Analyzing Determinants of Tax Morale Based on Social Psychology Theory: Case Study of Iran

MirHadi Hosseini Kondelaji*[1],

Majid Sameti[2],

Hadi Amiri[3],

Rozita Moayedfar[4]

Abstract

While economic deterrence models are fully based on maximizing economic utility; social psychology models explain human behavior by examining the underlying attitudes, norms and beliefs. Tax morale is defined as the intrinsic motivation to pay taxes. However, determinants of tax morale need to be investigated for a more comprehensive understanding of tax morale. In this paper we analyze the most important determinants of tax morale in Iran using data from World Values Surveys (WVS). Determinants of tax morale are categorized into four main groups: social capital, conditional cooperation, demographic factors and economic situation of the respondents. Estimating ordered probit model, we find that conditional cooperation and economic situation have the most important effects on tax morality. However, some of the social capital variables like importance of politics and religion and demographic factors like gender and marital status don't have significant effect on tax morale in Iran.
Keywords: Tax Morale, Tax Evasion, Ordered Probit Model, World Value Survey (WVS).
JEL Classification: C83, H26, H29, K34.

1. Introduction

Tax compliance is an important subject in public finance and almost all countries. It is not only concerned with tax ratios, probability of detection and punishments, but also is a function of an individual's

1. Department of Economics, University of Isfahan, Isfahan, Iran (Corresponding Author: mhadi.hoseini@gmail.com).
2. Associate Professor, Department of Economics, University of Isfahan, Isfahan, Iran.
3. Assistant Professor, Department of Economics, University of Isfahan, Isfahan, Iran.
4. Assistant Professor, Department of Economics, University of Isfahan, Isfahan, Iran.

willingness to comply with and to evade (Bilgin, 2014). Tax morale can explain why some people do not evade. According to Torgler (2007) when tax morale is high, level of tax compliance is relatively high; therefore tax morale is very important for tax compliance and plays a significant role in determining the levels of shadow economy; so it is necessary to investigate the determinants of tax morale. On the other hand, expanding from deterrence theory directed at "why people evade paying taxes" into a new perspective focus of "why so many individuals have high tax compliance" (Elffers, 1991), "tax morale" is supposed to be very important variable to broaden the understanding of tax compliance behavior. In general, tax morale is defined as the "intrinsic motivation" to pay taxes.

Tax morale studies can be traced back to the 1960's and the "Cologne School of Tax Psychology" (Schmolders, 1959), but recently, researchers have attempted to bridge the gap between economics and social psychology by emphasizing that the economic phenomena should not be limited to the traditional neoclassical point of view (Alm & Torgler, 2006).

The main object of the following paper is to analyze effects of the most important determinants of tax morale in Iran based on social psychology theories. Social psychology models attempt to explain and anticipate human behavior by examining the underlying attitudes, norms and beliefs Therefore; we explain three recognized social psychology models and then construct our model based on these theories. Finally, we estimate the model using data from WVS and finish with some concluding remarks.

2. Theoretical Consideration

A large part of the existing literature recognizes social interaction variables as determinants of tax morale. Besley, Jensen & Persson (2015), and Bénabou & Tirole (2011) show for example, that the intrinsic motivation of taxpayers to pay their taxes is affected by social norms. No one can explain Tax compliance using only the economics-of-crime approach because it is a complex subject. In the other words, considering factors such as penalty schedule and probability of detection is not sufficient for anticipating behaviors of tax payers (Alm, 2012). While economic deterrence models argue that

individual's decisions are fully based on maximizing only economic utility; social psychology models attempt to explain and anticipate human behavior by examining the underlying attitudes, norms and beliefs (Devos, 2005). The core center of these models is if the individual's behavior is understood, then it may be possible to understand and predict attitudes toward taxpayer compliance decisions (Smart, 2012). In general, there are three recognized social psychology models for tax compliance research: Compositional Modeling, Attribution Theory, and Equity Theory (McKerchar, Bloomquist, & Pope, 2013).

Compositional models assume individual's actions are based on personal beliefs and attitudes. The Theory of Reasoned Action (TRA) and Theory of planned behavior (TPB) are very applicable theories used in compositional modeling relevant to tax compliance research[1]. A taxpayer, before committing tax evasion, would first consider his\her own personal perceptions and norms of tax evasion and then act only if he\she believes friends and family would confirm. As a result, tax compliance or noncompliance behavior can be predicted if seen favorably by society.

Social psychology models which are based on Attribution theory explain how individuals evaluate the causes of special behavior or actions by other individuals (McKerchar et al., 2013). In reality, most individuals are uninformed and make decision based on perception of the causes of events and actions happening around them (Kaplan et al., 1988). Based on attribution theory, if tax evasion is recognized as an unacceptable behavior by society and a taxpayer is known as a tax evader, this would lead to a judgment of social irresponsibility and that individual would lose his\her social credibility (Arrington & Reckers, 1985). Therefore, according to this theory, tax evasion will be considered as an ethical behavior, if everyone commits it. For example, if a taxpayer fails to report income and gets caught, he/she may use situational factors as justification by saying everyone does it.

Equity theory has been used to evaluate the amount of taxpayer satisfaction when individuals compare their tax situations to others in

---

1. TRA describes an individual's intentions as a function of attitude and subjective norms (Ajzen & Fishbein, 1980) and TPB is the development of TRA by addition of third variable named behavioral control (Ajzen, 1991)

their reference group (King & Sheffrin, 2002). Equity theory, also suggests that taxpayers would be compliant if they perceive the tax system applies equitable rules. Therefore, if the rules are not justifiable regarding equity and taxpayers feel inequality in their tax paying situations in comparison to others, tax compliance will be diminished to restore the system (King & Sheffrin, 2002). Therefore, an increased perception of disparity will result in an increase in taxpayer noncompliance (Smart, 2012).

Before introducing model, we have to explain the most important determinants of tax morale; which are categorized into four main groups: social capital, conditional cooperation, demographic factors and economic situation of the respondents. Few scholars have conducted research on tax morale in detail.

2.1 Demographic Variables

Demographic variables influence tax morale significantly. The first variable is age. Generally, younger taxpayers have less fear about audits and penalties (Ritsema, Thomas, & Ferrier, 2003). Therefore, an increase in taxpayers' age seems to have a positive effect on tax morale (Torgler, 2006). After analyzing the variable of gender, Social-psychological research suggests that women are more compliant and less self-reliant than men (e.g., Tittle, 1980). Traditionally, females have been identified with conforming roles, moral restraints and more conservative life patterns (Jackson & Milliron, 1986).

According to the attribution theory, a higher education level can increase level of taxpayer's information about tax system. A higher-educated taxpayer knows more about tax laws and fiscal matters, and also is aware of the benefits of government's services to citizens (Lewis, 1982). However, these taxpayers may have some criticisms about how collected taxes would be redistributed (Ross and McGee, 2012). On the other hand, higher educated individuals are in a position to improve chance of evasion and avoidance (Torgler and Schneider, 2007). Therefore, a higher education level seems to be one of the main decreasing factors of tax morale (Torgler, 2006; I. Lago-Penas & S. Lago-Penas, 2010). Marital status can influence legal or illegal behavior, depending on the extent to which individuals are constrained by their social networks (Tittle, 1980). Thus, married people, in

comparison with others, are more compliant; because they are much more constrained by their social network. It could be argued that married taxpayers have higher tax morale than other individuals (Torgler, 2006).

2.2 Economic Status Variables
Some scholars in the area of tax compliance suggest that the higher income brings in less compliance (Torgler, 2002/2003). They argue that taxpayers who pay more based on income may not necessarily receive higher return in terms of government services (Jackson & Milliron, 1986). Therefore, this perceived unfairness may lead to less tax morality. Conversely, taxpayers who receive higher benefits from government may have a better understanding of the necessity of paying taxes (Duch, Palmer, & Anderson, 2000). On the other hand, because of higher marginal utility or wealth reduction if penalized, individuals in lower income classes may not take the risk of tax evasion (Jackson & Milliron, 1986). Also, Alm & Torgler (2006) argue that according to rational choice theory of crime, lower-income individuals are more likely to engage in criminal activities due to their lower opportunity costs. As a result, we do not expect the sign of coefficient on income variable in a priori. Based on the equity theory, the effect of financial satisfaction on tax morale can be investigated. Financial satisfaction is based on a taxpayer's current income situation as compared to others. The point here is that individuals who are the least satisfied financially are more likely to evade paying tax because they desire for a better financial situation. Thus, the least financially satisfied taxpayers will have the weakest tax morale. Financial satisfaction should have a positive effect on tax morale, whereas financial dissatisfaction might create a sense of unfairness and distress resulting in a decrease in tax compliance (Torgler, 2003).

2.3 Social Capital Variables
Social capital has a great effect on tax morale. Torgler (2003) investigated the relationship between trust and tax morale collecting data of 20 transition countries from WVS for the periods of 1989-1993 and 1995-1998. Both trust in government and trust in legal system are found to be significant and positive.

Religious practices can prohibit illegal behaviors because it has a sanctioning system in itself that legitimizes and supports social values (Hirschi & Stark, 1969). Torgler (2006), also, elaborates on the idea of religiosity as a factor that affects tax morale. It is based on survey questions that measure church attendance, religious education, church participation, and importance of religion, religious guidance related to good and evil and trust in the church as an organization. All variables are found to have a significant and positive effect on tax morale (Torgler, 2006). Criminology literature, also, has reported a negative correlation between religious membership and crime (see for example Torgler & Schneider, 2007:449). Thus, as religiosity decreases the levels of criminal actions, it can increase tax morale. According to the equity theory, when paying taxes to government is perceived as a patriotic duty, fairness can be seen in a taxpayer's loyalty to his country (Torgler, 2003). This national pride indicates an individual's behavior within organizations, groups and society (Torgler & Valev, 2010). An increase in national pride would lead to increased tax compliance in a country. Variable of importance of politics also have an effect on tax morale. This could be better explained with equity theories. The relationship between taxpayers and government would involve not only the provision of public goods, but also a psychological relation including the way both parts treat each other and the fairness of the procedures leading to political outcomes (Lago-Penas & S. Lago-Penas, 2010). According to Schnellenbach (2006) tax evasion might be considered as an instrument to punish Leviathan governments that are going to increase tax revenues rather than regarding the preferred policies of the taxpayers.

2.4 Conditional Cooperation Variable
Conditional cooperation is an important determinant that has a great impact on tax morale. If tax evasion is believed to be common and a taxpayer can be affected by the behavior of other individuals, tax morale decreases (Frey & Torgler, 2007). Alternatively, tax morale will increase if an individual taxpayer believes others to be honest. On the other hand, countries that taxpayers do not rely heavily on referent group opinions will experience higher tax compliance. These results are confirmed in other researches in which strong peer effects result in lower tax morality (Bobek, Roberts, & Sweeney, 2007; Torgler, 2012;

Alon & Hageman, 2013).

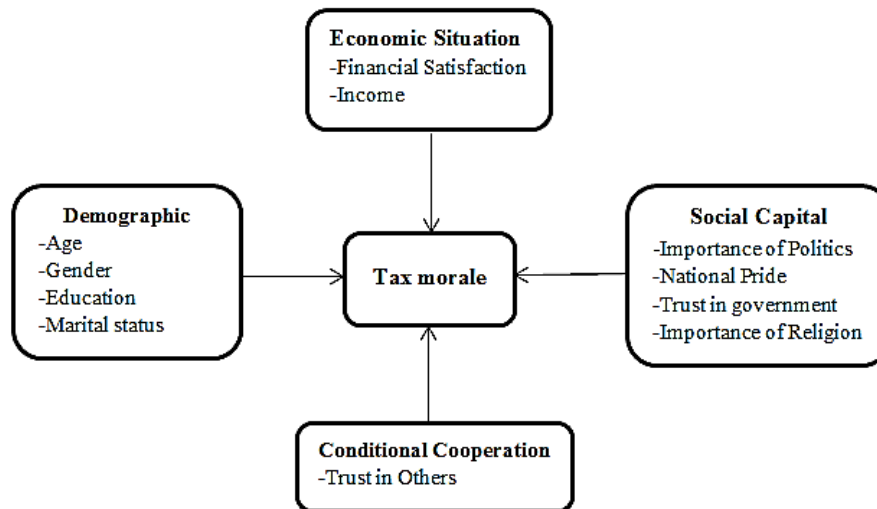Figure (1) indicates the determinants of tax morale based on social psychology.

Figure 1: Determinants of Tax Morale Based on Social Psychology

2.5 Previous Literature

In recent years, some scholars have investigated thoroughly the determinants of tax morale. Cummings, Martinez-Vazquez, McKee and Torgler (2009) analyzed the determinants of tax morale in Botswana (1999) and South Africa (2000) obtaining data from the Afro barometer. For estimating the effects of Gender, age, education and employment status on tax morale, they used ordered probit method. Their research results showed that tax morale rises with age and is higher in Botswana. Therefore, it supported the idea that tax morale is higher for countries with honest governance. Similarly, Martínez-Vázquez and Torgler (2009) applied weighted ordered probit and gathered data from WVS and EVS for searching determinants of tax morale in Spain during years 1981, 1990, 1995, 1999 and 2000. Their included variables were Gender, age, marital status, employment status, religiosity, and trust in the parliament, national pride, and time dummy variables. The results indicated that Tax morale is stronger in the 90's than in the 80's and rises with age and religiosity. Tax morale is also, lower for upper-class individuals and trust in parliament and national pride increase tax morale. Torgler (2012) has addressed the social

context impact on tax compliance behavior using data from the EVS for Eastern European countries that joined the European Union (EU) in 2004 or 2007. He also, analyzed tax morale differences between 1999 and 2008. Political interest is examined with the influence of trust and institutions on tax morale. Results were significant and negative and indicated that tax morale has decreased in 7 out of 10 Eastern European countries. Kaynar-Bilgin (2011) searched for the determinants of tax morale in Turkey by using the WVS data of 2005-2008. The included variables for probit model were 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, and confidence in government, all positively affect tax morale. Tax morale is low for the unemployed. Doerrenberg and Peichl (2013) investigated the effects of progressive taxation on individual tax morale. They used World Values survey data. Dependent variable in their study was tax morale, while explanatory and control variables were tax progressivity, economic indicators, demographic variables, national pride, trust and confidence in government and importance of religion. They found that women and married people have higher tax morale than men and singles respectively. Other variables that had a positive effect on tax morale were patriotism, being retired and being employed. Their findings showed that tax progressivity has a decreasing positive association with tax morale which suggested that "progressive taxes contribute to less tax evasion and higher perceived fairness and equality".

In summary, the existing literatures in this area offer an extensive set of determinants of tax morale. A further investigation to evaluate the determinants of tax morale based on social psychology, might offer a better understanding of tax morale at the country level. In the next section, we introduce our methodology and estimate the model.

3. Research Methodology

In the following article, tax morale is based on the responses to the WVS questions dealing with beliefs on *"Cheating on tax is justified if you have the chance."* Tax morale is measured by the WVS survey

question. Institutional determinants are defined by importance of religion, trust in government, national pride, and importance of politics, conditional cooperation and financial satisfaction. First of all, we need to describe the main characteristics of WVS; then we explain the percentages of participants for each variable, and finally, the Ordered-Probit model is used for estimation.

3.1 World Value Survey

The majority of studies identified in the area of tax morale utilize survey data gathered by World Values Survey (WVS). For the purpose of collecting data on values and belief systems around the world, the WVS is a worldwide investigation and its data enables evaluation of full range of economic, social, cultural and religious factors. The WVS, which is established in 1981, consists of national surveys based on almost 400,000 interviews in over 100 countries (G. Richardson, 2008).

   This international representative survey is based on a minimum of 1,000 individuals (This number is almost 2700 for Iran), aged 18 and over. Probability random methods and other extensive methodological requirements are used to select questions and samples. The questionnaires are translated into a country's own official language and are independently translated back to English to check for accuracy of the translation and are pre-tested to correct any problematic translation issues. The survey is administrated by professional organizations applying face-to-face interviews or phone calls for remote areas. After stratification by degree of urbanization and by region, the WVS consists of a multi-stage random selection of sampling points with a number of individual observations extracted from all administrative regional units. The results can be weighted to represent national population parameters. The WVS survey results found to be reliable and very consistent and the data has been successfully and widely applied by sociologists, political scientists and economists (Slemrod, 2002).

3.2 Participants

In this part, the descriptive statistics of all variables used in the model for Iran are derived. The percentage rates of individuals having

specific properties in the whole population are as follows; male 49.6, married 60.3, the 30-49 age group 40, the 50+ age group 10, the 16-29 age group 49.8. The percentage rates for education level are as follows: upper educated is 25 percent, middle educated is 41.1 percent, and lower educated is 33.9 percent.

The rates of income levels are 5.9 percent for lower step, 20 percent for fifth step, 0.6 percent for tenth step. The rates of financial satisfaction for levels 1, 5, 6 and 10 are 5.7, 17.3, 15.5 and 9.2 percent respectively.

The variable of religiosity and national pride give the relatively high values of 94.6 and 91.5 percent. Besides 78.5 percent of them thinks that religion is very important. The ratio of respondents considering politics as an important issue is relatively low, 6.2 percent and the rate of respondents who have confidence in government is 48 percent.

For the variable of Conditional cooperation, the ratio of respondents who have confidence in others presents low value of 11.3 while 88.7 don't have trust in others.

The general question that assesses the degree of tax morale is *Please tell me whether you think that cheating on tax if you have the chance can always be justified, never be justified, or something in between (Scale from 1=never justified to 10=always justified).* Thus, our dependent variable, tax morale, is obtained by recoding the question above. In this research, 3 corresponds to never justified and 1 for always justified. Therefore, when it comes to the variable of tax morale, 65.1 percent of the individuals have the highest tax morale level. These individuals respond that cheating on tax is never justified. The rates of the levels 2 and 3 are 14.1 percent and 6.9 percent respectively. The rate of people saying cheating is always justifiable is 1.9 percent.

3.3 Research Model and Estimation Results

In the following article, we use Ordered-Probit model for estimating model parameters and marginal effects for each variable. In general, ordered probit models were preferred to be used in determining the relations and the interactions between tax morale and personal and socio-economic factors. Ordered probit models are very useful to analyze dependent variables of tax morale containing ordering

information. Therefore, the same estimation method is used in this paper. Table (1) shows the results of Ordered Probit Model Estimation for Iran where Tax Morality is dependent variable. The independent variables are related to social capital (Importance of politics, importance of religion, religiosity, and national pride), demographic factors (Age, Gender, Education, & Marital Situation), conditional cooperation (trust in others) and the economic situation (financial satisfaction and income), and has been presented in the first column. The second column indicates the estimated coefficient for each independent variable. The coefficients cannot be directly interpreted because the model is non-linear. However, the signs of each coefficient can be evaluated. In the third and fourth columns, associated z-value and probability value for each variable are represented. The statistical significances of the variables are determined by using the z-statistics or probability value. In the fifth column, the marginal effects of the independent variables on the dependent variable are given (at average level). These effects are the ones related to the top level of tax morale category (Y = 3). Moreover, the specification test statistics are given at the end; the estimated model seems to be statistically significant since the probability value of chi-square is much less than 0.01 (LR chi2 (11) = 82).

As it is shown in table (1), in the case of social capital, variables of *Confidence in Government* and *National Pride* are statistically significant at 1 percent level and coefficients are positive. This means that *Confidence in Government* and *National Pride* has positive and significant effect on tax moral. Marginal effect of *Confidence in Government* on tax morale is 0.03 and is positive. Those trusting the government have high tax morale. The same result applies to *National Pride*, which has the marginal effect of 0.05 and is the largest marginal effect among the significant social capital variables and implies higher tax morale. The marginal effect of the *Importance of Religion* and *Importance of Politics* are 0.02 and 0.001 respectively. However, the estimated coefficients for these variables are not statistically significant.

Table 1: The Results of Ordered Probit Model Estimation for Iran

Independent Variables	Coefficient	z-value	p > |z|	Marginal Effects
Social Capital				
Importance of Politics	.004	0.19	0.851	.001
Importance of Religion	.054	1.31	0.190	.020
Confidence in Government	.082**	2.66	0.008	.030
National Pride	.136**	3.91	0.000	.050
Conditional Cooperation				
Trust in others	.182*	2.32	0.020	.067
Economic Situation				
Income	-.026*	-1.97	0.048	-.009
Financial Satisfaction	.030**	2.74	0.006	.011
Demographic Factors				
Age	.007**	3.34	0.001	.002
Gender	.028	0.59	0.554	.01
Education	-.137**	-4.00	0.000	-.050
Marital Status	.034	0.61	0.542	.012
Number of Observations	2665			
LR chi2(11)	82.71			
Prob (ChiSqd>value)	0.0000			

Note: Dependent variable is tax morale on a three-point scale (1 to 3).

* and ** refer to statistically significant parameter estimates at the 5 and 1 percent levels respectively.

Resource: World Values Survey Database; http://www.worldvaluessurvey.org/ .

Interestingly, the coefficient of *Trust in Others* is significant and positive. This finding implies that tax morality improves among taxpayers if they trust more on other individuals. The marginal effect for this variable has the value of 0.067.

According to the results of the third category of Table (1), economic situation, variables of *Income* and *Financial Satisfaction* have significant effect on tax morale. Respondents who are at the higher level of income turn out to have lower tax morale since coefficient for this variable is negative. However, the financial satisfaction variable has a positive effect on tax morale. This finding confirms that least financially satisfied taxpayers will have the weakest tax morale.

According to the estimated model, in the following research, marital status and gender seem to have nothing to do with tax morale since the coefficients for these variables are not significant even in 10 percent level. The coefficients of *Age* and *Education*, on the other hand, are significant and their signs are positive and negative respectively; implying that tax morale is higher for elderly persons

and lower for more educated ones. The marginal effect belonging to the variable of Age is 0.002 and is very low. This indicates that increasing age of the participants in the survey by one year would increase the probability of having the higher tax morality by 0.002 percent. However, the marginal effect of *Education* is negative and has the value of -0.5 and indicates that the higher levels of education causes lower tax morality. This finding confirms that the higher educated taxpayers may have some criticisms about how collected taxes would be redistributed. They are also aware of government inefficiencies. Therefore, higher education seems to be one of the main decreasing factors of tax morale.

Based on these findings, it can be concluded that improving institutional credibility as a public policy might increase the level of tax morale in Iran leading to more tax compliance by taxpayers.

4. Conclusion

While economic deterrence models argue that individual's decisions are fully based on maximizing only economic utility; social psychology models attempt to explain and anticipate human behavior by examining the underlying attitudes, norms and beliefs. The core center of these models is if the individual's behavior is understood, then it may be possible to understand and predict attitudes toward taxpayer compliance decisions. In this research, the determinants of tax morale were recognized and analyzed by estimating ordered probit models for Iran and using data of WVS. Dependent variable, in this study, was tax morale where the variables of religiosity, national pride, and importance of religion, importance of politics, confidence in government, age, gender, marital situation, education level, income, financial satisfaction and trust in others were independent variables. Most of coefficients were found to be statistically significant and consistent with related literatures. Among social capital variables, only national pride and confidence in government have significant and positive effects on tax morale. Importance of religion and importance of politics have positive effects, however, relating coefficients are not significant. For the case of economic situation, variables of income and financial satisfaction have significant effects on tax morale. While the effect of income is negative, financial satisfaction influences tax

morale positively. These findings are consistent with theory. Trust in others has significant and positive effect on tax morale, and indicates that individuals would consider tax paying as a morale action if they believe others are honest and pay their tax contribution. Demographic factors such as gender and marital status have nothing to do with tax morality; however the effects of age and education are significant. These findings are consistent with those of Torgler (2006), and I. Lago-Penas & S. Lago-Penas (2010).

Based on these findings, it can be concluded that improving institutional credibility as a public policy might increase the level of tax morale in Iran leading to more tax compliance by taxpayers. Therefore, if taxpayers get utility from redistributing tax resources which is based on persuasion rather than coercion, tax moral will be increased. In this respect, using instruments of persuasive power is crucial.

References

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall.

Alm, J., & Torgler, B. (2006). Culture Differences and Tax Morale in the United States and Europe. *Journal of Economic Psychology, 27*, 224-246.

Alm, J. (2012). Measuring, Explaining, and Controlling Tax Evasion: Lessons from Theory, Experiments, and Field Studies. *International Tax and Public Finance, 1*(19), 54-77.

Alon, A., & Hageman, A. (2013). The Impact of Corruption on Firm Tax Compliance in Transition Economies: Whom Do You Trust? *Journal of Business Ethics, 116*, 479–494.

Arrington, C., & Reckers, P. M. J. (1985). A Social-Psychological Investigation into Perceptions of Tax Evasion. *Accounting and Business Research*, *15*(59), 163–176.

Bénabou, R. & Tirole, J. (2011). Identity, Morals, and Taboos: Beliefs as Assets. *The Quarterly Journal of Economics, 126*(2), 805-855.

Besley, T., Jensen, A., & Persson, T. (2015). Norms, Enforcement, and Tax Evasion. *Technical Report, Mimeo*, Retrieved from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.648.5320&rep=rep1&type=pdf.

Bilgin, Cevat, (2014). Determinants of Tax Morale in Spain and Turkey: An Empirical Analysis. *European Journal of Government and Economics*, *3*(1), Retrieved from
http://www.europagrande.org/ejge/index.php/ejge/article/download/48/44.

Bobek, D. D., Roberts, R. W., & Sweeney, J. T. (2007). The Social Norms of Tax Compliance: Evidence from Australia, Singapore, and the United States. *Journal of Business Ethics, 74*(1), 49-64.

Cummings, R. G., Martinez-Vazquez, J., McKee, M., & Torgler, B. (2009). Tax Morale Affects Tax Compliance: Evidence from Surveys and an Artefactual Field Experiment. *Journal of Economic Behavior & Organization, 70*(3), 447–457.

Devos, K. (2005). The Attitudes of Tertiary Students on Tax Evasion and the Penalties for Tax Evasion - A Pilot Study and Demographic Analysis. *E-Journal of Tax Research*, *3*(2), 222–273.

Doerrenberg, P., & Peichl, A. (2013). Progressive Taxation and Tax Morale. *Public Choice, 155*(3–4), 293–316.

Duch, R., Palmer, H., & Anderson, C. (2000). Heterogeneity in Perceptions of National Economic Conditions. *Journal of Political Science*, *44*, 635–652.

Elffers, H. (1991). *Income Tax Evasion: Theory and Measurement*. Deventer, Netherlands: Kluwer Academic Publishers.

Frey, B., & Torgler, B. (2007). Taxation and Conditional Cooperation. *Journal of Comparative Economics, 35*, 136–159.

Hirschi, T., & Stark, R. (1969). Hellfire and Delinquency. *Social Problems, 17*, 202–213.

Jackson, B., & Milliron, V. (1986). Tax Compliance Research: Findings, Problems, and Prospects. *Journal of Accounting Literature, 5*, 125–165.

Kaplan, S., Reckers, P. M. J., & Roark, S. (1988). An Attribution Theory Analysis of Tax Evasion Related Judgments. *Accounting, Organizations and Society*, *13*(4), 371–379.

Kaynar-Bilgin, H. (2011). Türkiye'de Vergi Ahlakının Belirleyicileri. *Odtü Gelişme*, *38*(2), 167-190.

King, S., & Sheffrin, S. (2002). Tax Evasion and Equity Theory: An Investigative Approach. *International Tax and Public Finance*, *9*(4), 505–521.

Lago-Penas, I., & Lago-Penas, S. (2010). The Determinants of Tax Morale in Comparative Perspective: Evidence from European Countries. *European Journal of Political Economy*, *26*, 441–453.

Lewis, A. (1982). *The Psychology of Taxation*. Oxford: Blackwell.

Martínez-Vázquez, J., & Torgler, B., (2009). The Evolution of Tax Morale in Modern Spain. *Journal of Economic Issues, 43*(1), 1–28.

McKerchar, M., Bloomquist, K., & Pope, J. (2013). Indicators of Tax Morale: an Exploratory Study. *E-Journal of Tax Research*, *11*(1), 5–22.

Richardson, G. (2008). The Relationship between Culture and Tax Evasion across Countries: Additional Evidence and Extensions. *Journal of International Accounting Auditing and Taxation, 17*(2), 67–78.

Ritsema, C., Thomas, D., & Ferrier, G. (2003). Economic and Behavioral Determinants of Tax Compliance: Evidence from the 1997 Arkansas Tax Penalty Amnesty Program. In *Paper prepared for 2003 IRS Research Conference*, Retrieved from https://www.irs.gov/pub/irs-soi/ritsema.pdf.

Ross, A., & McGee, R. (2012). Education Level and Ethical Attitude toward Tax Evasion: A Six Country Study. *Journal of Legal, Ethical and Regulatory Issues*, *15*(2), 93–138.

Schmolders, G. (1959). Fiscal Psychology: A New Branch of Public Finance. *National Tax Journal*, *12*(4), 340–345.

Schnellenbach, J. (2006). Tax Morale and the Taming of Leviathan. *Constitutional Political Economy*, *17*, 117-132.

Slemrod, J. (2002). Trust in Public Finance. *National Bureau of Economic Research*, *Working Paper*, Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjaz8OfzsXQAhVBCBoKHZv5C_QQFggiMAE&url=http%3A%2F%2Fwww.bus.umich.edu%2FOTPR%2FWP2002-7paper.pdf&usg=AFQjCNGti88E6jt9L-txz7d9WC545tMHXQ.

Smart, M. (2012). *The Application of the Theory of Planned Behavior and Structural Equation Modeling in Tax Compliance Behavior: A New Zealand Study* (Doctoral Dissertation, University of Canterbury, New Zealand). Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjYhYrVz8XQAhUCBBoKHa

Y4CAkQFggaMAA&url=http%3A%2F%2Fir.canterbury.ac.nz%2Fbi
tstream%2Fhandle%2F10092%2F7528%2Fthesis_fulltext.pdf%3Fseq
uence%3D1&usg=AFQjCNHbAkTHS1i5gMaXmAtaEOwdGI_i0A.

Tittle, C. (1980). *Sanctions and Social Deviance: The Question of Deterrence*. New York: Praeger.

Torgler, B. (2002). Does Culture Matter? Tax Morale in an East-West-German Comparison. *FinanzArchiv/ Public Finance Analysis*, *59*(4), 504–528.

Torgler, B. (2003). Tax Morale in Transition Countries. *Post-Communist Economies*, *15*(3), 357–381.

Torgler, B. (2006). The Importance of Faith: Tax Morale and Religiosity. *Journal of Economic Behavior & Organization*, *61*(1), 81–109.

Torgler, B. (2007). *Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis*. Cheltenham: Edward Elgar Publishing.

Torgler, B. (2012). Tax Morale, Eastern Europe and European Enlargement. *Communist and Post-Communist Studies, 45*, 11–25.

Torgler, B., & Schneider, F. (2007). What Shapes Attitudes toward Paying Taxes? Evidence from Multicultural European Countries. *Social Science Quarterly*, *88*(2), 443–470.

Torgler, B., & Schneider, F., (2007b). What Shapes Attitudes toward Paying Taxes? Evidence from Multicultural European Countries. *Social Science Quarterly, 88*, 443–470.

Torgler, B., & Valev, N. (2010). Gender and Public Attitudes toward Corruption and Tax Evasion. *Contemporary Economic Policy, 28*(4), 554–568.