

## ANALYSIS OF TURKISH TAXPAYERS' PERCEPTIONS FOR GOVERNMENT TAX PLANNING DECISIONS

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### ABSTRACT

*There is no doubt that two things that everyone will have to face: death and taxes. Neither is liked by anybody in this world but of the two, possibly everyone will prefer taxes to death. In this study, we focus our attention on a region in Turkey to study how individuals' perception of taxes differed across different demography. The demographic factors we cover in this study included age, gender, education level and income level and so on. But we report our findings on education level only. We examined individuals' perception of the purpose of tax, awareness of tax and equity of the tax structure. We found that the perception of the purpose of taxation differed across education level. We found that perception on how to increase awareness of taxation also differed across different education level. Most persons with low educational levels learned about the tax structure from their accountant whereas those with higher education learned from media. Finally, there was no significant difference across different educational levels as far as the equity of tax structure was concerned.*

**Keywords:** *Turkish, Taxpayer, decision*

### 1. INTRODUCTION

The purpose of the study is to analyze the perception of tax payers toward income tax. Taxes are required to generate revenues for governments to provide the services the general public needs. Taxpayers' perception differs based on the various factors.

Additionally, the way taxes are used by the government changes the perception of the taxpayers. Accountants play a key role to resolve tax related issues. The understanding of the attitude of the taxpayers help regulatory authorities to determine the communication strategy that will best work for an increase or decrease of the taxes.

Therefore, such studies are helpful for taxpayers as well as for governments to make well-informed decisions. When governments make decisions based on taxpayers' perceptions and reactions, implementation of taxes are successful with minimum issues. Therefore, an effective and efficient taxation system takes into considerations of the taxpayers' perceptions and reactions related to tax liabilities. In this study, we study

the perceptions of taxpayers and test certain hypotheses based on demographic characteristics. This paper is organized to provide a brief literature review, development of hypotheses, description of research methodology, analysis of the findings and a conclusion after a brief discussion of the findings.

### 2. LITERATURE REVIEW

Tax perception leads to actions (tax compliance or tax evasion) which could reduce the revenue for any government reducing the government's ability to provide services to its citizens.

Most conservatives believe that if the tax rate is perceived to be high everyone find ways to reduce their taxable income whereas if the tax rate is perceived to be low, the revenue to the government will be high. Alm, Jackson and McKee (1992) found that higher tax rates led to lower level of compliance.

Alesina and Angeletos (2005) demonstrated that the perception of fairness leads to the choice of tax schemes. Ballard and Gupta (2018) found that the perception of tax rates was higher than actual rates if they felt that the government was not using their tax dollars effectively.

Bartels (2005) presented that individuals' perception about taxation was solely based on the rates rather than the reality where the difference between the tax rates and the government's services is more important than just the tax rate. So, in Bartels' view, the more complex the tax scheme the less knowledgeable the public was. Ipek and Kaynar (2009) argued that the knowledge of taxpayers' views on taxation will help the government establish an efficient and effective tax structure.

Demir (2006) found that not only society's view on compliance but also the taxpayers' perception of the tax burden affected compliance. Torgler, Demir, Macintyre and Schaffner (2008) studied the causes and consequences of tax morale on compliance. Torgler *et al.* (2008) reported that higher the tax morale higher was the tax compliance.

Another interesting element about Torgler *et al.* study is that they report US taxpayers' view as well as Turkish taxpayers' view thus providing a base for comparing our study which is based on surveying Turkish taxpayers in one of the provinces in Turkey. Blaufus, Bob, Hundsdorfer, Sielaff, Kiesewetter and Weimann (2015) studied the perception of German taxpayers with respect to individual taxpayer's estimate of their tax burden and found that most taxpayers overestimated their tax burden.

These studies examined above indicated that the perception of individual taxpayers mattered when one was concerned about the revenue from tax collection the government would get. Next we review literature on what factors affect individual taxpayers' perception.

Taxpayers' perception depended on many factors. Fujii and Hawley (1988) in their study examined whether the differences in age, education, gender and employment status had any impact on the perception of taxes (This perception was about whether the marginal tax rates estimated by the individual was different from the real marginal rates). They found that age did not have much impact on the perception. However, the gender difference and education did have an impact on the tax perception.

Another element which affected the perception of the tax was taxpayers' opinion on whether the tax system was fair. Richardson (2005) found that the taxpayers' perception reflected their views on the fairness of the tax structure. If they felt that the tax system is fair then, their tax morale is high. Richardson (2006) tax evasion and how the differences in demographic characteristics of taxpayers could explain the reasons for their tax evasion. Though we wanted to understand the link between demographic characteristics and their tax perception, tax evasion is the flip side of tax compliance and hence we could use these linkages to refer to their perception of tax. Richardson reviewed extensive literature that studied the following demographic characteristics: age, gender, education, income level, income source and marginal tax rate.

Richardson (2006) was a country-level analysis in that it was not based on individual taxpayer feedback. Most research in this stream is based on assessing individual's over/under estimation of marginal rate and not on their opinion of the tax system. So, in our research, we focus on individual taxpayers' opinion of the tax system.

Reviewing other research in the above stream, Blaufus *et al.* (2015) did not find any significant difference between people with higher degrees and people with low level of education with respect to their estimates of the tax burden. Earlier studies we reviewed had somehow assumed that everyone was aware of the purpose of tax – to meet the cost of services provided to the public.

The same is true about issues related to awareness. Again, this could be the idiosyncratic nature of the people involved. The perception of fairness was examined by many studies and all researchers has

hypothesized that higher is the level of education, lower will be the error in estimating whether the tax burden was fair or not. If the public felt that the tax rate was not fair, then many researchers found lower level of tax compliance. Given these realities perception of tax rates is important not only to government but also to individuals. In this study, we examine the perception of the purpose of the tax, tax awareness, sources of tax awareness, tax equity and their view on tax amnesties.

### 3. HYPOTHESES DEVELOPMENT

In our research, we examined most demographic characteristics listed by Richardson. But, in this study, we report our findings only on limited number of attributes and hence even in the hypotheses development section, we focus only on those demographic characteristics on which we report our findings.

Since people with higher education understand tax laws and their intent (as presented by politicians) better, we hypothesize that higher the level of education better is the understanding of the purpose of tax. That is:

H1: *The level of education will have significant impact on the perception of the purpose of taxation.*

If a person had higher education, they will be aware of the tax laws and hence will be able to participate in the discussions on fairness of the tax laws. So, higher the education level, more aware the individuals would be. So, one would expect that the level of education will affect the choices suggested by participants to improve tax awareness. That is:

H2a: *There will be significant impact on the ways to improve the awareness of taxation and education.*

The second issue that we examined was to understand how the public learned about the tax laws. Higher the level of education, the probability of learning from published media would be high. That is, highly educated individuals learn on their own whereas persons with lower level of education will have to get it from somebody else. So, we hypothesize that the level of education will have significant impact on how we become aware of tax laws and changes in tax laws. That is:

H2b: *The level of education will have a significant impact on the choice of the source of tax awareness.*

The third area studied was the perception of equity. As Blaufus *et al.* (2015) found most participants overestimated their tax burden. They argued that higher is the level of education, better would be the understanding of tax laws and hence lower would be the error in tax estimates. In a similar vein, we argue that higher is the level of education, higher is the understanding of the purpose of tax laws and hence higher will be the perception of equity. Hence, we hypothesize that the level of education will affect the perception of equity significantly. That is:

H3a: *The level of education will have significant impact on the perception of equity.*

Most taxpayers tended to feel that higher levels of taxes are not equitable. Since highly educated individuals understand the tax laws and their purpose, they would know the cause for the public's feeling of inequity more accurately than those who are not that well educated.

Another reason why the less educated would not be able to express the cause of the feeling of inequity is that they spend more time working and have less time to talk and discuss with other taxpayers. So, the taxpayers with lower level of education will not be able to understand the cause of their feeling of inequity. That is, the level of education will affect their choice of the cause of inequity. That is:

H3b: *Individual's choice of the cause of felt inequity will be affected significantly by their level of education.*

Tax amnesties are announced when a government felt that the non-compliance has reached record levels and try to get people to comply with tax laws so that the government can collect the unpaid tax. Most of the

time such tax amnesties waive the penalty so that people could pay the tax according to the law of that year. Most people who failed to comply with the law did so because they could not come up with the funds to pay the tax at the right time. Then, they have to find the funds to pay the penalty and the interest on the unpaid tax. Highly educated individuals understand the purpose of tax amnesties and so will choose the correct reason compared to people with no higher education. That is:

H3c: *The level of education will affect significantly the view on tax amnesties.*

In the next section, the research methodology will be discussed.

#### 4. RESEARCH METHODOLOGY

The study was conducted using surveying taxpayers from a province in Turkey. The survey was designed ensuring to get adequate information to test our hypotheses. There were 45 questions in the questionnaire to test our hypotheses though responses to not all 45 questions are discussed in this paper.

The questionnaires were provided to randomly selected taxpayers in one of the provinces in Turkey to measure their perceptions about taxes and other related issues. The number of acceptable responses was 350. The data was analyzed using SPSS version 20.0 to perform statistical tests. Statistical measures included frequency, percentage distribution, t-test, p-value, chi-square test and others to measure demographic and perception related questions.

The variations and relationships between the groups (categories) of independent variables were considered "significant" where p-value ( $p < 0.05$ ). If the findings were significant (i.e.,  $p < 0.05$ ), then the results were analyzed further to understand what factors led to such significant results.

#### 5. DATA ANALYSIS

The following table show the distribution of the sample based on gender and education level. Though the questionnaire covered many demographic characteristics, only gender and education are reported in Table 1 below.

<b>Variable</b>	<b>Characteristics</b>	<b>Frequency (f)</b>	<b>Distribution (Percentage)</b>
Gender	Female	43	12.3
	Male	307	87.7
Level of Education	Elementary	68	19.4
	High school	188	53.7
	Bachelor's degree	81	23.1
	Master's - PhD	13	3.7

The sample had disproportionately large number of male respondents. The working population in Turkey had 28% of female population employed whereas 65% of male population employed (OECD, 2019a). The second reason could be the fact that most female taxpayers are always short on time. They have to work not only outside their home but also work extensively inside their home. Most females who did not work would not be in the list of taxpayers.

Also, since surveys are usually voluntary, this distortion could be amplified. That is female taxpayers might not have responded as much as male taxpayers. But despite this distortion, this sample could be viewed to be representative of the population because of the proportionalities. In a similar vein, over 44% of the

population between 25-34 age group did not have post-secondary education (OECD, 2019b). this explains why a large % of this sample had less than graduate level education.

The taxpayers' perceptions on three areas are presented in the following tables. Survey participants' perception on the purpose of tax collection is provided in Table 2.

Variable	Option	Frequency	Percentage
Perception of the Purpose of Tax Collection	Providing Public Services	59	16.9
	Required Payment	71	20.3
	Civic Duty	144	41.1
	Financial Burden	48	13.7
	Prevention of Entrepreneurship	28	8.0

Of the five views on the purpose of tax collection, most thought it was about carrying out a civic duty.

A few somehow thought that the tax was to discourage entrepreneurship though most governments are sensitive to small and medium enterprises and protect them by reducing their tax burden and providing assistance in tax software.

Participants' responses on their perception on how tax awareness could be improved and the source of tax laws and their own tax burdens are presented in Table 3.

The first issue address was how taxpayers became aware of their tax. Most have picked up education and training and by eliminating tax inequity. Some suggested that reducing tax rates and increasing per capita income could help increasing awareness. The second issue was to know the source of tax awareness.

As the education level was skewed, so is the response to this question in that most chose their financial advisor or accountant clearly indicating most taxpayers did not venture into learning about the tax system and filing their own taxes. Very few had indicated popular press.

How can tax awareness be raised in our country?	By eliminating tax inequity	250	71.4
	By education and training	296	84.6
	By reducing tax rates	107	30.6
	By preventing lavish public expenditures	76	21.7
	By increasing per capita income	117	33.4
Where do you learn about the tax legislation and relevant developments?	From the press	29	8.3
	From my financial adviser or accountant	292	83.4
	My magazine subscriptions	12	3.4
	I do not monitor the legislation	14	4.0
	Other	3	0.9

The taxpayers' perception regarding tax equity was investigated by three questions given in following table – Table 4. On the question on equity, most taxpayers felt that the tax was not equitable. As for the cause of inequity, the most popular answer as tax amnesties offered by the government.

Certainly, the responses to the question on tax amnesty reflected why they chose tax amnesty to be the reason for them feeling inequity. It is very clear that sincere taxpayers do not want government to announce tax amnesties.

<b>Variable</b>	<b>Option</b>	<b>Frequency</b>	<b>Distribution (Percentage)</b>
Do you believe that taxes imposed in our country are equitable?	Equitable	10	2.9
	Inequitable	80	22.9
	Very inequitable	260	74.3
If taxes are inequitable, what do you think the reason is?	Because tax evasion is common	197	56.3
	Because tax penalties are inadequate	184	52.6
	Because the government frequently offers tax amnesty	227	64.9
	Because tax laws are inadequate	169	48.3
	Because tax awareness is lacking	191	54.6
What do you think about tax amnesties?	Honest taxpayers are being punished	132	37.7
	They undermine tax equity	143	40.9
	Very beneficial	8	2.3
	They undermine people's confidence in the government	50	14.3
	No positive or negative impact	17	4.9

## 6. FINDINGS OF HYPOTHESIS TESTING

Hypothesis testing was conducted by chi-square ( $\chi^2$ ) tests. Though we conducted chi-square ( $\chi^2$ ) tests across each of the demographic variables collected, in this paper we report only the findings on the hypotheses listed above.

The hypothesis 1 deals with impact of the level of education on the perception of the purpose of taxation. The chi-square test found significant relationship between the level of education and the perception of the purpose of taxation ( $\chi^2 = 70.44$  and  $p < 0.001$ ).

The residual analysis found that participants with lower of education level felt that the taxes were for the government to provide services to the public and a required payment whereas participant with higher level of education were of the opinion that it is more a civic duty.

The second set of analyses were conducted to test whether education level had an impact on awareness of taxation and the source of their awareness. The hypothesis 2a stated that the level of education will have a significant impact on the participants' suggestions to increase the awareness of taxation. As anticipated, a significant relationship was found between the level of education and the reducing the tax rates to increase the tax awareness.

The residual analysis indicated that the participants with lower level of education believed that decreasing tax rates will increase the tax awareness whereas participants with higher level of education did not agree with that idea.

In hypothesis 2b, we argued that the higher is the level of education, the more the participants learned from published media whereas participants with lower level of education were not as aware of tax laws as participants with higher level of education.

A significant relationship was found between the source from which respondents learn about the tax legislation and developments and their level of education ( $\chi^2 = 135.39$  and  $p < 0.001$ ). the residual analysis

found that participants with higher level of education learned about the tax laws mostly from the media whereas participants with lower level of education depended on their financial advisor or accountant.

The third set of hypotheses were related to the participants' perception of the equity of taxes. Hypothesis 3a suggested that the level of education will have a significant effect on their perception of the equity of taxes. That is higher the level of education, lower will be their perception of inequity.

A chi-square test was conducted to determine whether there was a significant relationship between the respondents' perception that the taxes imposed were equitable and their educational level and we did not find any significant relationship between the level of education and perception of equity of taxes ( $p > 0.05$ ).

In hypothesis 3b, we suggested that the level of education of the participant will have a significant impact on their view of the reasons for the perception of the taxes being inequitable. A chi-square test was conducted to determine whether there was a significant relationship between the answers given by the respondents to the question on the reason underlying inequitable taxes and their educational level. There is no significant relationship between the educational level of taxpayers and their choice of the reasons for the perception of tax being inequitable ( $p > 0.05$ ).

In hypothesis 3c, we related the level of education of the respondent to their view of tax amnesties. A significant relationship was found between the level of taxpayers' education and their view of tax amnesties ( $\chi^2 = 38.25$  and  $p < 0.001$ ). According to the residual analysis carried out following the chi-square test, it was found that taxpayers with higher level of education felt that tax amnesties undermined tax equity. The taxpayers with higher level of education also felt that the honest taxpayers were unduly punished.

## 7. DISCUSSIONS

In this study, we examined taxpayers' perception of tax on certain dimensions and tested hypotheses on the impact of the level of education on such perceptions. The level of education affected the perception on the purpose for which the tax was collected. This hypothesis was supported by the statistical analysis and a related analysis also confirmed that the best way to increase tax awareness was by education and training.

The hypotheses on the level of education and tax awareness and source of information on tax found statistical support. Though the hypothesis on link between the level of education and their perception of tax equity was not supported statistically, this finding was similar to Blaufus et al. (2015) finding that taxpayers all levels of education consistently overestimated their tax burden. The hypothesis on the reason for finding tax to be inequitable also did not find statistical support.

The hypothesis on the source of tax awareness and the level of education found statistical support. As anticipated taxpayers with higher level of education were aware of tax based on the information available on media whereas taxpayers with lower level of education obtained information on tax from their financial advisor or their accountant. Though we found statistical support for the level of education and taxpayers' perception on tax, this finding is limited due to the fact that data was collected in a province from Turkey and such finding may not be generalizable.

Further exploration into the data will be required to confirm whether or not these findings can be generalized across other populations and other countries. One implication for further research and practice is that educating taxpayers early on the purpose of tax and the reasons for the nature of the tax structure may find support for the tax as well as have implications for compliance.

## 8. CONCLUSION

Taxes cause a certain amount of reduction in the disposable income available to individuals, and are in most instances mandatory rather than voluntary. So, most taxpayers have negative image of the tax liability.

*“The attitude and behavior (reactions) of taxpayers toward taxes is associated with their demographic characteristics, understanding, and culture, as well as other external factors. Irrespective of measures taken regarding the taxation practices and taxation structures introduced, it is not possible to completely eliminate these negative reactions of taxpayers toward tax, because it is not easy for individuals to give away part of their income to the government”* (Hellac 2018). For this reason, the methods and practices to be introduced will intend to minimize the negative perceptions of tax, rather than eliminating the negative perceptions altogether. Our findings suggest that higher level of education will certainly reduce the negative perceptions of taxpayers. This study contributes to the existing literature related to tax payers’ perception towards taxes in Turkey. We intend to explore opportunities of research in different geographical area using similar methodologies.

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