ORIGINAL PAPER

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Effectiveness and performance of tax system in Slovak Republic in terms of its key non-macroeconomics factors

Abstract

Research background: The paper addresses the issue of an optimal tax system and puts emphasis on two aspects: justice and efficiency. The issue of taxation has been the subject of numerous debates at the European level for several years. A good tax system should contribute to the state treasury with sufficient revenues, should not be an administrative burden, and must be sufficiently efficient and transparent.

Purpose of the article: The article provides an extensive analysis of the opinions of respondents on the effectiveness of the financial administration of the Slovak Republic. The aim is to analyse the views and attitudes of the respondents on the key factors affecting the effectiveness of financial administration in terms of respondents' age, gender, occupation and place of residence using mathematical-statistical methods.

Methods: In the empirical quantitative research Factor Model Analysis (Factor Analysis) and Analysis of Variance (Anova) were used. The data was obtained through a questionnaire

survey, which-was carried out in four districts of Slovakia and focused on a wide range of respondents divided into four age-related categories.

Findings & Value added: In terms of research carried out, it is possible to conclude that there is dissatisfaction with the overall tax and customs system in the Slovak Republic. An analysis of respondents' views on the effectiveness of the tax system has shown that it is possible to identify several key factors that affect it, and they are: collection of levies and availability, competence of tax administration staff, computerisation of tax administration, tax collection efficiency, labour costs, and administrative difficulty of tax administration. in the paper, we also discuss these in more detail. The research results offer relevant and interesting implications for public authorities, policy makers and reformers as well as motives for further investigation of the tax administration issue.

Introduction

One of the basic features of the functioning of all entities economically active in national economies is their participation in the tax system of the state and their own tax liability (Kubátová, 2010; Harutyunyan, 2017). For the comprehensive context of the tax system as a whole, it is important to know the impacts of the Slovak Republic's accession to the European Union as well as the financial administration in its states (Dobrovič *et al*., 2017).

The issue of taxation is one of the "most sensitive" areas. Each Member State's tax revenue represents a substantial part of the revenue side of the state budget, which is why it is not easy to achieve any form of joint action by all stakeholders in this area. The adoption of new European legislation in the tax area takes a long time and the search for the agreement is accompanied by many difficulties (Rajnoha *et al*., 2014). The greatest progress has been made in indirect taxes. The area of direct taxation remains in the full competence of individual Member States. On the one hand, there are efforts to deepen integration in the tax area, but on the other hand, individual states (after renunciation of monetary policy) are not prepared to abandon another important tool for influencing economic development of the state (Dobrovič, 2017).

The paper addresses the issue of an optimal tax system and puts emphasis on its justice and efficiency. A good tax system should contribute to the state treasury with sufficient revenues, should not be an administrative burden, and must be sufficiently efficient and transparent.

In our extensive empirical quantitative research Factor Model Analysis and Analysis of Variance were used. The data was obtained through a questionnaire survey, which was carried out in four districts of Slovakia and focused on a wide range of respondents divided into four age-related categories.

The aim of this study was to analyse the selected factors of effectiveness and performance of the tax administration management in the Slovak Republic and to find possibilities for their improvement. An analysis of respondents' views on the effectiveness of the tax system has shown that it is possible to identify several key factors that affect. Performance and efficiency of the tax system in Slovakia in the long term is lower compared to other V4 countries. In our research we are looking for answers as to why this is so? In the following parts we will discuss that in more detail.

The article is divided into several main sections. Firstly, current literature is reviewed. In the next section, research methodology is characterized, followed by the most important research results, discussion and conclusion. Finally, we also define some limits of our research as well as offer implications for public authorities and tax policy makers.

Literature review

A good and effective tax system should bring sufficient revenues to the state treasury (Šimelytė & Antanavičienė, 2013; Brederrode, 2009; Majerová, 2016) should not be an administrative burden, and has to be sufficiently transparent. Its mission is to balance the tax burden in a homogeneous way. The optimal tax system puts emphasis on two aspects: justice and efficiency.

To meet this objective, it is necessary to ensure appropriate conditions for the business environment, to which the tax system of the country significantly contributes (Koišová *et al*., 2017; Belás *et al*., 2014; Čepel *et al*., 2018; Gavurová *et al*., 2017; Štiglic, 2017). It is important to emphasize that, in addition to economic (tax system) factors, social, cultural and other factors are important for the creation of a quality business environment that is essential to economic development (Ključnikov *et al*., 2016; Chromjaková, 2016; Ivanová & Čepel, 2016). In this context, Belás *et al.* (2014) add that optimism of the economic system participants is also substantial for its optimal functioning. Today's management should focus on strategic thinking, responsiveness to change, and so on (Rajnoha & Lesníková, 2016; Belás *et al*., 2014; Korauš *et al*., 2016; Štefko *et al*., 2015). Emphasis is placed on greater effectiveness of changing organizations.

Taxes are collected mainly because they are the main foundations of state functioning (Brederrode, 2009; Majerová, 2016). Taxes and their payments has almost always been considered as "unavoidable evil" that raises the concerns of citizens and still causes citizens to feel worried about

their payments on one hand and, on the other hand, it creates a room for not paying taxes at all (Dobrovič, 2017; Tvaronavičienė *et al*., 2016).

Tax system is a driving force of economy of every country (Majerová, 2016). Hence, implementation of reforms in tax and customs system in response to time challenges is of crucial importance (Harutyunyan, 2017; Kubátová, 2010; Dabla-Norris *et al*., 2017; Dobeš *et al*., 2017; Šimelytė, Antanavičienė, 2013).

For establishment of an effective tax system that complies with international standards, it is necessary to strive for implementation of ongoing reforms in the sector, including the change of image of tax and customs officers. In all countries, the requirements to tax and customs officers are the same, namely, to be knowledgeable, proactive, innovative, goal-oriented, conscientious, professional, willing to further develop their professional skills (Harutyunyan, 2017; Dabla-Norris *et al*., 2017; Arnold *et al*., 2011; Štiglic, 2017; Frankovský *et al*., 2016; Štefko *et al*., 2015).

The most important objectives of every country are public administration, security of the country, political stability, sustainable development of economy, and tax system, which play an important role in ensuring economic stability and progress (Harutyunyan, 2017; Dabla-Norris *et al*., 2017; Brederode, 2009; Gasparėnienė *et al*., 2016; Arnold *et al*., 2011; Majerová, 2016; Zídková, 2014).

One of the most serious problems of fiscal character is the issue of tax system and the tax gap (Majerová, 2016; Zídková, 2014; Castro & Camarillo, 2014). According to Majerová (2016) there is a dependence of the VAT gap on three variables: the Corruption Perception Index CPI, GDP growth rate and the basic VAT rate. The method of regression analysis was used, which was performed on data in the years 2000–2011. Although it could be assumed that tax burden will affect the VAT gap the most, the highest dependence was shown in the case of Corruption Perception Index (Majerová, 2016).

According and in addition to these previous empirical research studies, also other following criteria are considered to be relevant to tax system effectiveness: willingness of the tax office employees; competence of the tax office employees; tax collection — process/method and simplicity; collection of tariffs/customs — process/method and simplicity; collection of levies — process/method and simplicity; administrative difficulty of the tax and customs agenda; time saving; availability and computerisation; transaction costs; postage costs; labour costs; a comprehensive view of public finance developments; effectiveness of the tax evasion mechanism; the amounts spent on tax and customs offices.

Research objectives, data collection and methodology

In line with the above mentioned introductory philosophical — theoretical bases, the effectiveness of the financial management of the Slovak Republic has been investigated. With these intentions, and on the basis of these assumptions, we have examined the adoption of the reform by taxpayers, which is considered to be extremely important for its effective functioning (Dobrovič, 2017).

The main objective of this study was to analyse selected factors of effectiveness and performance of the tax administration in the Slovak Republic and to find possibilities for their improvement.

Research hypothesis was derived from this main scientific objective. The hypothesis is based on the assumption that *the effectiveness of the tax administration of the Slovak Republic is statistically significantly influenced by a number of key factors* that differ in terms of the gender structure of taxpayers, the age of the tax subjects, their occupations and the place of their activity within the individual regions of the Slovak Republic.

The following criteria were considered to be relevant:
− willingness of the tax office employees;
− competence of the tax office employees;
− tax collection – process/method and simplicity;
− collection of tariffs/customs – process/method and simplicity;
− collection of levies – process/method and simplicity;
− administrative difficulty of the tax and customs agenda;
− time saving;
− availability;
− electronisation/computerisation – great user comfort;
− transaction costs;
− postage costs;
− labour costs;
− electronisation of the agenda – simplification of the system;
− a comprehensive view of public finance developments;
− effectiveness of the tax evasion mechanism;
− the amounts spent on tax and customs offices.

The key criteria for the survey were generated on the basis of the expected benefits of the reform in case of its implementation. The purpose of the survey was to identify the needs and expectations of the people most affected by the reform, as well as the need for reform, its efficiency/inefficiency — using the method of generating criteria. The analysis of individual segments is based on the authors' own experience and on the

citizens' perception of the benefits of tax and customs reform. This is a qualitative and quantitative research based on the basis of the above mentioned facts concerning the tax reform.

For the purpose of the research, the representative research sample as a selection file (N = 1.500) was divided into four age-related categories: 18-25 years: 384 respondents, 26–35 years: 369 respondents, 36–45 years: 359 respondents, and 46–60 years 388 respondents. The average number of respondents in the four age categories is 375 respondents. Calculated standard deviation is of value of 13.44. The selection representative file (N = 1.500) was defined from the basic file (N = 3.685), the first selection criterion being a fully completed questionnaire. Subsequently, a random number generator was applied to the base file cleared from incompletely filled out questionnaires, when 1.500 selection objects were randomly selected. In terms of job occupation, the composition of respondents participating in the research in the following categories was as follows: officials: 373 respondents, entrepreneurs: 383 respondents, students: 360 respondents, not mentioned (unspecified) job: 384 respondents.

The questionnaire survey was realized in 2017 (March 1 — October 31). Closed survey questions were used (5-point Likert scale). It was carried out in four districts of Slovakia. The number of respondents in each category is as follows: Prešov: 374 respondents, Bratislava-city: 385 respondents, Košice: 389 respondents, Banská Bystrica: 352 respondents.

From the qualitative analysis, it can be concluded that the different categories of respondents in terms of age, gender, employment and geographical distribution are homogeneous with minimum variations in the number of groups in each group. The statistical research sample was representative both in terms of its size and its research structure.

Our research and questionnaire survey can be methodologically included into the "face to face" category. The questionnaire was distributed by randomly selected tax places in the abovementioned four districts of Slovakia via colporteurs.

From the above qualitative analysis, it can be concluded that the different categories of respondents in terms of age, gender, employment and geographical distribution are homogeneous with minimum variations in the number of groups in each group.

In extensive empirical quantitative research, several mathematical-statistical methods were used, such as Factor Model Factor Analysis (Factor Analysis), Analysis of Variance (ANOVA) among other. In the factor analysis the factors were selected on the basis of universal Keiser's assessment of the matrix's own numbers as the most objective form of assessment of the statistical significance of extracted factors.

Research results

The analysis of the factor model is based on the analysis of factor loadings of the individual factors listed in Table 1.

It is evident that Factor 1 strongly correlates with the question of the collection of levies (0.68157) and availability (0.63172). Considering this fact and the plus sign of these significant correlations, the first common factor explaining the variability of respondents' replies can be called *availability and effectiveness of levies collection*. From the point of view of respondents' responses, an increasing the efficiency of levies collection and improving the availability of contact points can contribute to increasing the efficiency of tax administration. The second factor strongly correlates with competence (0.68154), and is therefore called *competence of the tax office employees*; an increasing effectiveness of tax administration is achieved through increasing the competence of its employees. The third common factor strongly correlates with time savings (0.77413) and postage costs (-0.62079). This factor can therefore be called *time savings*. From the results, it can be also concluded that increasing the effectiveness of tax administration at this point can be achieved by reducing the time that taxpayers have to spend to meet their obligations, and also by reducing the postage costs associated with sending reports. In this context, it seems necessary to digitalize the entire tax system to address both of these problems. The fourth factor is highly correlated (0.67996) with tax collection. Thus, with the increasing efficiency of tax collection, it is possible — according to respondents' opinions — to increase the efficiency of the tax system. The fifth factor is correlated with the labour cost issue (0.71147). Thus, this significant factor can be classified as *labor costs*. The last significant factor that affects the variability of respondents' answers correlates with the question of administrative difficulty of the tax and customs agenda (0,8571).

On the basis of factor analysis, it can be concluded that the 12 questions in the questionnaire dealing with the satisfaction of respondents with tax administration can be explained by the six common factors that stand in the background. These factors can be defined as follows:
- Factor 1: levies collection and availability;
- Factor 2: competence of tax administration employees;
- Factor 3: computerisation of tax administration;
- Factor 4: effectiveness of tax collection;
- Factor 5: labour costs;
- Factor 6: administrative difficulty of tax administration.

Factor analysis focuses mainly on factor model parameters. Common factor estimates (called factor scores) may be required. The values of the

common factors in the selected objects or observations are not only a useful tool for data diagnostics, but can also be an important input for further analyses. Factor score is not an estimation of parameters in the common sense, because it is an estimate of values of unobserved variables. In addition, the estimate is complicated by the number of unobserved values of the vectors of common factors and the values of non-observable vectors. Estimated factor scores use estimates of factor loadings as well as specific variances. Non-rooted or rotating solutions can be used, but the second option is selected more often. Estimates of factor scores can easily be based on original, centred or normalized values.

Factor score results, calculated for individual surveyed subjects, serve as input to the next analysis in which Analysis of Variance was used. The aim is to define the relationship between input, independent variables such as age, gender, occupation and geographical distribution, and dependent variables that are represented by the factor scores for each defined factor (Table 2).

The first significant factor — the collection of taxes and levies — is mainly influenced by the respondents' gender (Table 3).

From Figure 1, it is evident that collection of taxes and levies is (more) positively rated by women as compared to men who evaluate it negatively. This difference in the evaluation of this factor between men and women is significant at the level of significance $\alpha = 5\%$.

From the analysis of the dependence of input variables and Factor 2 (competence of tax administration staff), none of the predictors examined significantly affects respondents' attitude towards this area. We also come to the same conclusion when examining the relationship between predictors and factor 4 (effectiveness of tax collection).

In connection with Factor 3 (computerisation of tax administration), it was found that geographical distribution is a significant predictor at the level of significance $\alpha = 5\%$ (p = 0,0041). As shown in Figure 2 respondents from Prešov, Košice and Banská Bystrica have a negative attitude towards digitization/computerisation. Conversely, respondents from Bratislava positively evaluate the computerisation of tax administration. In the assessment of computerisation there is a significant difference between the first three geographic areas (with negative evaluation) and Bratislava. This conclusion is based on a Scheffe test (p = 0.013226) at a 5% significance level.

The labour costs (Factor 5) is statistically significantly influenced by the interaction of respondents' gender and age at a 5% significance level (Figure 3). From Fig. 3 it is apparent that labour costs are evaluated by men aged 18–25 positively, in contrast to women of the same age. We see the

opposite trend among respondents aged 26–35 years — men perceive the costs on tax office staff negatively, while women positively. In the age category 36–45 year, there are no gender differences, i.e. all respondents of this age perceive this factor negatively, with higher values of factor scores being recorded among women. On the contrary, respondents aged 46–60 years perceive the labour costs positively, with higher values being recorded in the category of men.

We also find a significant relationship between the interaction of the respondents' age and the geographical distribution in relation to the Factor 5 — labour costs (p = 0,04661), at 5% significance level.

As shown in Figure 4, the costs associated with the workforce are negatively perceived by the respondents aged 18–25, who live in Prešov, Banská Bystrica and Bratislava. On the contrary, in this age group there is a positive perception of labour costs among the respondents living in Košice. In the age group of 26–35 years, labour costs are perceived negatively by the respondents living in Prešov and Košice, and positively by the respondents living in Banská Bystrica and Bratislava. The same trend as in the age category of 18–25 years is also seen in the 36–45 age category. In the category of respondents aged 46–60, the respondents living in Prešov and Banská Bystrica perceive the labour costs positively, while the respondents living in Košice and Bratislava negatively (Figure 4).

Different perceptions of labor costs in Slovak regions are perceived as probably the reason for the different economic strength of individual regions as well as different living costs.

Discussion

In addition to previous empirical research studies (Harutyunyan, 2017; Dabla-Norris *et al*., 2017; Arnold *et al*., 2011; Koišová *et al*., 2017; Majerová, 2016; Zídková, 2014), in our own empirical research realised in Slovakia we have also found other specific quantitative and qualitative factors to be relevant in efficiency of tax system.

On the basis of factor analysis, it can be concluded that the 12 questions in the questionnaire dealing with the satisfaction of respondents with tax administration can be explained by the six common factors that stand in the background. These factors can be defined as follows:
− Factor 1: levies collection and availability;
− Factor 2: competence of tax administration employees;
− Factor 3: computerisation of tax administration;
− Factor 4: effectiveness of tax collection;

− Factor 5: labour costs;
− Factor 6: administrative difficulty of tax administration.

Costs for staff dealing with the tax and customs agenda as well as the time costs for processing this agenda can be considered the most critical point in terms of input factors and their interactions.

The results of our extensive study are partially consistent with findings from other authors worldwide (Šimelytė & Antanavičienė, 2013; Brederrode, 2009; Harutyunyan, 2017; Dabla-Norris *et al*., 2017; Castro & Camarillo, 2014) or also in Czech Republic (Majerová, 2016; Zídková, 2014) and Slovakia (Koišová *et al*., 2017). However, our specific research focus points to some aspects that are critical and unique for Slovakia. So we can state that based on own empirical research conducted in Slovakia these are mostly different factors that determine the efficiency of the tax system in Slovakia, compared to other domestic or foreign research studies (Harutyunyan, 2017; Dabla-Norris *et al*., 2017; Arnold *et al*., 2011; Castro & Camarillo, 2014; Koišová *et al*., 2017; Majerová, 2016).

Costs for staff dealing with the tax and customs agenda as well as the time costs for processing this agenda can be considered the most critical point in terms of input factors and their interactions. In view of the results of our extensive empirical study, we recommend government institutions to focus on these key factors for the success and effectiveness of tax administration. We believe that it is necessary to take different approaches, taking into account the different economic and social level in the individual regions of Slovakia.

In terms of the research carried out, it is also possible to conclude that there is dissatisfaction with the overall tax and customs system in the Slovak Republic. In addition to solving differences of opinion between groups, the analysis of single groups was realized. Given the total population of over 18 years of SR in the given year, the sample size of 1.064 allows us to generalize the basic results of the population survey of SR aged 18 years with maximum deviation ± 3% (Source: Statistical Office of the SR, https://slovak.statistics.sk). Thus, from this point of view and in view of the population of the SR over 18 years, the results obtained from the sample collection can be generalized to the whole population of SR population over 18 years of age.

Conclusions

Given the scale and difficulty of the research, we only concentrate and mention some of the research findings. In terms of the research carried out,

it is possible to conclude that there is dissatisfaction with the overall tax and customs system in the Slovak Republic. An analysis of respondents' views on the effectiveness of the tax system has shown that it is possible to identify several key factors that affect it. Key factors were defined using 1.500 questionnaire factor analysis, and they are: collection of levies and availability, competence of tax administration staff, computerisation of tax administration, tax collection efficiency, labour costs, and administrative difficulty of tax administration.

The research conclusions can then be summarized as follows:

− The effectiveness of tax collection is perceived negatively by men compared to women, whereas this difference in the perception and assessment of tax collection is statistically significant.
− Informatisation of the tax administration is negatively perceived by respondents living in Prešov, Košice and Banská Bystrica, while the opposite opinion was found among respondents living in Bratislava; this positive evaluation of informatisation is not dependent on the age, gender and occupation of respondents.
− Labour costs, i.e. costs of tax administration employees are assessed positively by men aged 18–25 and 46–60 years and women aged 26–35 years. On the contrary, men aged 26–45 years, women aged 18–26 and 36-60 years have a negative view on labour costs.
− Labour costs (costs of tax offices employees) are also significantly influenced by the interaction of age and geographic distribution. These costs are negatively perceived by the respondents from Prešov aged 18–45, while in this geographical area of Slovakia only respondents older than 46 years had a positive opinion on labour costs. In Košice, only young people aged 18–25 years have a positive perception of labour costs, whereas all other age categories perceive them negatively.

Based on the research results, we can propose implications for the public authorities, and tax policy makers. The need for simplification of the tax and customs system is pointed to in the form of an agenda digitization, the transparency of public finances, the general mistrust of the citizens against the tax evasion mechanism, and the amount of money spent on tax and customs offices. In addition to predetermined objectives, the survey also revealed further weaknesses in tax and customs administration, particularly with regard to education of citizens, especially young people.

In view of the results of our extensive empirical study, we recommend government institutions to focus on these key factors for the success and effectiveness of tax administration. We believe that it is necessary to take different approaches, taking into account the different economic and social levels of individual regions of Slovakia. Our scientific research, carried out

on an extensive and statistically relevant research sample using significant statistical methods, clearly justifies our recommendation.

In further research, we would also like to focus on examining other mainly quantitative and macroeconomic factors and their impact on the effectiveness of the tax administration system in Slovakia.

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Annex

Table 1. Factor loadings table

Variable	Factor Loadings (Varimax normalized) Extraction: Principal components (Marked loadings are >,600000)					
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Willingness	0.247480	0.407177	-0.204138	0.247481	-0.119360	0.033054
Competence	-0.055020	**0.681540**	0.006961	-0.072000	0.265825	-0.143970
Tax collection	0.208022	0.193628	0.113738	**0.679960**	0.040969	0.043309
Collections of Tariffs	0.132591	0.065282	-0.075041	-0.362360	0.549920	-0.087184
Collections of levies	**0.681574**	-0.003556	-0.035835	-0.123172	-0.073222	-0.030383
Administrative difficulty	0.059084	-0.045698	-0.032242	-0.025110	0.030893	**0.857102**
Time saving	-0.019193	0.122648	**0.774129**	0.022727	-0.152556	-0.235661
Availability	**0.631722**	-0.009950	0.037099	0.165632	0.066763	0.065606
Electronization	-0.246514	0.479615	0.041579	-0.040427	-0.365937	0.364061
Transaction costs	0.164648	0.278856	0.194761	-0.570120	-0.033999	0.152900
Cost of postage	-0.015977	0.224791	**-0.620793**	0.032046	-0.174028	-0.250511
Labor costs	-0.152111	0.061086	0.068049	0.266025	**0.711466**	0.122212
Expl.Var	1.103872	1.051341	1.092940	1.102301	1.094582	1.060295
Prp.Totl	0.091989	0.087612	0.091078	0.091858	0.091215	0.088358

Table 2. Score Factor Table

Variable	Factor Score Coefficients Rotation: Varimax normalized Extraction: Principal components					
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Willingness	0.205796	0.376278	-0.164468	0.208859	-0.103547	0.023101
Competence	-0.055656	0.658290	0.016733	-0.071109	0.255672	-0.140508
Tax collection	0.160379	0.181078	0.130743	0.611778	0.031774	0.042153
Collections of Tariffs	0.127781	0.074195	-0.077384	-0.344497	0.505661	-0.074574
Collections of levies	0.625033	-0.011773	-0.017127	-0.141355	-0.073869	-0.037670
Administrative difficulty	0.045918	-0.057397	-0.034847	-0.018755	0.047070	0.810105
Time saving	0.004835	0.134565	0.715503	0.039989	-0.149343	-0.232019
Availability	0.566973	-0.015901	0.053816	0.124818	0.053070	0.058888
Electronization	-0.225652	0.447273	0.042378	-0.020860	-0.313357	0.329552
Transaction costs	0.175005	0.268421	0.174206	-0.520869	-0.019016	0.131580
Cost of postage	-0.030403	0.200535	-0.561007	0.012563	-0.154963	-0.240066
Labor costs	-0.157652	0.072953	0.059459	0.243237	0.653340	0.134326

Table 3. Significance test for predictors affecting Factor 1 (levies collection and availability)

Effect	Univariate Tests of Significance for F1 - Choice of levy and availability Sigma-restricted parameterization Effective hypothesis decomposition; Std. Error of Estimate: 0,9978				
	SS	Degree of Freedom	MS	F	p
Intercept	0.001	1	0.000549	0.000551	0.981278
Age	2.164	3	0.721395	0.724514	0.537349
Gender	**7.302**	**1**	**7.302405**	**7.333977**	**0.006844**
Employ	3.101	3	1.033659	1.038128	0.374651
Geographical distribution	4.322	3	1.440785	1.447014	0.227376
Error	1482.590	1489	0.995695		

Figure 1. Graph of the effect Gender in relation to Levies collection and availability (F1)
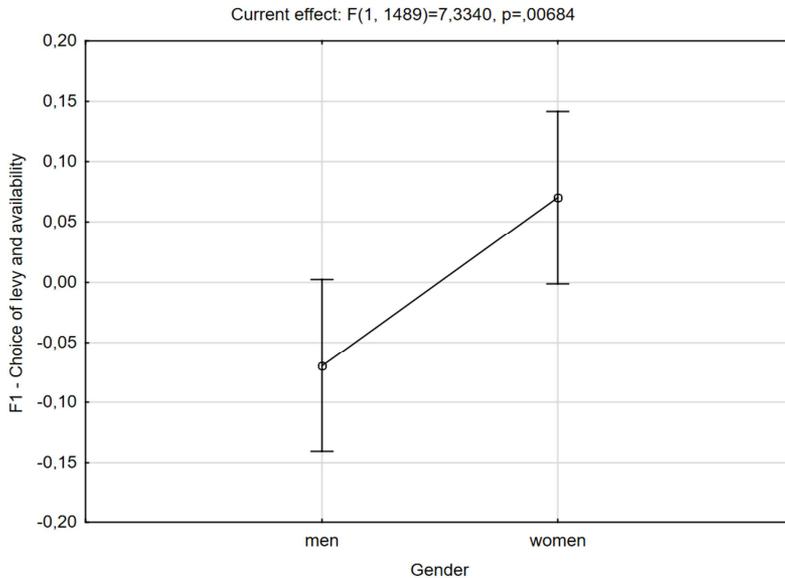

Current effect: F(1, 1489)=7,3340, p=,00684

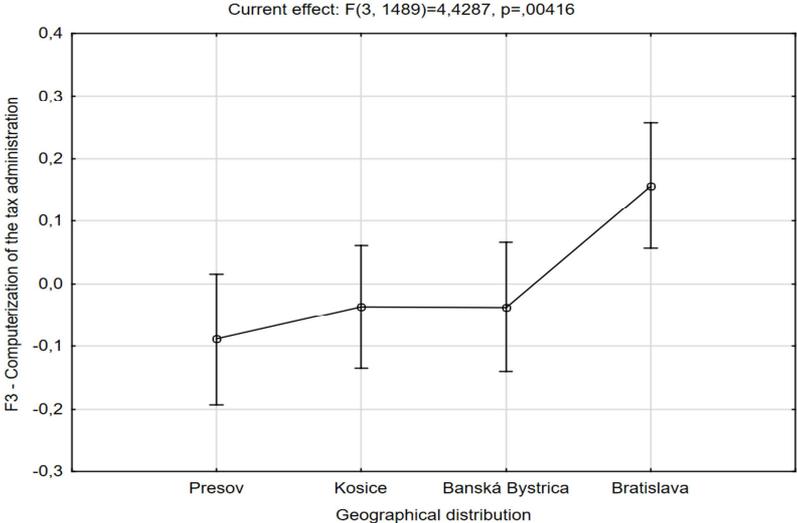**Figure 2.** Graph of the effect Geographical distribution in relation to Computerisation of tax administration (F3)

Current effect: F(3, 1489)=4,4287, p=,00416

Figure 3. Graph of the effect Age and Gender in relation to Labour cost (F5)

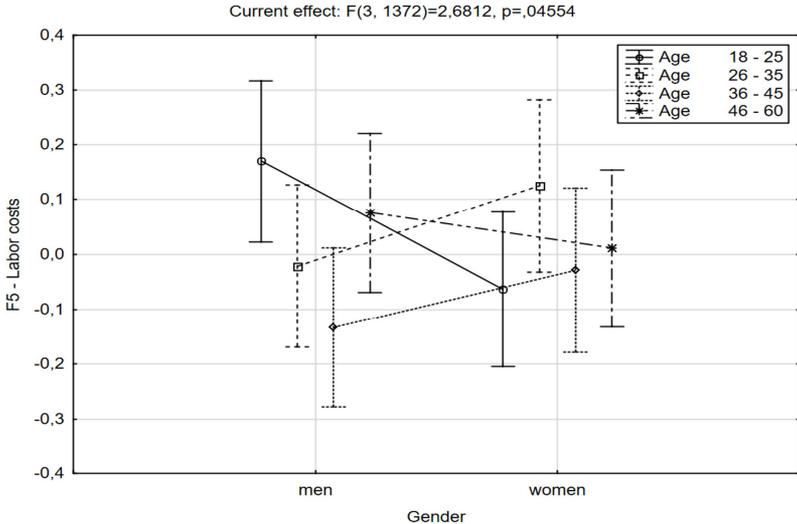Current effect: F(3, 1372)=2,6812, p=,04554

Figure 4. Graph of the effect Age and Geographical distribution in relation to Labour cost (F5)

Current effect: F(9, 1372)=1,9264, p=,04461