A COMPARATIVE ANALYSIS OF TURKISH AND RUSSIAN BUSINESS MANAGEMENT STUDENTS ON THE ETHICS OF TAX EVASION

VERGİ KAÇIRMA ETİĞİ ÜZERİNE TÜRK VE RUS İŞLETME YÖNETİMİ ÖĞRENCİLERİNİN KARŞILAŞTIRMALI BİR ANALİZİ

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ABSTRACT

This study aims to analyze the views and thoughts of Turkish and Russian business management students on the ethics of tax evasion by conducting a statement-based survey in Turkey and The Russian Federation. In the analyses, T-Test and Mann Whitney Test show that there is no significant difference between two groups of students on the statement *of justifiability of tax evasion if the tax system is unfair, if the money collected is wasted and winds up in the pockets of corrupt politicians or their close ones and, if the government violates human rights. In further analysis, K Means Clustering Analysis shows that Turkish and Russian students generally differs on ethics of tax evasion, while Logistic Regression is used to find out which statements are important on the classification of nationalities.*

ÖZET

Bu çalışma, Türkiye ve Rusya Federasyonu'nda işletme eğitimi gören Türk ve Rus öğrencilere önermelere dayalı anketler uygulayarak vergi etiği konusundaki görüş ve düşüncelerinin analizini amaçlamaktadır. T-Testi ve Mann Whitney U testi analizleri, vergi sisteminin adaletsiz olması, vergi gelirlerinin gereksiz yerlerde israf edilmesi ve siyasetçilere ve yakın çevresine aktarılması ile devletin insan hakları ihlalinde bulunması durumlarında vergi kaçırmanın ne kadar haklı görülebileceği konusunda öğrenciler arasında anlamlı bir farklılık bulunmadığını göstermiştir. Ayrıca çalışmada K Means Kümeleme Analizi vasıtasıyla Türk ve Rus öğrencilerin vergi kaçırma etiği konusunda genelde farklı düşündükleri tespit edilirken; vergi kaçırma konusundaki hangi önermelerin milliyetleri ayırt etmede önemli olduğunu bulmak amacıyla da Lojistik Regresyon analizi kullanılmıştır.

Tax Evasion, Tax Morale, Corporate Finance and Governance, The Russian Federation
Vergi Kaçırma, Vergi Ahlakı, İşletme Finansı ve Yönetişim, Rusya Federasyonu

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1. INTRODUCTION

Studies on tax evasion and tax ethics that have the main determinants of tax systems, socio-cultural, political and economic factors has increased dramatically in Turkey as well as in the world in recent years. While studies on tax evasion in literature of our country has been generally made just for Turkey; the studies aiming to find out the differences between our country and others has been rarely done. However, the scientific comparison of differences and similarities on tax ethics between other countries and Turkey is important in determining the situation of tax ethics in Turkey. In particular, to compare the degree of tax ethics between an economy which has been transformed from centrally planned economies to free market economies and just introduced modern tax practices and Turkey which has been implementing free market economy since the early 1980s, will be an important indicator to asses the level Turkey has reached.

For this purpose, this study analysis the similarities and differences on perception of ethics of tax evasion of the undergraduate students who are expected to be future's entrepreneurs and managers in Turkey and The Russian Federation via survey method. The survey on ethics of tax evasion used, is prepared by Robert McGee who has conducted several survey-based studies on this subject in different countries including Turkey.

In the study, The Independent Samples T Test, Mann Whitney U Test, k-means clustering analysis and Logistic regression are used. Analyses were performed by using the SPSS 17.0. The Independent Samples T Test and Mann Whitney U Test show that there is no significant difference between two groups of students on the statement of justifiability of tax evasion if the tax system is unfair, if the money collected is wasted and winds up in the pockets of corrupt politicians or their close ones and, if the government violates human rights. In further analysis, K Means Clustering Analysis shows that Turkish and Russian students generally differs on ethics of tax evasion, while Logistic Regression is used to find out which statements are important on the classification of nationalities.

Although Turkish and Russian students generally differs on ethics of tax evasion, the study shows that both Turkey and Russian Federation should take measures to make their tax system fairer and to strengthen legal sanctions for violations of human rights and corruption because of the similarities on tax evasion ethics.

2. REVIEW OF LITERATURE

Tax evasion can be defined as the wilfull and fradualent reduction of the tax by the taxpayers and tax responsibles and the third persons who have a legal relationship with these people by the violation of the provisions of tax laws in wider context ranging from the interpretation of tax laws to creative accounting tricks.

Jackson and Milliron (1986) who studied first major review of literature on this subject observe 14 main factors for tax evasion. Authors list the factors that are divided in to three groups as follows: Age, gender, level of education, occupation (Demographic Factors), income level, income resource, marginal tax rate, sanctions for tax evasion, probability of detection (Economic Factors), complexity of tax laws, tax fairness, tax authority, compliant peers, ethics or tax morale (Behavioural Factors)

Riahi-Belkaoui (2004) who is among the researchers studied this subject in recent years finds in his analysis including 30 countries that voluntary tax compliance is positively related to level of economic freedom, importance level of capital markets, efficiency of competition law and high ethic norms. Torgler (2004) in his analysis including seven Asian countries reports that trust in government and legal system have a positive effect on tax morale. Richarson (2006) in his analysis including 45 countries finds out that non-economic factors has the most important effect on tax evasion and especially complexity is the most important factor on tax evasion. He reports the other important factors as education, source of income, fairness and tax morale. Torgler (2006), in his study about religion effect on tax morale in 32 countries performed by using datas of World Values Survey finds that church attendance, religious education, religious guidance and trust in church improve the tax morale. Picur and Riahi-Belkaoui (2006) in their analysis including 30 developed and developing countries reports that voluntary tax compliance is at its highest level in the countries having low level of red tape and high level control of corruption. McGee (2006) in his study including 33 countries observed that olders are more opposite to tax evasion compared to younger ones. He claims that this is result of the fact that as people get older, they become more royal to state and authority. He also argue that people getting lower income and low level of education are more opposite to tax evasion compared to people having higher income and higher level of education.

Many researchers observed that developed western countries have higher tax ethics compared to developing countries. According to Alm and Torgler (2006), who analysed 15 EU countries and USA on tax morale by using the datas of World Values Survey, citizens of USA are the ones who have highest tax morale and he also reports that there is a negative correlation between shadow economy and tax morale. McGee, Nickerson, and Fees (2006), in their survey which is used in this study indicate that the strongest tendency to justify tax evasion for undergraduate and mba students who study in Germany and USA is in cases where government abuses human rights. Lavoie (2009) observes high level of compliance in most western democracies and finds that trust in government and trust in other taxpayers are major forces to this compliance. Hammar et al. (2009) in their study including ten different taxes in Sweden show that those who do not trust their fellow citizens are more likely to believe that they are evading taxes, but distrust in politicians has an even greater effect. Wärneryd and Walerud (1982) in analysis based on interviews with 426 adult men determine that younger ones are more opportunist on tax evasion compared to older ones.

There is no enough scientific studies in tax evasion literature about The Russian Federation. Alm et al. (2006), in their analysis performed by using the datas released by World Values Survey and European Values Survey for the years of 1991, 1995 and 1999 when The Russian Federation was transformed from planned economy to free market economy, observed that the government was unsuccessful on building tax systems which highlights tax morale and designing tax authority and the state. In their study they report the most important factors effecting the individual's tax morale in The Russian Federation determined as trust in government and other taxpayers' will to pay. They also discovered that tax morale differs among the regions because of ethnic, financial and economic factors. They asserted that poorer regions and the regions where it is believed that they are exploited by Moscow have lower tax morale than regions with a higher level of prosperity.

In his study Mironov (2006) used the data of banking transactions and finds that tax evasion is highly related to regional corruption and negatively correlated to foreign inverstment in Russia Federation. Interestingly, Mironov reports that largest tax evaders in this country are State Economic Enterprises. Mironov also determines that as of 2004, tax evasion volume reached to 6,4 percent of GDP, 60 percent of Russian companies evaded the tax, the amount of evaded tax of a firm exceeded the 40 percent of paid tax and small and medium sized companies evaded about 40 percent more taxes than the large companies. Mironov (2010), in his other analysis studying 46,965 firms, estimates that average firms diverted 5.7% (31.2%) of their revenue (assets) per year through off-shore companies.

By conducting the survey used in this study on 79 business management students in Kazakhstan that emerged with the collapse of the Soviet Union and having socio-economic similarities with The Russian Federation, McGee and Preobragenskaya (2007) find out that respondents justified tax evasion in case that tax system is unfair and the government makes corruption, and waste the tax revenues. McGee (2005) used the same survey for the business students in Romania and indicates that respondents most justified tax evasion in case of that tax system is unfair.

Riahi-Belkaoui (2004) ranked Turkey as one of the three countries with the lowest rating with 2,07 points in voluntary tax compliance among 30 countries which were scaled between 0 and 6 points. Saruç and Sağbaş (2003) reports that the taxpayers who are graduated from university have higher tax ethic than the ones who are not graduated from university. And they observed that female taxpayers have higher tax ethic than male ones. Gökbunar et al. (2007) find out that age, gender, employment status, level of religiosity and loyalty to democracy has statistically significant effect on tax morale

3. DEVELOPMENT IN TAX REGIME AND TAX EVASION METHODS IN THE RUSSIAN FEDERATION

There are lots of studies on tax regimes and tax evasion in Turkey. For that reason, this section focuses on development in tax regime and tax evasion methods in The Russian Federation that is less known in Turkey.

In order to revise the antiquated tax system of Soviet Union and to reduce the tax burden and the number of tax on companies and individuals, significant changes in the tax regime has been made in The Russian Federation and flat-rate tax of 13% for individuals came in to force. At the beginning of 2002, corporate tax rate was decreased to 24% from 35%. At the beginning of 2004, the rate of VAT was reduced to 18% from 24% and regional tax rate of 5% was removed. As a result of these efforts, a significant increase in tax revenues was observed, for example, in 2007, tax revenues rose 30 percent on an annual basis (Pogorletskiy and Söllner, 2008). However, despite these changes in the The Russian Federation's tax regime, tax evasion is still high in this country.

There are three main tax evasion methods in The Russian Federation: "Legal", "illegal" and "semi-legal" (Mironov 2006). In legal method, companies use off-shore firms which are located at home or abroad and pays lower tax rate to get profit accumulation. Illegal method includes underreporting of revenues and "black cash transactions"

The most popular semi-legal tax evasion method in Russia is to decrease the taxable incomes by inflating the expenditures by fake contracts. For example The company A, wishing to reduce the taxable income of 1000 Dollars, deals with The company B for taking consulting services and pays 1000 Dollars, but it gets 1000 Dollars back for a small commission (generally 2 -3 %) on the same day. So-called consulting companies which are called "Dump", "flashlight", "bruise" and "hedgehog" operate fictionaly, pay no tax and disappear within 6 months and two years. Tax evasion by using this kind of companies includes long chain of transaction, transaction appears legitimate when analyzed separately but the whole process is illegal.

4. PERCEPTION OF TAX EVASION IN TURKEY AND THE RUSSIAN FEDERATION IN THE LIGHT OF WORLD VALUES SURVEY AND CORRUPTION PERCEPTION INDEX

Ethical perceptions of the citizens of Turkey and the The Russian Federation, in the light of The World Values Survey and The Corruption Perception Index (CPI) developed by Transparency International that are frequently used in the studies on tax morale and tax evasion literature, are explained by the tables below.

Table 1 shows the tax evasion perceptions of Turkish and Russian citizens by the years using the datas of The World Values Survey.

Table 1: Ethics on Tax Evasion of Turkish and Russian Citizens in World Values Survey**

Results		Turkey (1990)	Turkey (2001)	Turkey (2007)	The Russian Fed. (1990)	The Russian Fed. (1995)	The Russian Fed. (1999)	The Russian Fed. (2006)
Justifiable: cheating on taxes	Never justifiable	90.0 %	92.0 %	80.5 %	53.0 %	46.6 %	45.6 %	51.3 %
	2	4.3 %	4.9 %	12.5 %	9.1 %	9.0 %	10.7 %	7.4 %
	3	2.7 %	1.5 %	4.0 %	8.5 %	8.3 %	9.5 %	7.1 %
	4	1.2 %	0.2 %	1.1 %	4.7 %	5.6 %	6.3 %	6.4 %
	5	0.3 %	0.3 %	1.1 %	8.7 %	10.9 %	11.3 %	11.3 %
	6	0.9 %	0.1 %	0.2 %	3.0 %	3.3 %	3.1 %	4.0 %
	7	-	-	0.2 %	2.9 %	4.4 %	4.0 %	3.2 %
	8	0.2 %	0.3 %	0.1 %	4.1 %	4.2 %	4.2 %	2.3 %
	9	0.1 %	-	0.1 %	1.6 %	2.2 %	1.5 %	1.9 %
	Always justifiable	0.4 %	0.6 %	0.3 %	4.5 %	5.4 %	3.9 %	5.2 %

* The years the surveys are conducted are different for each country.

Source: World Values Survey Association (2009), http://www.worldvaluessurvey.org, 20.11.2010

As it can be seen from World Values Survey, the ratio of citizens who never justifies tax evasion is highly different between two countries in expense of The Russian Federation citizens. This difference which nears to 45 points in nineties, and falls to the level of 30 points in last surveys.

The ratio of Turkish citizens who never justify tax evasion fell down to 80,5% in 2007 from the level of 90% in 1990. However, Turkey was ranked among the first five countries within 57 developed and developing countries for the ratio of citizens who never justify tax evasion. In the survey of 2001, opposition to tax evasion was quite higher compared even to year of 1990. This may be interpreted as the perception that tax evaders are the main reason for the negative effect of crisis on people. When 17 years of surveys is analysed as a whole, it can be seen that the ratio of citizens in Turkey who think that tax evasion is not correct in any circumstances decreased by a significant trend.

According to the Survey, while the ratio of citizens in The Russian Federation who never justify tax evasion in any circumstances in nineties, the time when Soviet Union collapsed, constantly decrased, in 2006 it reached to the level in 1990. while the reason for the decline in the 1990s was the

problems in the transition to a market economy, the figures of 2006 can be seen as a reflection of positive developments in tax regimes.

The results of the research among the citizens who have higher level of education are given in Table 2. When these results are generally interpreted, it is seen that the ratio of citizens who never justify tax evasion in any circumstances both in Turkey and The Russian Federation, are lower than general population.

Table 2: Ethics on Tax Evasion of Turkish and Russian Citizens Who Had Higher Education in World Values Survey

Results		The Russian Federation (2006)	Turkey (2007)
		Higher Educated Ones (%)	Higher Educated Ones (%)
Justifiable: cheating on taxes	Never justifiable	48.7	79.6
	2	6.3	13.6
	3	6.7	2.7
	4	7.4	1.4
	5	12.0	1.5
	6	5.0	0.8
	7	3.3	-
	8	2.9	-
	9	2.4	-
	Always justifiable	5.3	0.6

Source: World Values Survey Association (2009), http://www.worldvaluessurvey.org, 20.11.2010

As it can be seen from the literature review above, one of the most important motives of tax evasion is the distrust of politicians. The results of the Corruption Perception Index (CPI) developed by Transparency International to measure the degree of corruption perceptions among public officials and politicians, are summarized in Table 3 for two countries, as of 2009. In the index which scores from 1 to 10, "1" indicates highest corruption perception. As one can see in the Table 3, confidence in public officials and politicians in The Russian Federation is significantly less compared to Turkey.

Table 3: Corruption Perception Index (CPI) Points in Turkey and
The Russian Federation

Rank	Country	CPI 2009 Points	Number of Surveys	Confidence Interval
146	The Russian Federation	2,2	8	1.9 - 2.4
61	Turkey	4,4	7	3.9 - 4.9

Source: Transparency International (2009), http://www.transparency.org, 20.10.2010

This result can be interpreted as that democratic customs and basic rules and institutions of free market economy does not fully function in The Russian Federation.

5. AIM, SCOPE AND METHOD OF THE STUDY

The aim of this study is to find out the differences on ethics of tax evasion among undergraduate students in the department of business management in Turkey and The Russian Federation via survey method.

In this study, I have analyzed the similarities and differences on perception of ethics of tax evasion of the undergraduate students who are expected to be future's entrepreneurs and managers in Turkey and The Russian Federation that have similar characteristics and intensive trade relations with Turkey.

Respondents from Turkey of this study include the 82 undergraduate students in the department of Business Management of Faculty of Economics and Administrative Sciences of University of Balıkesir while The Russian Federation respondents include 50 undergraduate students in the Department of Business and Management in Moscow University Touro

The survey on ethics of tax evasion used is prepared by Robert McGee who has conducted several survey-based studies on this subject in different countries including Turkey. In this study 16 out of 18 statements constructed by him are used.

The students were asked to rate each statement of the survey using seven-point Likert Scale (1 = strongly agree 7 = strongly disagree). The surveys were distributed to 93 Turkish students and 63 Russian students during their lessons. Eleven surveys from students studying in Turkey, 13 surveys from students studying in the The Russian Federation were excluded from evaluation for various reasons.

In the analysis, initially, Cronbach's α (alpha) coefficient is calculated to measure of the internal consistency of the survey and then Hotelling's T-square test is made. The Independent Samples T Test and Mann Whitney U Test have been applied for the mean differences of two countries of the scores given to statements and then k-means clustering analysis has been used to test the importance of nationality for partition to the sets.

Logistic regression is used to find out which statements are important to determine nationalities of the respondents. Analyses were performed by using the SPSS 17.0.

6. FINDINGS AND ASSESTMENTS OF THE STUDY

A total of 132 usable responses were obtained. Responses by gender are shown in Table 4

Table 4: Responses by Gender

University – Department	Number of usable responses	Number of Female students	Number of male students
The Russian Federation - Moscow University Touro, Bachelor of Science in Business & Management	50	23	27
Turkey – Department of Business Management of Faculty of Economics and Administrative Sciences of University of Balıkesir	82	46	36

To measure of the internal consistency of the survey, reliability analysis has been performed via Cronbach's α (alpha) coefficient which is useful to find out reliability of the tools which are sensitive to scales (Likert and Q Type) based on total scores. The scale is highly reliable if the Cronbach's α (alpha) coefficient is "$0,60 \leq \alpha < 0,80$". As it can be seen on Table 5, Cronbach's α (alpha) coefficient of the survey is found out as 0,775. So the value of the coefficient shows that the survey is highly reliable.

Table 5: Cronbach Alfa Coefficient

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,775	,784	16

On the other hand, Hotelling T^2 is calculated to find out if the means of statements are equal to each other and accordingly the statements are perceived by the respondents by the same approach. As it can be seen from Table 6, the value of Hotelling T^2 is calculated as 21,11. This result shows that the means of statements are not equal.

Table 6: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
355,205	21,110	15	115	,000

For the analysis of differences in scores which Turkish and Russain students has given to the statements, the Independent Samples T Test for parametric analysis and Mann Whitney U Test for non-parametric analysis have been applied. For the measurement of the ethical values of Turkish and Russian students on tax evasion, following hypotheses are tested.

H_0: There is no significant difference between Turkish and Russian students on the ethics of tax evasion.

H_1: There is a significant difference between Turkish and Russian students on the ethics of tax evasion.

significance level is accepted as 0,05

Table 7 gives the country averages on ethics of tax evasion of Turkish and Russian students. As one can see from the table, general average score on ethics of tax evasion is 4,95 for Russian students while the score of Turkish students is 4.

Table 7: Country Average of Turkish and Russian Students on Ethics on Tax Evasion

	Statement	Average of Turkish Students	Average of Russian Students
1	Tax evasion is ethical if tax rates are too high.	5,15	3,88
2	Tax evasion is ethical even if tax rates are not too high because the government is not entitled to take as much as it is taking from me.	6,09	4,44
3	Tax evasion is ethical if the tax system is unfair.	3,78	3,18
4	Tax evasion is ethical if a large portion of the money collected is wasted.	3,38	3,20
5	Tax evasion is ethical even if most of the money collected is spent wisely.	6,61	5,38
6	Tax evasion is ethical if a large portion of the money collected is spent on projects that I morally disapprove of.	4,33	3,34
7	Tax evasion is ethical even if a large portion of the money collected is spent on worthy projects.	6,66	5,18
8	Tax evasion is ethical if a large portion of the money collected is spent on projects that do not benefit me.	5,50	4,24
9	Tax evasion is ethical even if a large portion of the money collected is spent on projects that do benefit me.	6,26	4,44
10	Tax evasion is ethical if everyone is doing it.	5,68	4,64
11	Tax evasion is ethical if a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends.	2,34	2,72

	Statement	Average of Turkish Students	Average of Russian Students
12	Tax evasion is ethical if the probability of getting caught is low.	6,33	3,84
13	Tax evasion is ethical if some of the proceeds go to support a war that I consider to be unjust.	3,02	3,84
14	Tax evasion is ethical if I can't afford to pay.	4,85	3,76
15	Tax evasion is ethical even if it means that I pay less, others will have to pay more.	6,06	4,44
16	Tax evasion is ethical if the government discriminates against me because of my religion, race or ethnic background.	3,20	3,50
	Country average for all statements	4,95	4,00

1 = strongly agree 7 = strongly disagree

As it can be seen from Table 8, the most justifiable statement on tax evasion which the Turkish students evaluate is the situation that a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends. Two other reasons for justifiability of tax evasion stated in statements 13 and 16 can be generalized as the violation of human rights by state or government.

Table 8: Tax Evasion Ranking by Level of Agree (Turkey)

	Statement	Average
11	Tax evasion is ethical if a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends.	2,34
13	Tax evasion is ethical if some of the proceeds go to support a war that I consider to be unjust.	3,02
16	Tax evasion is ethical if the government discriminates against me because of my religion, race or ethnic background.	3,20
4	Tax evasion is ethical if a large portion of the money collected is wasted.	3,38
3	Tax evasion is ethical if the tax system is unfair.	3,78
6	Tax evasion is ethical if a large portion of the money collected is spent on projects that I morally disapprove of.	4,33
14	Tax evasion is ethical if I can't afford to pay.	4,85
1	Tax evasion is ethical if tax rates are too high.	5,15
8	Tax evasion is ethical if a large portion of the money collected is spent on projects that do not benefit me.	5,50
10	Tax evasion is ethical if everyone is doing it.	5,68
15	Tax evasion is ethical even if it means that I pay less, others will have to pay more.	6,06

	Statement	Average
2	Tax evasion is ethical even if tax rates are not too high because the government is not entitled to take as much as it is taking from me.	6,09
9	Tax evasion is ethical even if a large portion of the money collected is spent on projects that do benefit me.	6,26
12	Tax evasion is ethical if the probability of getting caught is low.	6,33
5	Tax evasion is ethical even if most of the money collected is spent wisely.	6,61
7	Tax evasion is ethical even if a large portion of the money collected is spent on worthy projects.	6,66

1 = strongly agree 7 = strongly disagree

As it can be seen from Table 9, most justifiable statement on tax evasion seen by the Russian students as well as Turkish students evaluate is the situation when a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends. However, as it is seen from Table 3, although the corruption perception for the politicians in The Russian Federation is quite higher than the Turkish ones, opposition scores of Russian students to this statement is higher compared to Turkish students. Two other reasons for justifiability of tax evasion stated in statements 3 and 4 are when tax evasion is ethical if the tax system is unfair and when tax evasion is ethical if a large portion of the money collected is wasted.

Table 9: Tax Evasion Ranked by Level of Agree (The Russian Federation)

	Statement	Average
11	Tax evasion is ethical if a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends.	2,720
3	Tax evasion is ethical if the tax system is unfair.	3,180
4	Tax evasion is ethical if a large portion of the money collected is wasted.	3,200
6	Tax evasion is ethical if a large portion of the money collected is spent on projects that I morally disapprove of.	3,340
16	Tax evasion is ethical if the government discriminates against me because of my religion, race or ethnic background.	3,500
14	Tax evasion is ethical if I can't afford to pay.	3,760
12	Tax evasion is ethical if the probability of getting caught is low.	3,840
13	Tax evasion is ethical if some of the proceeds go to support a war that I consider to be unjust.	3,840
1	Tax evasion is ethical if tax rates are too high.	3,880
8	Tax evasion is ethical if a large portion of the money collected is spent on projects that do not benefit me.	4,240
9	Tax evasion is ethical even if a large portion of the money collected is spent on projects that do benefit me.	4,440

	Statement	Average
2	Tax evasion is ethical even if tax rates are not too high because the government is not entitled to take as much as it is taking from me.	4,440
15	Tax evasion is ethical even if it means that I pay less, others will have to pay more.	4,440
10	Tax evasion is ethical if everyone is doing it.	4,640
7	Tax evasion is ethical even if a large portion of the money collected is spent on worthy projects.	5,180
5	Tax evasion is ethical even if most of the money collected is spent wisely.	5,380

1 = strongly agree 7 = strongly disagree

6.1. The Comparison of Opinions of Turkish and Russian Students on the Ethics of Tax Evasion

In this part, the differences on the opinions of the individuals from two groups are analysed by independent samples T and Mann Whitney U Tests in the framework of the hypotheses above.

Firstly, Parametric T Test is performed to find out if Turkish and Russian students are different on the tax ethics. Tablo 10 shows the results of analysis of independent T Test on the differences of scores Turkish and Russian students give to the statements.

Table 10: Independent Samples T Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	
		F	Sig.	t	df				Lower	Upper
S1	Equal variances assumed	,008	,929	3,795	130	,000	1,26634	,33366	,60624	1,92644
S2	Equal variances assumed	,759	,385	6,153	130	,000	1,6453659	,2674014	1,1163442	2,1743875
s3	Equal variances assumed			1,635	102,613	,105	,60049	,36734	-,12808	1,32905
s4	Equal variances assumed			,482	115,096	,631	,16585	,34418	-,51588	,84759
s5	Equal variances assumed			4,603	77,854	,000	1,31136	,28491	,74412	1,87859
s6	Equal variances assumed	3,198	,076	2,737	130	,007	,9892683	,3613803	,2743205	1,7042160

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| | | | | | | | | | Lower | |
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
s7	Equal variances assumed			4,836	63,814	,000	1,4785366	,3057618	,8676730	2,0894002
s8	Equal variances assumed	,202	,654	3,743	130	,000	1,26000	,33665	,59398	1,92602
s9	Equal variances assumed			5,482	87,410	,000	1,8160976	,3312958	1,1576548	2,4745403
s10	Equal variances assumed	2,488	,117	2,892	130	,004	1,04293	,36068	,32937	1,75648
s11	Equal variances assumed	,706	,402	-1,007	130	,316	-,37854	,37589	-1,12219	,36511
s12	Equal variances assumed			8,820	84,693	,000	2,48927	,28222	1,92811	3,05043
s13	Equal variances assumed			-2,278	120,679	,025	-,81561	,35808	-1,52455	-,10667
s14	Equal variances assumed	,269	,605	2,882	130	,005	1,09366	,37944	,34297	1,84434
s15	Equal variances assumed	2,337	,129	5,291	130	,000	1,62098	,30637	1,01485	2,22710
s16	Equal variances assumed	1,452	,230	-,736	130	,463	-,30488	,41439	-1,12470	,51494

As it can be seen from the Table, there is no significant difference for the statements 3, 4, 11, 16 for both countries. That is, there is no significant difference between Turkish and Russian students on the ethics of tax evasion for the justifiability of the following statements: if the tax system is unfair, if a large portion of the money collected is wasted, if a significant portion of the money collected winds up in the pockets of corrupt politicians or their families and friends and if the government discriminates against respondent because of his/her religion, race or ethnic background. On the other hand, there are significant differences between Turkish and Russian students on the ethics of tax evasion for the justifiability of the following statements: if tax rates are too high, rightness, worthiness of the project the taxes will be used, probability of getting caught, war and if everyone is doing it.

Secondly, the difference on opinions of the students on tax evasion is tested through non-parametric Mann Whitney U Test, the results are given

at Table 11. As it can be seen that Mann Whitney T Test has produced the same results with parametric T-Test at significant level of 5%.

Table 11: Mann Whitney U Test

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
S1	1264,0	2539,0	-3,8	0,00
S2	854,0	2129,0	-5,9	0,00
s3	1699,5	2974,5	-1,7	0,10
s4	1982,5	3257,5	-0,3	0,75
s5	1004,5	2279,5	-6,1	0,00
s6	1487,0	2762,0	-2,7	0,01
s7	1055,5	2330,5	-5,5	0,00
s8	1253,5	2528,5	-3,8	0,00
s9	892,0	2167,0	-5,9	0,00
s10	1449,0	2724,0	-3	0,00
s11	1665,5	5068,5	-2	0,05
s12	524,0	1799,0	-7,6	0,00
s13	1530,5	4933,5	-2,5	0,01
s14	1454,5	2729,5	-2,8	0,01
s15	980,0	2255,0	-5,4	0,00
s16	1774,0	5177,0	-1,3	0,18

6.2. Clustering Analysis

Clustering analysis is the assignment of a set of observations into useful and meaningful subsets. If the aim is to form meaningful groups, sets should catch natural structure of data.

Clustering analysis groups the data objects under the light of the information obtained from datas which identify and find out the relations of the objects. The aim is to find out the objects within the same group to be similiar or related to each other and the objects within different groups to be different from each other and unrelated to each other. (Takçı, 2010: 3)

In this study, an analysis is performed to form two sets by using K means Clustering Analysis by excluding the statements 3, 4, 11 and 16 which arise from T Test and Mann Whitney U Test which show that two countries resemble. Final cluster centers for each statement obtained from the analysis is shown at Table 12.

Table 12: Cluster Analysis: Final Cluster Centers

	Cluster			Cluster	
	1	2		1	2
S1	5,30	3,36	s9	6,3596	3,9762
S2	6,2809	3,8095	s10	6,00	3,76
s5	6,79	4,93	s12	6,40	3,29
s6	4,1910	3,4048	s13	3,19	3,67
s7	6,7978	4,7143	s14	4,88	3,50
s8	5,48	4,05	s15	6,15	4,02

Table 13 shows the distribution of the number of cases in each cluster and Table 14 shows the cluster number of case crosstabulation:

Table 13: Cluster Analysis: Number of Cases in Each Cluster

Cluster	1	89,000
	2	42,000
Valid		131,000
Missing		1,000

Table 14: Cluster Analysis: Country * Cluster Number of Case Crosstabulation

Count

		Cluster Number of Case		Total
		1	2	
Country	Russia	15	35	50
	Turkey	74	7	81
Total		89	42	131

When the Cluster Number of Case Crosstabulation is analysed, it can be seen that while 70% of Russian students is classed in the second set, 91% of Turkish students is classed in the first set. According to these results, it is found out that the important factor for clustering to sets is the nationality. So the clustering analysis shows that point of views on tax ethics of the Turkish and Russian students are generally different. The results, showing that average of Turkish students in all statements is 4,95 and while the average of Russian students is 4, also confirms the analysis.

6.3. Logistic Regression Analysis

Finally, logistic regression analysis was applied to find out which statements are important to determine respondents' nationality according to their answers. The variables in the equation are shown in Table 15, while classification table is given at Table 16.

Table 15: Logistic Regression Analysis: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1	s12	,933	,154	36,836	1	,000	2,543
	Constant	-4,483	,864	26,920	1	,000	,011
Step 2	s9	,428	,128	11,135	1	,001	1,534
	s12	,855	,158	29,263	1	,000	2,352
	Constant	-6,388	1,148	30,958	1	,000	,002
Step 3	s9	,438	,135	10,533	1	,001	1,549
	s12	,950	,174	29,789	1	,000	2,586
	s16	-,249	,117	4,518	1	,034	,780
	Constant	-6,122	1,193	26,346	1	,000	,002

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 4	s6	,447	,161	7,721	1	,005	1,563
	s9	,357	,141	6,434	1	,011	1,429
	s12	1,053	,192	30,087	1	,000	2,866
	s16	-,387	,139	7,767	1	,005	,679
	Constant	-7,455	1,392	28,665	1	,000	,001

Table 16: Logistic Regression Analysis: Classification Tablea

			Predicted		
			Country		Percentage Correct
		Observed	Russia	Turkey	
Step 4	Country	Russia	41	9	82,0
		Turkey	6	75	92,6
	Overall Percentage				88,5
a. The cut value is ,500					

Regression model has been applied as stepwise and it is seen that the statements 6, 9, 12 and 16 are important in logistic regression model at fourth step. The models obtained are summarized in Table 15. That is, the following statements are important to classify Turkish and Russian students according to their nationality: if a large portion of the money collected is spent on projects that respondent morally disapprove of, even if a large portion of the money collected is spent on projects that do benefit respondent, if the probability of getting caught is low and if the government discriminates against respondent because of respondent' religion, race or ethnic background.

Since the aim of logistic regression is to classify the datas, 82% of the Russian students and 92,6% of Turkish students and 88,5 of all nationalities classified correctly in classification estimation by using this model.

7. CONCLUSION

This study aims to analyse the views and thoughts of Turkish and Russian business management students on the ethics of tax evasion by conducting a statement-based survey in Turkey and The Russian Federation. In the analyses, T-Test and Mann Whitney Test show that there is no significant difference between two groups of students on the statement of justifiability of tax evasion if the tax system is unfair, if the money collected is wasted and winds up in the pockets of corrupt politicians or their close ones and, if the government violates human rights. K Means Clustering Analysis, made by excluding these statements which does not make difference, shows that Turkish and Russian students generally differs on ethics of tax evasion,

In the logistic Regression, it is found that the following statements are important to classify Turkish and Russian students in regard of their nationality: if a large portion of the money collected is spent on projects that respondent morally disapprove of, even if a large portion of the money collected is spent on projects that do benefit respondent, if the probability of getting caught is low and if the government discriminates against respondent because of respondent' religion, race or ethnic background.

As the result, although students in Turkey, where free market economy rules have been implemented since the early 1980s, and The Russian Federation, that has been transformed from centrally planned economies to free market economy and just introduced modern tax practices, generally differs on ethics of tax evasion; it is possible to say that unfair tax system, human rights violation and corruption by the government make a similiar perception on both countries on ethics of tax evasion. Therefore both Turkey and Russian Federation should take measures to make their tax system fairer and to strength legal sanctions for violations of human rights and corruption because of similarities on tax ethics.

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