637500		0	1
1) Social Capital	•		1	
Importance of Politics	0.077500	0.267495	0	1
Importance of Religion	0.147500	0.354751	0	1
Confidence in Justice System	0.540000	0.498605	0	1
Confidence in Government	0.440833	0.496694	0	1
Confidence in Parliament	0.491667	0.500139	0	1
Confidence in Civil Services	0.390000	0.487953	0	1
Religiosity	0.440833	0.496694	0	1
National Pride	0.920833	0.270111	0	1
Education (level 2)	0.206667	0.405083	0	1
Education (level 3)	0.160833	0.367530	0	1
Education (level 4)	0.076666	0.266173	0	1
2)Demographic Factors	1		I	
Sex (Female)	0.500000	0.500208	0	1
30-49 Age Interval	0.362500	0.480923	0	1
50-98 Age Interval	0.408333	0.491730	0	1
Marital Status (Married)	0.585000	0.492927	0	1
3) Employment Status	•		1	
Part time	0.039166	0.194072	0	1
Self employed	0.077500	0.267495	0	1
Retired	0.195833	0.397006	0	1
Housewife	0.170833	0.376520	0	1
Student	0.074166	0.262151	0	1
Unemployed	0.046666	0.211012	0	1
Private	0.565833	0.495854	0	1
4) Economic Status	•		1	
Income Level (level 2)	0.431667	0.495515	0	1
Income Level (level 3)	0.211667	0.408660	0	1
Income Level (level 4)	0.029166	0.168344	0	1
Financial Satisfaction (level 2)	0.300833	0.458812	0	1
Financial Satisfaction (level 3)	0.430833	0.495399	0	1
Financial Satisfaction (level 4)	0.170000	0.375789	0	1

**Table 2: Ordered Probit Model Estimation for Spain** 

Table 2: Ordered Probit Model Estimation for Spain				
Independent Variables	Coefficient	Standard	z-value	Marginal
	Coefficient	Error		Effects
1) Social Capital				
Importance of Politics	-0.193061	0.135398	-1.426	-0.0739
Importance of Religion	0.176889	0.115744	1.528	0.0644
Confidence in Justice System	0.058499	0.079132	0.739	0.0219
Confidence in Government	-0.051011	0.084690	-0.602	-0.0191
Confidence in Parliament	-0.020400	0.087950	-0.232	-0.0076
Confidence in Civil Services	0.076616	0.081206	0.943	0.0285
Religiosity	0.135098*	0.080430	1.680	0.0503
National Pride	0.379701***	0.133833	2.837	0.1475
Education (level 2)	0.060485	0.104411	0.579	0.0224
Education (level 3)	0.150077	0.120894	1.241	0.0549
Education (level 4)	0.552271***	0.158983	3.474	0.1828
2) Demographic Factors				
Female	-0.088738	0.082358	-1.077	-0.0331
30-49 Age Interval	0.349768***	0.112433	3.111	0.1276
50-98 Age Interval	0.294453**	0.133045	2.213	0.1085
Married	0.039771	0.087424	0.455	0.0149
3) Employment Status				
Part time	0.151088	0.194842	0.775	0.0548
Self employed	-0.229823	0.156199	-1.471	-0.0883
Retired	0.137709	0.131056	1.051	0.0506
Housewife	0.181493	0.138894	1.307	0.0661
Student	0.418436**	0.175769	2.381	0.1434
Unemployed	0.246105	0.190259	1.294	0.0875
Private Sector	0.111949	0.091400	1.225	0.0419
4) Economic Status				
Income Level (level 2)	0.007230	0.090271	0.080	0.0027
Income Level (level 3)	-0.043904	0.111705	-0.393	-0.0165
Income Level (level 4)	-0.399906*	0.231603	-1.727	-0.1561
Financial Satisfaction (level 2)	-0.171399	0.141282	-1.213	-0.0647
Financial Satisfaction (level 3)	-0.191946	0.140196	-1.369	-0.0719
Financial Satisfaction (level 4)	-0.328749**	0.157227	-2.091	-0.1264
Number of Observations	1200			
Prob (ChiSqd>value)	0.000000			
Information Criterion (AIC)	2.02991			
Pseudo R <sup>2</sup>	0.026466			

Notes: Dependent variable: tax morale on a four-point scale (0 to 3). In the reference group are age 16–29, man, unmarried, full time employed, public sector, education (level 1), income level (level 1), financial satisfaction (level 1)

Most of the social capital variables appear to be statistically insignificant; importance of politics, importance of religion, confidence in justice system, confidence in government, confidence in parliament, and confidence in civil services do not have effect on tax moral in this sample level. The estimated coefficients of the variables of national pride and education level 4 are statistically significant at 1% level while the one of the religiosity is significant at 5% level; besides they are all positive. These findings imply that national pride and religiosity have positive effect on tax moral. Moreover, the most educated people have higher tax moral. The estimated coefficient of the highest level of education has the biggest marginal effect among the significant social capital variables; it is 0.18

According to the estimated model, gender and marital status seem to have nothing to do with tax moral. Age interval coefficients, on the other hand, are fairly significant and their signs are positive implying that tax moral is higher for elderly persons. The marginal effect belonging to the variable 30-49 age interval is 0.12; being in the highest level of education category increases the probability of being at the top level of tax moral by 0.12 units comparing to the lowest level of education. When it comes to the employment status, the results are not remarkable; all of the variables in this category except student are not significant. Students have higher tax moral than full time employers have.

Interestingly, respondents who are at the top level of income are turned out to have lower tax moral than the lowest group has. In addition to this, financial satisfaction variable has a negative significant effect on tax moral. The highest level of this category has a statistically significant estimated coefficient.

### **Determinants of Tax Moral in Turkey:**

Table 3 shows descriptive statistics of the variables. Of the respondents 49% is female, 66% is married, 41% is in 30-49 age interval, 17% is in 50-98 age interval and 42% is in 16-29 age interval. Rates of education level 1, 2, 3 and 4 are 52%, 10%, 27% and 11%. The figures about employment status: full time employed 30%, part time employed 2%, self employed 13%, retired 9%, student 8% and unemployed 6%. Religiosity and national pride figures are relatively high; 805 and 89%. Confidence in the entities of political system is lower when comparing them in Spain. Income level rates indicate that the biggest part of the people is in the lowest income level; 64% of them are in level 1. It is followed by level 2, level 3 and level 4; 18%, 8% and 10%. 74% of the respondents think religion is important,

**Table 3: Descriptive Statistics of the Variables for Turkey** 

Variables		Standard	Minimum	Maximum
	Mean	Deviation		
Tax Morale (level 1)	0.034201		0	1
Tax Morale (level 2)	0.037175		0	1
Tax Morale (level 3)	0.119703		0	1
Tax Morale (level 4)	0.809822		0	1
1) Social Capital	•		-	
Importance of Politics	0.131599	0.338180	0	1
Importance of Religion	0.748699	0.433923	0	1
Confidence in Justice System	0.353903	0.478358	0	1
Confidence in Government	0.260967	0.439325	0	1
Confidence in Parliament	0.203717	0.402911	0	1
Confidence in Civil Services	0.099628	0.299615	0	1
Religiosity	0.805204	0.396191	0	1
National Pride	0.899628	0.300607	0	1
Education (level 2)	0.105576	0.307409	0	1
Education (level 3)	0.278810	0.448581	0	1
Education (level 4)	0.111524	0.314897	0	1
2)Demographic Factors				
Sex (Female)	0.498141	0.500183	0	1
30-49 Age Interval	0.418587	0.493511	0	1
50-98 Age Interval	0.178439	0.383024	0	1
Marital Status (Married)	0.662454	0.473049	0	1
3) Employment Status	•			
Part time	0.027509	0.163623	0	1
Self employed	0.133829	0.340595	0	1
Retired	0.094423	0.292526	0	1
Housewife	0.343494	0.475051	0	1
Student	0.088475	0.284091	0	1
Unemployed	0.060966	0.239358	0	1
Private	0.446840	0.497351	0	1
4) Economic Status				
Income Level (level 2)	0.180669	0.384887	0	1
Income Level (level 3)	0.088475	0.284091	0	1
Income Level (level 4)	0.101115	0.301593	0	1
Financial Satisfaction (level 2)	0.231227	0.421774	0	1
Financial Satisfaction (level 3)	0.406691	0.491399	0	1
Financial Satisfaction (level 4)	0.228996	0.420343	0	1

**Table 4: Ordered Probit Model Estimation for Turkey** 

Table 4: Ordered Probli Model Estimation for Turkey				
Independent Variables	Coefficient	Standard Error	z-value	Marginal Effects
1) Social Capital				
Importance of Politics	0.369703***	0.133793	2.763	0.0815
Importance of Religion	0.435832***	0.097435	4.473	0.1213
Confidence in Justice System	0.176320*	0.105660	1.669	0.0435
Confidence in Government	0.296404**	0.125291	2.366	0.0699
Confidence in Parliament	-0.022028	0.134359	-0.164	-0.0056
Confidence in Civil Services	-0.059884	0.161653	-0.370	-0.0155
Religiosity	0.299047***	0.105325	2.839	0.0821
National Pride	0.447546***	0.125907	3.555	0.1318
Education (level 2)	0.040732	0.142562	0.286	0.0101
Education (level 3)	0.068301	0.118135	0.578	0.0170
Education (level 4)	0.271146	0.167764	1.616	0.0617
2) Demographic Factors				
Female	0.045841	0.123619	0.371	0.0116
30-49 Age Interval	-0.041882	0.106269	-0.394	-0.0106
50-98 Age Interval	0.038892	0.157216	0.247	0.0097
Married	0.114222	0.110406	1.035	0.0294
3) Employment Status				
Part time	-0.124043	0.242470	-0.512	-0.0331
Self employed	-0.087781	0.142623	-0.615	-0.0229
Retired	0.040662	0.190237	0.214	0.0101
Housewife	-0.121057	0.166322	-0.728	-0.0312
Student	0.123917	0.182094	0.681	0.0298
Unemployed	-0.417013**	0.171534	-2.431	-0.1232
Private Sector	0.186067*	0.109411	1.701	0.0466
4) Economic Status				
Income Level (level 2)	-0.163385	0.108557	-1.505	-0.0434
Income Level (level 3)	-0.076305	0.150657	-0.506	-0.0199
Income Level (level 4)	0.083103	0.158473	0.524	0.0204
Financial Satisfaction (level 2)	0.131735	0.140117	0.940	0.0322
Financial Satisfaction (level 3)	-0.002190	0.131878	-0.017	-0.0006
Financial Satisfaction (level 4)	0.008572	0.143839	0.060	0.0022
Number of Observations	1345			
Prob (ChiSqd>value)	0.0000000			
Information Criterion (AIC)	1.27499			
Pseudo R <sup>2</sup>	0.073878			

Notes: Dependent variable: tax morale on a four-point scale (0 to 3). In the reference group are age 16–29, man, unmarried, full time employed, public sector, education (level 1), income level (level 1), financial satisfaction (level 1)

13% percent of them think politics is important in their life. About tax moral level, level 4 gives the highest rate which is 80%. That is 80% of respondents find that cheating on taxes is never justifiable. Besides, only 3% of them says that it is always justifiable.

The ordered probit model is indicated by Table 4. The dependent variable is tax moral level, the independent ones are the variables related to social capital, demographic factors, employment status and economic situation. The model is statistically significant model since the probability value of chi-square is much less 0.01.

The important part of the social capital variables appear to be statistically significant. Importance of politics, importance of religion, religiosity, national pride are all statistically significant at the 1% level. The estimated coefficients for the variables of confidence in government and confidence in justice system are significant at 5% and 10% levels.

The marginal effect of the importance of politics on tax moral is 0.08. Considering politics as an important factor increases the probability of being at the top level of tax moral by 0.08 units. In other words people interested in politics have higher tax moral. Politics is a kind of tool to take part in the political structure in democratic countries. The existence of democratic mechanism increases the political interest. Taxation is also evaluated in this political context. The importance of politics has a positive effect on tax moral.

Marginal effect of confidence in justice system on tax moral is 0.04 and it is positive. People trusting on justice system have high tax moral. The same applies to the confidence in government. The more confidence in government implies the higher tax moral. Taxpayers' confidence in government means that they approve government's taxation policies and its related decisions since governments are the entities formulating tax policies. The marginal effects of the importance of religion and the religiosity are 0.12 and 0.08 respectively. In this case, it might be said that religion affect tax moral positively. As an explanation of this, it can be said that religion extensively covers the beliefs about the right behavior. According to Hull (2000) religion has the ability to prevent illegal behaviors since it legitimizes and reinforces social values. Paying taxes is seen as a social norm and it is motivated by religion. The marginal effect of national pride is 0.13, so it is positive and among the biggest marginal effects. It is clear that national pride supports tax moral. When people are satisfied with their national identities, they are usually devoted to their states and governments.

All of the demographic factors are not statistically significant. Among the employment status factors, only unemployed and private sector have effect on tax moral. While the unemployed persons have less tax moral, private sector employers have higher tax moral than public sector employers. When it comes to the category of economic status, none of these factors can be evaluated as the determinants of tax moral since the related estimations are not statistically significant at any level.

The estimated model points out that the most effective factors on tax moral in Turkey are the factors of social capital. When compared with the individualistic variables, the variables related to social capital have stronger relations with tax moral. The feeling of confidence, religiosity and national pride seem to be very important to understand the concept of tax moral in Turkey. In other words what persons feel about themselves and how much they trust on social entities are strongly related the level of tax moral.

Comparing these findings with the ones derived from Spain's model indicates that the determinants of tax moral in two countries are not so similar. Contrary to Turkey case, confidences in political entities are not explaining the tax moral in Spain. Religion does not have an important role as in Turkey. Under the social capital title, only national pride an education level 4 have the real meaning on tax moral. Tax moral in Spain is more related to the individualistic factors while it is a social confidence phenomenon in Turkey. Age, education, income level and financial satisfaction are significant in Spain.

#### Conclusion

The determinants of tax moral were analyzed by estimating ordered probit model for Spain and Turkey. For this aim, we estimated two models for each country. In the first model for Spain, the variables of religiosity, national pride, education level 4, 30-49 age interval, 50-98 age interval, student, income level 4, financial satisfaction level 4 found to be statistically significant at different significant levels. That is, all these variables have effects on tax moral in different degrees. In Spain, mostly individualistic factors are explaining tax moral. As social capital variables, only national pride and one part of education level have strong effect on tax moral. Religiosity is significant at only 10% level.

The second model for Turkey indicates that the variables of the importance of religion, importance of politics, confidence in justice system, confidence in government, religiosity, national pride, unemployed, private sector are statistically significant. The perception on religion and politics, confidence in justice system, confidence in government, being religious, having national pride, working for the private sector have positive effects on tax moral. The unemployed has lower tax moral.

The first and second models give different results that suggest the different structures of tax morals in Spain and Turkey. The estimations based on the WVS data for Spain and Turkey indicates that tax moral in Turkey can be seen as a social phenomenon; in other words, social capital variables have positive effects on tax moral. Personal factors such as gender, age, being self employed or retired, income level and financial satisfaction seem to be irrelevant with tax moral. On the contrary, age, income level, financial satisfaction and education level seem to have effects on tax moral in Spain. It can be said that tax moral in Spain is highly related to individualistic conditions when compared tax moral in Turkey.

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# **APPENDIX**

# **Definition of Variables**

Variable	Definition		
TAX MORAL	Please tell me for the following statement whether you think it can always be justified, never be justified, or something in between: 'Cheating on tax if you have the chance'		
	(3=never justified 0=always justified)		
	0 4,5,6,7,8,9,10		
	1 3		
	2 2		
	3 1		
GENDER	0 male		
	1 female		
AGE	How old are you?		
	1 18-29		
	2 30-49		
	3 50-98		
MARITAL STATUS	0 Unmarried (living together as married, divorced,		
	separated, widowed, single/never married)		
	1 Married		
EDUCATION	level 1 (no formal; inadequately completed elementary;		
	completed elementary; incomplete secondary)		
	level 2 (intermediate vocational; intermediate general)		
	level 3 (maturity level; higher education)		
	level 4 (university with degree)		

# **EMPLOYMENT STATUS**

Are you employed now or not?

- 1 full time
- 2 part time
- 3 Self employed i
- 4 retired
- 5 housewife
- 6 student
- 7 unemployed

#### IMPORTANCE OF RELIGION

How important is religion in your life?

- 0 not at all important; not very important
- 1 very important; rather important

# **RELIGIOSITY**

Independently whether you go to church or not, would

you say you are?

- 0 not a religious; a convinced atheist, other
- 1 religious

# IMPORTANCE OF POLITICS

How important is politics in your life?

- 0 not at all important; not very important
- 1 very important; rather important

#### NATIONAL PRIDE

How proud are you to be (nationality)?

- 0 Not at all; not very
- 1 Very; quite

# CONFIDENCE IN JUSTICE

**SYSTEM** 

How much confidence do you have in justice system?

- 0 none at all; not very much; quite a lot
- 1 a great deal

#### **CONFIDENCE IN**

**GOVERNMENT** 

How much confidence do you have in government?

0 none at all; not very much; quite a lot

1 a great deal

CONFIDENCE IN PARLIAMENT How much confidence do you have in parliament?

0 none at all; not very much; quite a lot

1 a great deal

**CONFIDENCE IN CIVIL** 

SERVICES How much confidence do you have in civil services?

0 none at all; not very much; quite a lot

1 a great deal

SCALE OF INCOMES Scale of incomes?

Level 1 (lower step; second step, third step)

Level 2 (fourth; fifth)

Level 3 (sixth; seven)

Level 4 (nineth; tenth)

FINANCIAL SATISFACTION How satisfied are you with the financial situation of

yous household?

0 1,2,3

1 4,5

2 6,7

3 8,9,10

INSTITUTION OF OCCUPATION 0 Public Sector

1 Private Sector