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# The Relationship between Social Norms and Tax Compliance: The Moderating Role of the Effectiveness of Tax Administration

# Abstract

Tax compliance behavior of taxpayers is an important issue for tax administration and government. The main objective of this research is to determine the relationships between social norms and tax compliance and to evaluate whether tax administration's efficiency moderates the relationship between social norms and tax compliance in Turkey case. This study was conducted on taxpayers who declare their income to the tax administration. In the questionnaire development stage, pilot test was done on 30 respondents in order to test the clarity of the questions and to identify the average completion time. After the necessary improvements and simplifications were done, the questionnaire was applied. Face-to-face interviews with taxpayers who declare their income to the tax administration were conducted in Aksaray and İzmir cities. As a consequence, 400 respondents were interviewed. Field and office audits of the questionnaires ended with the elimination of 79 questionnaires. Therefore, 321 questionnaires were included in the analyses process. To test our research hypotheses, hierarchical multiple regression analysis was run. This study examined social norms of taxpayer–tax compliance behavior relationship as well as the impact of effectiveness of tax administration on that relationship. According to results, efficiency of tax administration was found to have a significant and positive moderating effect on the relationship between social norms and tax compliance.

Key words: Tax Compliance, Social Norms, Tax Evasion, Tax Administration's Efficiency.

## JEL Classification: H26 - Tax Evasion

## 1 Introduction

Tax compliance behavior of taxpayers is an important issue for tax administration and government. In recent years, tax compliance behavior of taxpayers has increasingly attracted attention of academicians. Based on theoretical argument to explain tax compliance decision, this paper suggests that social norms as an intrinsic taxpaying motivation has strong influence on taxpayer's compliance behavior. It is expected that the effectiveness of tax administration moderates the relationship between social norms and tax compliance. Interaction with tax administration is a key determinant of taxpayers' behavior. Research findings stress that a personal interaction between taxpayers and the tax administration is a key determinant regarding the degree of tax evasion (Torgler,

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2003). Feld and Frey (2002a) emphasize "If they treat taxpayers as partners in a psychological tax contract, instead of inferiors in a hierarchical relationship, taxpayers have incentives to pay taxes honestly" (p. 5).

This paper attempts to investigate the relationship between tax compliance and social norms. In order to achieve this aim, this article was organized as follows. Firstly, theoretical background and conceptual framework about tax compliance behavior were reviewed. Secondly, the research methodology was explained in detail. Then, the statistical results of our research were summarized. Finally, the overall conclusions and recommendation were explained.

#### 2 Explaining the Tax Compliance Behavior

Explaining determinants of tax compliance, one of most influential studies is Allingham and Sandmo (1972) model that assume as taxpayers are rational agents who try to maximize utility of their taxable income. Here, a rational individual is viewed as maximizing the expected utility of the tax evasion gamble, weighing the benefits of successful cheating against the risky prospect of detection and punishment, and individuals pay taxes because they are afraid of getting caught and penalized if they do not report all income (Alm et al., 2010). Therefore, the tax compliance decision depends on the level of income, tax rates, audit probabilities and the magnitude of fines.

However, it is well-known fact that this model under-predict real-world compliance level. Empirical findings from experiments and social survey display that although actually low level of audits and penalties, compliance level is considerably higher than expected by the expected utility approach (Alm, McClelland and Schulze, 1992: 48). Although the compliance varies significantly across countries and across taxes and is often quite low. Actual compliance seldom falls to a level predicted by the standard economic theory of compliance. This fact had led most scholars to examine non-economic factors such as social norms, moral appeals, social cohesion, political institutions and attitudes toward tax system/tax administration. (For an overview, see Kirchler, 2007; Torgler, 2007; Torgler 2008). Thus, the tax compliance has become a major topic in economic psychology and behavioral economics with an enormous literature.

Cullis, Jones and Lewis (2010) consider into three categories of alternative explanations to the expected utility model. Some of the studies introduce to revise the Allingham-Sandmo model by including 'psychic costs' into taxpayer's utility function in addition to pecuniary costs imposed through legal sanctions (for example, Spicer, 1986; Gordon, 1989; and Erard and Feinstein, 1994). According to these models, tax evasion also creates non-pecuniary costs as guilty, feeling ashamed and a reduction in self-image that caused the disutility from behaving dishonestly.

Another tendency in tax compliance literature is to consider cognitive bias at decision making, influenced by the prospect theory that the work on heuristic decision-making of Kahneman and Tversky (1979), developments in cognitive psychology and subsequently in behavioral economics. As is known from the prospect theory of Kahneman and Tvesky (1979, 1984), people who limited information processors are vulnerable to a wide range of heuristics and biases in decision-making,

which lead to inconsistent judgments and evaluations. They pay attention to gains and losses with respect to a reference point and therefore they can evaluate possible risk and gains according to a particular reference point. "People are risk-averse for gains with high probabilities and for losses with low probabilities, risk-seeking for gains with low probabilities and losses with high probabilities". "It can be assumed that risk propensity changes and, consequently, audit probability and fines receive changing weight in considerations regarding tax evasion. If taxes are perceived as a loss, the tendency to repair the loss and willingness to take higher risks should lead to higher evasion as compared to taxes perceived as a gain and co-varying risk aversion" (Kirchler 2007). These cognitive biases are important while taxpayer considers the probability of audit and possible gains from tax evasion as well as value of tax deductions magnitude of tax rates and fairness of tax system. They also can be explanatory the fact of high level of compliance in spite of low level of audit probability. Kirchler and Maciejovsky (2001) "were able to show that, among a sample of 60 self-employed respondents, an unexpected demand for payment led to low tax compliance (risk-seeking for losses) and a surprise refund led to high tax compliance (risk aversion for gains)".

Finally, the largest group of studies on tax compliance focuses on importance of wide range of social and political interactions such as social norms, social influence, culture, perceived fairness, public governance and social capital, developing intrinsic taxpaying motivation. If tax-paying are considered as a quasi-voluntary action and an issue of collective action one also should consider relationships with taxpayer and the government, the taxpayer and the society for explaining why people cooperate with authority and the society. Cooperation for collective actions can be explained altruistic preferences, reciprocal tendencies, social norms and social influence which regulate individual behaviors in social context.

It is known that reciprocal tendency and social interaction have strong influence on individual decision-making in social context. Reciprocity as willingness to cooperate those who have cooperated with them is an important behavioral motivation and human action characteristic (Rabin, 1993; Fehr and Gachter, 2000a; Charness and Rabin, 2002). A person's behaviors are influenced by his perception on attitude and behavior of individuals or institutions in the society he or she belongs. Individuals' decisions and behaviors are systematically affected by the behavior of other members of the group. Thus, while individuals make decision whether they cooperate, they seek others' cooperative behaviors. If they believe others cooperate, they cooperate as well (Gächter, 2007:21). There are numerous evidences on this reciprocal tendency and conditional cooperation from the literature on collective action. Fischbacher et al. (2001), Fischbacher and Gächter (2006) found very important evidences for conditional cooperation that subjects contribute to public goods according to others' contributions and. belief formation about others' contribution is seen as important from results of experimental studies. Fehr and Schmidt (2003) show that there are also many people who are strongly motivated by fairness and reciprocity despite of existence of subjects who behave quite selfishly. Reciprocal-minded subjects are willing to reward or punish other people at expense of high costs.

One can expect that reciprocal tendency and conditional cooperation of taxpayers may have influence at two dimensions of interactions which both with the government and the society. Schnellenbach (2010) refers to as 'vertical reciprocity' the first of them and as 'horizontal reciprocity'

the latter. Taxpayers can seek reciprocity at their 'exchange' relationship with the government as well how they are treated by the political institutions and tax administration. In relationships with political institutions such as government, legal system, tax administration, Feld and Frey (2010) emphasize that political decision-making system should create fair procedures (procedural justice) and fair outcomes (distributive justice) and respectful treatment (interactional justice). Studies on social dilemma and collective action display that people's cooperation with authorities depends on how people find authorities' power exercising as fair, legitimate and respectful (procedural justice); whether or not people define themselves through the social identity (Tyler, 2000); whether or not people feel pride, trust and respect because of feeling of belong to society and involving of decision-making mechanism; and whether or not people perceive resource allocation is in a fair manner.

Thus, taxpayer's beliefs about others' compliance behavior shape compliance decision. They are less likely to cheat on their taxes if others behave honestly (Frey and Torgler, 2007; Traxler, 2010). Fortin et al. (2007) demonstrate that subjects' tax evasion level is influenced by other subjects' behavior in an experimental design. Frey and Torgler (2007) find a positive correlation between tax morale and perception of compliance level of others in the society. Those who believe that others are honest consider evasion morally wrong than those who believe evasion to be widespread. Results from experiments by Fischbacher et al. (2001) and Fischbacher and Gäcter (2006) suggest that believes about other's cheating cause to subjects' own cheating behavior.

Interaction with social and political institutions can be approached with perspectives of 'the psychological tax contract' of Feld and Frey (2010). According to them, taxation can be seen as an implicit contractual relationship which involves emotional ties, loyalties as well as duties and rights for the parties involved. Neglecting of the obligations of either party would undermine the psychological sanctions of the contract for the other party. This contract includes not only fiscal exchange and reciprocity at relationship in related to public services-tax prices but also elements of good treatment, respect and participation to political decision-making at procedural level. Therefore, taxpayer's tax morale is determined by government policies, public services, tax authorities' treatment to taxpayers and political context (Feld and Frey, 2002a; Frey, 2003; Feld and Frey, 2007; Feld and Frey, 2010). According to Feld and Frey (2007 and 2010), intrinsic motivation that shaped by interaction of government-taxpayer is negatively responsive to external pecuniary motives such as punishments and rewards. Deterrence factors crowd out intrinsic norm-guided behavior when they are perceived to be oppressive by the taxpayer.

This perspective can be expanded toward relationship taxpayer-society and taxation can also be seen as a 'social act' with others in context of social interaction (Frey and Torgler, 2007). Studies on social capital and social dilemma display that perceived social cohesion and societal identities also have important impact on involvement collective action. Social capital as features of social organization that facilitating collective action and improving efficiency in the society (Putnam et al., 1993) covers the trust and participation in collective actions for both political institutions and societal institutions (Hardin, 2006; Uslaner, 2002, Welzel, 2010). Wenzel (2004) and Wenzel (2007) found that social norms can influence the behavior of tax compliance only through a process of self-categorization. If persons do not have group identity, group's social norms don't have any impact on

compliance behavior. Inclusiveness level of identity (such as a nation, a profession, or an autonomic individual) is also important at participation in collective action. If taxpayer defines his identity in national level instead of a subcategory or of autonomy, it is more likely having high level intrinsic value to participate national level collective actions as taxation. Wenzel (2002), Torgler (2003a; 2003c; 2004b) and Martinez-Vazquez and Torgler (2009) provide evidences on importance of national pride and national belonging at tax compliance. Li (2010) presents evidences that ethnic identities have influence on tax decision as well country's ethnic fragmentation level.

#### **3** Social Norms and Individual Values

Researches about tax compliance behavior have been increasingly analyzed non-traditional economic factors such as social norms (Torgler, 2002). Social norms are important social codes which constrain individual behaviors through social sanction. Individuals are receptive these social sanctions or rewards as well legal sanctions or rewards. However, to determine whether anticipated social approval or disapproval has effect on behavior or not, social norms need to be refined. Because, it is obvious that individuals don't obey all social norms and sometimes even they refuse to comply with social norms. On the other hand, it cannot be said that paying taxes are generally accepted moral standard/social norm for all cultures and/or sub-communities.

Alm, Sanchez and de Juan (1995) point out:

"...a government compliance strategy based only on detection and punishment may well be a reasonable starting point but not a good ending point. Instead, what is needed is a multi-faceted approach (...) Put differently, explaining tax compliance requires recognizing the myriad factors that motivate individual behavior, factors that go much beyond the standard the economics of crime approach to include theories of behaviors suggested by psychologists, sociologist, and other social scientists. Until this effort is made, it seems unlikely that we will come much closer to unrevealing the puzzle of tax compliance..." (p. 15).

Cialdini (2007) identifies two types of social norm to determine effects of social influence. 'Injunctive norms' that refer to one's perception about others' beliefs on appropriate behaviors and 'descriptive norms' that refer to one's perception on widespread of the behaviors among others. Injunctive norms are especially important in terms to functioning of psychological costs. 'Subjective norms' a particular form of injunctive norms, are perception of person about expectations of a referent group as family or friends (Cialdini and Trost, 1998).

Individuals encounter with other members of society, observe them and learn from them. Social interaction connects individuals' decisions to each other through social influence and social norms, and thus, a person's behavior is determined by behaviors of others in that society to a certain extent. Mostly, in social interaction, individuals' perceptions on others' behaviors take effect through social norms.

Social norms as rules and expectation to act that guide and/or constrain social behavior with enforcing by members of the general community are sustained in part by social sanction or reward (Schwartz and Howard, 1982; Elster, 1989; Alm et al., 1995). According to Fehr and Gächter (1998) define social norm as:

"...behavior regularity that is based on a socially shared belief how one ought to behave which triggers the enforcement of the prescribed behavior by informal social sanctions" (p. 854).

They stressed that:

"Reciprocity provides a key mechanism for the enforcement of social norms. In view of the fact that most social relations in neighborhoods, families and work places are not governed by explicit agreements but by social norms the role of reciprocity as a norm enforcement device is perhaps its most important function" (p. 854).

Alm et al. (1999) stressed that if others behave according to a socially accepted mode of behavior, the individual will also behave appropriately. Therefore, taxpayers will comply and pay taxes as long as they believe that compliance is a social norm. In other words, taxpayers' compliance behavior depends on the other taxpayer's behavior.

Studies on tax compliance and social norms display that subjective norms are especially explanatory compliance behavior instead of general social norms. For instance, Bobek et al. (2007) found that especially subjective and personal norms are the most important factors to explain tax compliance whereas descriptive norms are not significant factors at compliance choice. Wenzel (2004) and Wenzel (2007) found that social norms can influence the behavior of tax compliance only through a process of self-categorization. If persons do not have group identity, group's social norms don't have any impact on compliance behavior. Inclusiveness level of identity (such as a nation, a profession, or an autonomic individual) is also important at participation in collective action.

Therefore we expect that individuals are more sensitive about views of important persons for them and if taxpayers perceive their peers or families have tax morale norms, then social influence and social sanction work for these taxpayers.

Studies on tax compliance and public goods present empirical evidences that individuals' beliefs and perceptions on others' tax compliance level have strongly impact on their compliance and participate level (for example, Falk et al., 2003; Fortin et al., 2007; Frey and Torgler, 2007). Thus, one can expect a positive correlation between taxpayer's compliance level and his or her perception of compliance level of other member of the society. If individuals notice that many others evade taxes, their intrinsic motivation to comply with taxes decreases. Thus, it is expected that taxpayers 'compliance behavior is directly influenced by social norms. Based on these, the hypothesis is as follows: **Hypothesis 1:** Taxpayer's compliance behavior will be positively related to his or her perception of compliance level of other member of the society.

# 4 Interaction with Tax Administration

The psychological tax contract approach of Feld and Frey (2007 and 2010) suggests that the relationship between taxpayers and tax authorities can be modeled as an implicit or relational contract, which involves strong emotional ties and loyalties. Incentives and respectful treatment are important determinants of tax compliance. "Respectful treatment can be split into two different components. First, the procedures used by auditors in their contact with taxpayers are to be transparent and clear. Second, respectful treatment has a direct personal component in the sense of how the personality of taxpayers is respected by tax officials. If they treat taxpayers as partners in a psychological tax contract, instead of inferiors in a hierarchical relationship, taxpayers have incentives to pay taxes honestly". Feld and Frey (2007) distinguish treatment of taxpayer into two opposite poles: respectful treatment and authoritarian treatment undermining tax morale. We can expect that perceived respectful and fair treatment support tax morale while disrespectful treatment of taxpayers and inefficient tax administration ruin the legitimacy and therefore, undermine intrinsic motivation. In the light of this framework, the following hypothesis was formulated.

**Hypothesis 2:** The relationship between social norms and tax compliance will be moderated by efficiency of tax administration.

## 5 Research Methodology

# 5.1 Objectives and Limitations of the Research

The main objective of this research is to determine the relationships between social norms and tax compliance and evaluates whether tax administration's efficiency moderates social norms and tax compliance in Turkey case. As can be understood from the research hypotheses, the effect of the social norms of taxpayers who declare their income to the tax administration on tax compliance will be tested.

This study was conducted on taxpayers who declare their income to the tax administration. This is an important limitation of our research. Another limitation of this research is that, it is conducted on taxpayers who declare their income to the tax administration living in Izmir and Aksaray cities. For that reason, the results of this research cannot be generalized for the whole country. Even though this study has some limitations, it is believed that the results derived from the research will provide significant contributions to the tax administration authorized for setting regulations on taxation and also to the academicians working on this subject.

# 5.2 Sample

A literature review about tax compliance behavior was done before the questionnaire is formed. In the questionnaire development stage, pilot test was done on 30 respondents in order to test the clarity of the questions and to identify the average completion time. After the necessary improvements and simplifications were done, the questionnaire was applied. Face-to-face interviews with taxpayers who declare their income to the tax administration were conducted in Aksaray and İzmir cities. As a consequence, 400 respondents were interviewed. Field and office audits of the questionnaires ended with the elimination of 79 questionnaires. Therefore, 321 questionnaires were included in the analyses process. From the available sample of 321 taxpayers, 19.9 percent respondents are female and 80.1 percent of respondents are male. Approximately 79 percent of respondents are married and 21 percent of respondents are single. Approximately 48 percent of respondents' education level is less than high school, 49 percent of respondents' education level is Bachelor degree and also 3 percent of respondents' education level is Master's/Doctorate, aged between 20 and 72 years. The median age is 39.

## 5.3 Independent Variables

#### Social Norms

In order to measure social norms of taxpayers who declare their income to the tax administration Likert's five point scale was used. A Likert's five point scale ranging from 1= "strongly disagree" to 5="strongly agree". Scale coefficient alpha for the scale was .79.

## Efficiency of Tax Administration

We propose to focus on effectiveness as possibly moderating the impact of different social norms on tax compliance behavior. Effectiveness of tax administration was measured by eight questions on service efficiency, honesty of staffs, perceived discrimination, feeling repressed by audit staffs. In order to measure effectiveness of tax administration Likert's five point scale was used. Scale coefficient alpha was .82.

## 5.4 Control Variables

Several demographic variables such as age, gender, education, and marital status were included in hierarchical multiple regression analysis. These demographic variables are potential predictors of tax compliance and. As it is known, older people are more sensitive to the threats of sanctions and over the years have acquired greater social stakes, as material goods, statuses, and a stronger dependency on the reactions from others, so that the potential costs of sanction increase. In most studies, a higher age is significantly correlated with higher tax morale or tax compliance. Age was asked as an open ended question.

The other predictor variable is gender. Social psychological research suggests that females are more compliant and less self-reliant than males (e.g. Tittle, 1980). Education is related to taxpayer's knowledge about the tax law. Better educated taxpayers are supposed to know more about tax law and fiscal connections, they are better aware of the benefits and services the state provides for the citizens from the revenues and thus would be in a better position to assess the degree of compliance (see Lewis 1982). On the other hand, highly educated taxpayers can be expected to be more aware of possible governments' wastes, and to have more consciousness of civil duties. Marital status might influence

legal or illegal behavior depending on the extent to which individuals are constrained by their social networks.

In our questionnaire, age was asked as an open ended question. Gender (1=female, 2=male) and marital status (1=married, 2=single) was a dichotomous variable while education was categorical (1=less than high school, 2=Bachelor's, 3=Master's/Doctorate).

# 5.5 Dependent Measures

# Tax Compliance

One of the major problems facing a research into tax compliance is undoubtedly how to measure it. Most researchers use the concept of tax compliance and tax morale in interchangeable meaning, although they are really different. While Robert (1994) and Hasseldine and Hite (2003) use a "noncompliance scale" which consists of items related to cases of noncompliance. However these cases hardly fit to Turkish tax system. Some quasi-experimental and experimental studies (for example Cullis et al, 2012) use self-reported measurement of tax compliance in a hypothetical income and audit probability. If the confidentiality of answers could be ensured, these types of variables can be more close measurement to behavioral intention. Therefore, we used the measurement of compliance in two hypothetical cases by audit probability (definitely non-audit in one case and tax administration possibly will examine declaration in other case). In addition to hypothetical questions, in order to measure tax compliance of taxpayer, two questions of self-declaration on the past behavior and on future compliance intention have been used. Scale coefficient alpha was 0.78.

## 5. Results

Descriptive statistics can be seen from Table 1. Table 1 provides the means, standard deviations, and correlations for the research variables. In addition to these, regression results for the test of hypotheses can be seen in Table 1.

|                   | <u>Mean</u> | <u>S.D.</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> |
|-------------------|-------------|-------------|----------|----------|----------|----------|----------|----------|
| 1. Age            | 39.95       | 10.87       | -        |          |          |          |          |          |
| 2. Gender         | 1.80        | .40         | .117*    | -        |          |          |          |          |
| 3. Education      | 1.55        | .55         | 105      | 119*     | -        |          |          |          |
| 4. Marital Status | 1.21        | .41         | 450**    | 085      | .059     | -        |          |          |
| 5. Tax Compliance | 3.01        | .51         | .179**   | .106     | .015     | 111*     | -        |          |
| 6. Social Norms   | 4.14        | .75         | .013     | 012      | .096     | 028      | .448**   | -        |
| 7. Efficiency of  | 2.53        | .87         | 073      | .139     | .049     | .068     | .037     | 005      |
|                   |             |             |          |          |          |          |          |          |

**Table 1:** Descriptive Statistics and Pairwise correlations

## Tax Administration

<sup>a)</sup>N=321. Every value above |.117| is significant at the 1% level.

**Table 2:** The Results of Regression Analysis for Tax Compliance

|  | Model 1 |        | Model 2 |        | Model 3  |        | Model 4       |        | Model 5  |        | Model 6  |         |
|--|---------|--------|---------|--------|----------|--------|---------------|--------|----------|--------|----------|---------|
| Age  | .008†   | (.004) | .007†   | (.004) | .007†    | (.004) | .007†         | (.004) | .007†    | (.004) | .008*    | (.004)  |
| Gender   | .191†   | (.105) | .194†   | (.097) | .185†    | (.095) | .173†         | (.097) | .179†    | (.096) | .163†    | (.095)  |
| Education  | .012    | (.075) | 038     | (.070) | 026      | (.069) | 029           | (.069) | 026      | (.069) | 018      | (.068)  |
| Marital Status   | 049     | (.114) | 029     | (.105) | 011      | (.103) | 015           | (.103) | 011      | (.103) | .016     | (.106)  |
| Social Norms   |         |        | .374*** | (.051) | 1.648*** | (.338) | 1.655***      | (.338) | 1.940*** | (.380) | 5.328*** | (1.132) |
| Social Norms <sup>2</sup>  |         |        |         |        | 168***   | (.044) | -<br>.169**** | (.044) | 173***   | (.044) | 606***   | (.143)  |
| Efficiency of Tax Administration                                   |         |        |         |        |          |        | .032          | (.044) | .451†    | (.260) | 2.925*** | (.821)  |
| Social Norms X<br>Efficiency of Tax<br>Administration              |         |        |         |        |          |        |               |        | 099      | (.061) | -1.420** | (.421)  |
| Social Norms <sup>2</sup> X<br>Efficiency of Tax<br>Administration |         |        |         |        |          |        |               |        |          |        | .169**   | (.053)  |
| $R^2$  | .0      | 29     | .168    |        | .205     |        | .206          |        | .213     |        | .238     |         |
| R <sup>2</sup> Change  | .02     | 29†    | .139*** |        | .037***  |        | .001          |        | .007     |        | .025**   |         |
| Model F  | 2       | 358    | 12.725  |        | 13.483   |        | 11.615        |        | 10.551   |        | 10.768   |         |

The coefficients and standard error (in parenthesis) are reported.  $\ddagger p < .10; *p < .05; **p < .01; ***p < .001$  (2-tailed), N=321.

#### 6 Hypotheses Testing

To test our research hypotheses, hierarchical multiple regression analysis was run. Firstly we made regression of tax compliance on our control variables (see Step 1 in Tables 2). In our next step we entered social norm to determine the incremental variance attributable to that variable (see Step 2 in Tables 2). We then entered the social norms squared to investigate the nonlinear main effect (see Step 3 in Tables 2). Next, our moderator, efficiency of tax administration, was entered to determine the incremental variance attributable to that variable (see Step 4 in Tables 2). In the next step, we computed the product term for the variables in our two-way interaction and entered it into the regression equation, to test the joint relationship between social norms and efficiency of tax administration (see Step 5 in Tables 2). Finally, we computed the interaction between social norms squared and efficiency of tax administration, and entered it into the equation to test Hypotheses 1 and 2 (see Step 6 in Tables 2). Support for our hypotheses would require statistically significant increases in variance explained ( $\Delta R^2$ ) with the addition of the social norms squared by efficiency of tax administration interactions. Hypotheses 1 and 2 were assessed simultaneously in Table 2. Hypothesis 1 states that social norms will be positively related to tax compliance. Model 2 in Tables 2 reports the results of H1 for tax compliance. In Model 2, social norms is positively related to tax compliance (b= .374, p< .001) Thus, we found support for Hypothesis 1. Hypotheses 2 were assessed in Model 6. The test of Hypothesis 2 evaluated the moderating effect of efficiency of tax administration. Efficiency of tax administration was found to have a significant and positive moderating effect on the relationship between social norms and tax compliance (b = .169, p < .05). Our test examined the moderating effect of efficiency of tax administration on the nonlinear efficiency of tax administration to tax compliance relationship. For social norms, efficiency of tax administration significantly and positively moderated the nonlinear social norms relationship to tax compliance (b = .169, p < .01). To determine whether there was support for H2 it is developed a graph of the above moderating effect, which are shown in Figures 1. In Figure 1 it is illustrated the joint effect of social norms and efficiency of tax administration on tax compliance. Thus, the results provide support for Hypothesis 2.

#### 7 Conclusions and Recommendations

This study examined social norms of taxpayer - tax compliance behavior relationship as well as the impact of effectiveness of tax administration on that relationship. As can be derived from Table 2, the results of the regression analysis for Hypothesis 1 were supported. As mentioned before, social norms of taxpayers were found to be significant predictor of tax compliance behavior ((b= .374, p< .001). In addition, the results of the analyses strongly support Hypothesis 2. In other words, efficiency of tax administration was found to have a significant and positive moderating effect on the relationship between social norms and tax compliance. These results were supported by past studies that individuals' beliefs and perceptions on others' tax compliance level have strongly impact on their compliance and participate level (Falk et al., 2003; Fortin et al., 2007; Frey and Torgler, 2007). This study's results indicate that social norms causally affect tax compliance behavior of taxpayers. In other words, the present evidence indicates that social norms can be both motivations for tax compliance behavior. These results are so important for tax administration. These results should be considered by tax administration in order to design appropriate implementations and policies to maintain tax compliance. In sum, to ensure tax compliance, taxpayers' motivation should be considered by tax administration.

The results of hierarchical multiple regression analysis strongly support Hypothesis 2, which posited that effectiveness of tax administration would moderate social norms and tax compliance behavior relationship was supported. As mentioned above, these results are also consistent with past studies that investigate the relationship between effectiveness of tax administration and tax compliance behavior of taxpayers. These results have shown us, the effectiveness of tax administration is also very important determinant to ensure tax compliance.

Although, this study has several limitations, these limitations may also serve as future extension. Researchers might also further develop the study by conducting the research in different cities or countries since that study is conducted in İzmir and Aksaray cities.

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