

# The Effect of Economic Freedom on Tax Evasion and Social Welfare: An Empirical Evidence\*

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## ABSTRACT

The purpose of this study is to analyze the effect of economic freedom on tax evasion and on social welfare level. According to the estimate results obtained with the analyses, economic freedom variable has a negative effect on tax evasion in all countries (Total), developed, developing, EU (European Union) member countries, and OECD ( Organisation for Economic Co-operation and Development) member countries. This negative effect has statistical significance in all countries (Total), developed countries and OECD member countries except for the EU member, and developing countries. For this reason, the increase in the economic freedom level in these countries causes that tax evasion is reduced. On the other hand, economic freedom variable, which affects tax evasion in a negative manner, has a positive effect on social welfare level. This positive effect of economic freedom is statistically significant in each country group included in the analyses. In this respect, the increase in the economic freedom level causes that the social welfare level is increased.

**Key Words:** Economic Freedom, Welfare, Tax Evasion, Taxation.

**JEL Classification:** C21, C23, H26, I31.

## Ekonomik Özgürlüğün Vergi Kaçakçılığı ve Sosyal Refah Üzerine Etkisi

### ÖZ

Bu çalışmanın amacı ekonomik özgürlüğün vergi kaçakçılığı ve sosyal refah düzeyi üzerindeki etkisini analiz etmektir. Analizlerden elde edilen tahmin sonuçlarına göre gelişmiş, gelişmekte olan, AB üyesi, OECD üyesi ve tüm ülkeler için, ekonomik özgürlük değişkeni vergi kaçakçılığı üzerinde negatif yönlü bir etkiye sahiptir. Negatif yönlü bu etki gelişmekte olan ve AB üyesi ülkeler hariç gelişmiş, OECD üyesi ve tüm ülkelerde istatistiksel olarak anlamlılığa da sahiptir. Dolayısıyla bu ülkelerde ekonomik özgürlük düzeyinin artması vergi kaçakçılığının azalmasına neden olmaktadır. Diğer yandan, vergi kaçakçılığını negatif yönlü etkileyen ekonomik özgürlük değişkeni, sosyal refah düzeyi üzerinde ise pozitif yönlü bir etkiye sahiptir. Ekonomik özgürlüğün pozitif yönlü bu etkisi analizlere dahil edilen her bir ülke grubunda, istatistiksel olarak anlamlıdır. Buna göre ekonomik özgürlük düzeyinin artması her bir ülke grubunda sosyal refah düzeyinin artmasına neden olmaktadır.

**Anahtar Kelimeler:** Ekonomik Özgürlük, Sosyal Refah, Vergi Kaçakçılığı, Vergileme.

**JEL Sınıflandırması:** C21, C23, H26, I31.

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## **INTRODUCTION**

Tax evasion is the illegal non-payment of tax to the government of a jurisdiction to which it is owed by a person, company, trust, or other organisation that should be a taxpayer in that place (Tax Justice Network, 2011). Difficult and demanding to measure, tax evasion is a serious problem for both developed and developing countries, because it reduces the tax revenue of government in a way that could be regarded as quality fraud. When tax revenues are reduced, the amount of debt increases and the funding of public services becomes difficult. If fiscal laws are not followed, resources will be transferred from honest to dishonest taxpayers, causing the next generations to become bad debtors (Gerxhani, 2007; Cebula and Feige, 2012). A decrease in tax revenue not only raises social dissatisfaction, but also profoundly damages current and future fiscal policies.

The effects of tax evasion on the economy are both direct and indirect. When public revenues decrease, the first expense reductions to be implemented are public investments. A decrease in public investments and the resulting budget deficits are the direct effects of tax evasion. This study aimed to show that enhancing economic freedom will reduce tax evasion, this in turn, will lead to an increase in the level of welfare. From this perspective, main purpose of this study is to analyse the effect of economic freedom on tax evasion and social welfare with the data from 63 countries using a multi-regression method.

With this aim, the rest of the paper is organized as follows. Second section discussed the theoretical framework related to economic freedom, tax evasion, and social welfare. The next section provides an overview of the empirical literature. The fourth section presents the data, econometric methodology, and model specifications. In section fifth, empirical results are presented. Finally, the last section concludes the paper.

### **I. THEORETICAL FRAMEWORK: ECONOMIC FREEDOM, TAX EVASION, AND SOCIAL WELFARE**

Tax evasion is a serious problem for both developed and developing countries. To address this problem, programmes such as the Taxpayer Compliance Measurement Program and the National Research Program are undertaken in the United States. Despite their being low-scale and giving non-detailed results, programmes developed for this issue are also being implemented in Australia, Canada, the United Kingdom, and Sweden. The United States estimates that it has a gap of 13 percent, while Sweden estimates 8 percent. This ratio is approximately the same as those in the United Kingdom (O'Donnell, 2004). According to Uslander (2007), tax evasion is widespread not only in developed but in developing countries as well. Studies show that the rate of tax evasion in Russia, the Czech Republic, the Poland, and Croatia is almost 40 percent. Tax evasion is not that much related to whether the tax rates of a country are high or low. Table 1 shows the tax rates and tax evasion data in countries belonging to various income groups. When the tax evasion figures taken from the World Economic Forum (Global Competitiveness Report 2001-2002) increase, the level

of tax evasion decreases; when the figures become low, the level of tax evasion increases. According to the table, tax evasion rate is quite low in the United States, Japan, Germany, and Canada, where the rate of corporate tax is the highest. On the other hand, India, Argentina, and Brazil have among the highest rates of tax evasion, although they have a similar rate of corporate tax with Canada. Besides, the level of tax evasion in Chile, which also has the lowest tax rate, is almost the same as that of the United States, which has the highest tax rate. The United States even has a lower rate of tax evasion.

**Table 1:** Tax Rates and Tax Evasion Indicators in Some Countries (2002)

Country	Statutory Corporate Tax Rate	Labor Tax	Other Taxes	VAT and Sales Tax	PIT Top Marginal Rate	Tax Evasion
Argentina	35,00	19,51	14,51	24,00	35,00	2,00
Brazil	34,00	31,45	04,32	73,54	27,50	2,40
Canada	36,12	07,04	04,52	15,00	29,00	5,20
Chile	17,00	02,04	02,17	19,00	40,00	5,30
China	33,00	36,71	00,88	18,87	45,00	3,00
France	35,43	37,65	03,32	21,10	48,09	4,00
Germany	37,07	16,75	00,04	16,00	45,00	3,80
Hungary	18,00	31,01	05,26	27,20	38,00	3,40
India	36,59	14,21	03,28	25,65	30,00	2,70
Indonesia	30,00	08,00	00,09	10,00	35,00	2,30
Japan	42,05	10,00	02,16	05,00	37,00	4,70
Malaysia	28,00	09,79	00,35	10,00	28,00	4,60
Mexico	33,00	18,46	00,70	15,00	33,00	2,00
Nigeria	32,00	06,54	00,40	05,00	25,00	2,00
Russia	24,00	29,41	02,30	18,00	13,00	2,10
Turkey	30,00	22,96	00,34	18,00	40,00	2,00
United Kingdom	30,00	08,19	01,10	17,50	40,00	5,40
United States	45,20	07,18	04,56	08,25	35,00	5,40
Vietnam	28,00	14,42	00,17	10,00	60,00	3,40
Zimbabwe	30,90	03,52	04,87	15,00	45,00	2,40

**Source:** World Economic Forum, World Bank, Djankov et al.,2010

As for income taxes, France, China, Brazil, and Hungary have the highest income tax rates in that order. Among these countries, France has the lowest rate of tax evasion while the rate in China and Hungary is close to medium level. In Brazil, tax evasion is higher than it is these countries. Chile and Zimbabwe, which have the lowest income tax rates, have quite different levels of tax evasion. Substantially low in Chile, the level of tax evasion is quite high in Zimbabwe. When all consumption taxes are considered (VAT and sales tax), between the two countries that have the lowest rate of income tax, tax evasion in Japan is low, while it is highest in Nigeria. When the highest rate of personal income tax is considered (PIT Top Marginal Rate), Vietnam, which has the highest tax rate, is

above the average in tax evasion. However, where the lowest tax rate is concerned, Russia is among the worst countries in terms of tax evasion. As it can be seen from the table 1, tax evasion is not just related to the tax rates of countries. It is also a consequence of corruption, insufficient political structure, non-effective economy and most of all, governments that fail to provide basic services (Uslaner, 2007). A review of the literature would show that corruption is a very serious problem that triggers tax evasion (Dreher and Schneider, 2010). On the other hand, tax evasion has internal and external components (Fuest and Riedel, 2009). One of the most important internal components of tax evasion is the unregistered economy. According to Cobham (2005), developing countries lose 285 billion dollars of tax revenue a year because of the unregistered economy. It is quite difficult to measure the size of the unregistered economy; nonetheless, among the factors that pave the way for the unregistered economy, not only the inequity of tax rates, but also ineffective public administration and insufficient legal infrastructures hold an important place.

The external components of tax evasion are profit changes that result from the trade between developed and developing countries. The most important factor affecting these profit changes that encompass tax avoidance alongside tax evasion consists of the international prices of goods. Accordingly, with the help of taxes, goods are imported from developing countries with intentionally low prices and exported with intentionally high prices. Thereby, as a result of international trade, a profit transfer of between 35 and 160 billion dollars is made annually from developing to developed countries such as the United States and the United Kingdom (Fuest and Riedel, 2009). On the other hand, another type of tax evasion is money laundering in developing countries. In developing countries that do not have an effective financial system, due to improvident and corrupt governments and the lack of deterrent legal measures, individuals and institutions can easily engage in money laundering (Yikona et al., 2011).

As tax evasion has such components as corruption, unregistered economy, money laundering, and legal insufficiencies, the tools to be used against this problem should be able to take measures against each component. Economic freedom is one of the the best tool to be used against this type of tax evasion. Economic freedom measures the degree of economic freedom that contain size of public economy, legal Structure and security of property rights, sound money, freedom to trade with foreigners, and regulation of credit, labor, and business (Gwartney and Lawson, 2003). In studying the relationship between international tax compliance and tax ethics, Riahi-Belkaoui (2004) established that economic freedom increases tax compliance. Downsizing the public economy causes a decrease in tax evasion. The public economy consists of the following variables: ratio of public expenses to total expenditure, ratio of transfer expenses to gross domestic product (GDP), amount of public investments, and the tax rate of the highest income and salary levels. As tax revenue decreases with the reduction of public expenses, reduction of the tax rates will cause a decrease in tax evasion.

Controlling the growth of the money supply prevents the rise of inflation; thus, the money market will operate more effectively. Enhancing the freedom to create individual bank accounts, another subdivision of the money and inflation variable, will also contribute to this process. The international trade variable consists of the following sub-variables: regulations for tariff rate, international trade taxes, size of international trade sectors, black market exchange rate, and foreign capital market. Reduction of the obstacles and taxes for international trade will contribute to preventing tax evasion by helping liberalise international trade. Other sub-divisions of economic freedom, which are the variables of the regulations for loans, labour force, and labour market, have important variables such as foreign bank competition, private sector loans, controls of interest rates, labour cost, minimum wage, price controls, bureaucracy, bribery, and cost of tax compliance. Government regulations to increase the effectiveness of the financial and real sector and to increase the country's power in international competition will help reduce tax evasion by making a more transparent economic structure possible.

Economic freedom is closely related to social welfare, because a shrinking public economy causes a decrease in tax evasion, thus helping to reform the distribution of income. This situation will also lead the way to reduce the evasion-related tax burden imposed on individuals who do not evade taxes and to increase their level of income. On the other hand, controlling the money supply will contribute to increase purchasing power by preventing inflation from rising. Again, protecting property rights, reinforcing the political structure, reducing the obstacles to and taxes of international trade, and establishing an effective market for loans and labour will contribute to individual welfare in a positive way. According to Gwartney and Lawson (2006) and Gwartney et al. (2008), there is a positive correlation among such variables as income per capita, economic growth, foreign direct investments, access to clean water, infant mortality, clean environment, and political rights and liberties. According to these findings, countries that want to reduce poverty and to prosper should give importance to improving economic freedom, which means realising such institutions as free trade, hard currency, private property, limited state, and a strong political structure.

## **II. REVIEW OF EMPIRICAL LITERATURE**

The objective of this paper is to examine empirically the effect of economic freedom on tax evasion and social welfare. In this paper we investigate the main effect of economic freedom on tax evasion and social welfare, together with the relationship of these variables. Although there exist a large number of empirical studies relating these variables separately in literature, little research has considered the relationship between economic freedom, tax evasion, and social welfare. For this reason, we examined previous literature review of these factors combined.

Various major studies try to investigate the determinants of tax evasion (Clotfelter, 1983; Wallschutzky, 1984; Jackson and Milliron, 1986; Feinstein, 1991; Riahi-Belkaoui, 2004; Richardson, 2006; Richardson, 2016). However, little research has considered the relationship between tax evasion and economic freedom. Riahi-Belkaoui (2004) examined the relationship between the ethics of tax and the tax evasion for 30 countries by taking the level of economic freedom, the level of importance of the equity market, the effectiveness of competition laws and high moral norms as its determinants. His results showed that the level of tax evasion across countries is negatively related to the level of economic freedom, the level of importance of the equity market, the effectiveness of competition laws and high moral norms.

Economic freedom is closely related to social welfare, because a shrinking public economy causes a decrease in tax evasion, thus helping to reform the distribution of income. For instance, Veselin Vukotić (2008) defines economic freedom “as economic freedom is freedom of an individual to do business (earn money), as well as the belief that business is the key factor of a society’s development and individual wealth”. From this perspective, it can be pointed out that welfare enhancing economic freedom might reduce tax evasion, thus preventing imbalanced income distribution; this in turn, will lead to an increase in the level of welfare. According to a comparison of data from various countries (Gwartney and Lawson, 2006; Gwartney et al., 2008), there is a positive correlation among such variables as income per capita, economic growth, foreign direct investments, access to clean water, infant mortality, clean environment, and political rights and liberties, all of which are indicators of economic freedom and social welfare.

As mentioned above, although there is an extensive literature analyzing the relationship between economic freedom and its economic, social, and political determinants, there are only a few studies related to the impact of economic freedom on the social welfare. Grubel (1998) have provided evidence that economic freedom is associated with superior performance in income levels, income growth, unemployment rates, and human development. Esposto and Zaleski (1999) and Madan (2002) found that economic freedom has a positive influence on quality of life. Faria and Montesinos (2009) found that higher the degree of economic freedom have a positive and significant influence on social prosperity level. Stroup (2007) analyzed the effects of economic freedom on the quality of life, specifically health, education, and disease prevention with data of 104 countries for the 1980–2000 period. He found that the expansion of economic freedom significantly enhances economic welfare.

To summarize, most of studies examined economic freedom, tax evasion, and social welfare separately, less attention has been paid to their combined effect. The present study fills the gap in the literature and provides recent additional econometric evidence on this issue by considering relevant control variables and a multi-regression econometric methodology.

### III. DATA, METHODOLOGY, AND MODEL SPECIFICATIONS

In this study, the impact of economic freedom on tax evasion and social welfare is examined for 63 countries with a multi-regression method. Two separate multivariate model was formed to test the impact of economic freedom on tax evasion and social welfare. The first multivariate model was formed to test the relationship between tax evasion and economic freedom:

$$\text{TAXEVA}_i = \beta_1 \text{EF}_i + \beta_2 \text{LAW}_i + \beta_3 \text{POLSAV}_i + \beta_4 \text{Log GDP}_i + \varepsilon_i \quad (1)$$

where,  $i$  represents the country and  $\varepsilon_i$  signifies the error term of country  $i$ . For this relationship, six types of models (all countries, developed, developing, EU, G20, and OECD countries) are forecast with data from 63 countries from the year 2002. The data on tax evasion (TAXEVA) were published by World Economic Forum (WEF) for all countries only in 2002. In 2009 and 2011, data were published only for Organisation for Economic Co-operation and Development (OECD) countries. In this study, the data on tax evasion for the year 2002 were used because the relationship between economic freedom and tax evasion in all countries was analysed. Therefore, the 2002 data were also used for the independent variables in this model.

To see the effect of economic freedom on social welfare in the countries analysed in the same period of time, the yearly data of 63 countries were used. Among these countries, however, the data of only 57 could be accessed. With this aim, this multivariate model was formed to test the relationship between social welfare and economic freedom:

$$\text{HDI}_i = \beta_1 \text{EF}_i + \beta_2 \text{POP}_i + \beta_3 \text{URBAN}_i + \beta_4 \text{EDU}_i + \varepsilon_i \quad (2)$$

where,  $i$  represents the country and  $\varepsilon_i$  signifies the error term of country  $i$ . The relationship between economic freedom and social welfare was analysed for 2002. Table 2 presents the definition of the variables and the data sources.

**Table 2:** Definition of Variables and Data Sources

Variable	Definition	Source
TAXEVA	Tax Evasion, 0-10 scale	World Economic Forum
EF	Economic Freedom, 0-10 scale	The Heritage Foundation
LAW	Law and Order, 0-1 scale	PRS Group
POLSAV	Political Stability and Absence of Violence, 0-1 scale	PRS Group
GDP	Gross Domestic Product per capita in current US Dollars	World Bank
HDI	Human Development Index, 0-1 scale	UNDP
POP	Population, the rate of population increase 0-1 scale	World Bank
URBAN	Urbanization, 0-1 scale	World Bank
EDU	Education, 0-1 scale	World Bank

Apart from the variable of economic freedom (EF), three more independent variables were used for the equation 1. The data on law and order (LAW) and political stability and absence of violence (POLSAV) were collected

from the Political Risk Services International Country Risk Guide (PRS), and data on GDP per capita (LogGDP) were gathered from the World Bank (WB). The variables used in our analyses were chosen in terms of their practicality and in the light of studies found in our hypothesis and related literature. The independent variables are defined and their prospective signs are discussed below.

The EF data were gathered from The Heritage Foundation (HF). Economic freedom is expected to reduce tax evasion. Therefore, the coefficient sign of this variable is expected to be negative.

The variable LAW represents the respect shown to the laws of the country and to their implementation. As long as individuals comply with laws, the rate of tax evasion should decrease. An increase in the value of this variable means an improvement, so its sign is expected to be negative.

The variable POLSAV consists of a combination of government stability, internal conflict, external conflict, and ethnic tensions. The rate of tax evasion is predicted to drop in countries where conflicts do not occur, the ethnic tension is low, and the government is stable. An increase in the value of this variable indicates an improvement in this field, so its coefficient sign is to be negative. LogGDP indicates the logarithm of GDP per capita. The higher the income per capita, the more developed a country gets; therefore, the rate of tax evasion is expected to decrease. An increase in the value of this variable indicates an improvement in this field, so its coefficient sign is to be negative.

In the second part of the analysis, the Human Development Index (HDI) was regarded as an indicator of social welfare, and the effect of economic freedom on social welfare was analysed with the help of another four independent variables. The HDI data were taken from the Human Development Report 2004 of the United Nations Development Programme (UNDP). The independent variables are EF, the rate of population increase (POP), urbanisation (URBAN), and human capital accumulation (EDU).

According to the data of the UNDP, as the figures of countries rise, the HDI figures also rise in those countries. As the EF figures have the same characteristics, the coefficient sign of this variable is expected to be positive. In other words, economic freedom and social welfare have a positive effect. POP shows the rate of population increase in countries. The data were collected from the WB. An increasing population may cause social welfare to decrease. Therefore, the expected sign of the POP variable on HDI is negative. That is to say, population increase and social welfare have a negative effect. URBAN represents the ratio of the urban population to the total population. The data for this variable were taken from the WB. An increasing urban population may signify an increase in social welfare. Thus, the expected sign of the URBAN variable on HDI is positive, which means urbanization and social welfare have a positive effect. EDU is the ratio of primary school students to overall students. Primary school students are the variable used for human capital accumulation, and the data were gathered from the WB. As a rising level of education will increase the potential for the poor to earn income, a high level of enrolment in



education may improve social welfare. Hence, on HDI, the expected sign of the education variable, which shows human capital accumulation, is positive. In other words, human capital accumulation and social welfare have a positive effect.

#### IV. EMPIRICAL FINDINGS

In this section, the relationship between economic freedom, tax evasion and social welfare were determined. To this aim, six types of models (all countries, developed, developing, EU, G20 and OECD countries) were estimated with the data from 63 countries from the year 2002. Table 3 and Table 4 reports the results and the technique used to forecast. The techniques of OLS and WLS were used in the study. When making predictions with cross-section data, changing variance may cause a problem. In this case, the variables were rescaled by a suitable weight factor and the model was forecast again with WLS. The results were obtained using all the variables

**Table 3:** Tax Evasion and Economic Freedom

Dependent Variable: TAXEVA						
	Countires (Total)	Developed	Developing	EU	G20	OECD
<b>EF</b>	-0.5086	-1.2849	-0.1841	-0.0641	-0.8992	-1.2064
Standart error	0.1686	0.1732	0.1370	0.2686	0.2304	0.2296
<i>Prob.</i>	0.0038	0.0000	0.1902	0.8142	0.0007	0.0000
<b>LAW</b>	-0.8942	-0.4379	-1.0108	-2.3330	-1.3815	-1.2523
Standart error	0.4558	0.8125	0.6518	0.8212	0.3834	0.5767
<i>Prob.</i>	0.0546	0.5944	0.1326	0.0113	0.0015	0.0392
<b>POLSAV</b>	-1.4384	-0.7226	-1.9808	-0.6951	-0.5134	-0.6539
Standart error	0.8642	1.6659	1.0626	3.1333	1.4550	1.6011
<i>Prob.</i>	0.1014	0.6698	0.0732	0.8271	0.7274	0.6863
<b>LogGDP</b>	-0.4091	-0.2439	-0.3794	-0.5340	-0.0023	0.1780
Standart error	0.2219	0.5656	0.3932	0.5232	0.3308	0.5835
<i>Prob.</i>	0.0704	0.6698	0.3432	0.3217	0.9945	0.7627
<b>CONSTANT</b>	3.1915	7.2219	1.5404	1.4417	4.0957	5.4946
Standart error	0.9664	1.6315	1.5962	2.5589	1.0055	1.3380
<i>Prob.</i>	0.0016	0.0002	0.3431	0.5805	0.0005	0.0004
Estimation method*	OLS	OLS	OLS	OLS	OLS	OLS
Adj.R <sup>2</sup>	0.63	0.68	0.31	0.33	0.70	0.65
No. of obs.	63	31	32	22	28	31
Breusch-Pagan	0.47	0.32	0.61	0.25	0.30	0.40

\* White Heteroskedasticity-Consistent Estimator of the Coefficient Covariances

As seen in Table 3, a quite high and negative relationship exists between EF and TAXEVA. According to the findings, there is a statistically significant relationship between economic freedom and tax evasion, which is below the 1 % level of significance. Ergo, enhancing economic freedom causes tax evasion to decrease. When the sign of LogGDP for the OECD countries (countries that were

members of the OECD in 2002 and whose data could be accessed) is excluded, all variables have the expected sign. According to the findings collected for all countries, not only EF but also LAW and LogGDP are statistically significant. While in developed countries (WB classification) only EF is statistically significant, in developing (WB classification) and the EU countries (which were members of the EU in 2002 and whose data could be accessed), EF loses its statistical significance when the other variables are included in the model. Nonetheless, the sign of the EF variable is still negative. As for the other variables, only POLSAV in developing countries and only LAW for the EU states are statistically significant. G20 states (G20 members in 2002 whose data are accessible and the EU members) are the group with the highest adjusted R2. In this group and similarly in the OECD group, the EF and LAW variables are statistically significant.

**Table 4:** Social Welfare and Economic Freedom

Dependent Variable: Human Development Index (HDI)						
	Countires (Total)	Developed	Developing	EU	G20	OECD
<b>EF</b>	0.0369	0.0240	0.0705	0.0208	0.0591	0.0469
Standart error	0.0085	0.0082	0.0141	0.0081	0.0285	0.0095
<i>Prob.</i>	0.0001	0.0075	0.0025	0.0208	0.0001	0.0000
<b>POP</b>	-0.0344	0.0068	0.0367	0.0580	-0.0322	-0.0206
Standart error	0.0125	0.0103	0.0423	0.0169	0.0384	0.0130
<i>Prob.</i>	0.0081	0.5161	0.4187	0.0033	0.4100	0.1252
<b>URBAN</b>	0.0016	-0.0000	0.0051	0.0007	0.0018	0.0000
Standart error	0.0004	0.0002	0.0010	0.0003	0.0007	0.0004
<i>Prob.</i>	0.0006	0.9337	0.0032	0.0629	0.0252	0.9875
<b>EDU</b>	0.0015	0.0008	-0.0009	0.0007	0.0007	0.0008
Standart error	0.0004	0.0002	0.0009	0.0002	0.0006	0.0002
<i>Prob.</i>	0.0027	0.0017	0.3907	0.0223	0.2726	0.0027
<b>CONSTANT</b>	0.3541	0.6545	0.0000	0.6156	0.2688	0.4878
Standart error	0.0529	0.0616	0.0000	0.0604	0.1175	0.0626
<i>Prob.</i>	0.0000	0.0000	0.6718	0.0000	0.0322	0.0000
Estimation method*	OLS	OLS	WLS	OLS	OLS	OLS
Adj.R <sup>2</sup>	0.70	0.42	0.98	0.77	0.68	0.63
No. of obs.	57	29	27	22	27	31
Breusch-Pagan	0.66	0.29	0.99	0.31	0.29	0.23

\* White Heteroskedasticity-Consistent Estimator of the Coefficient Covariances

Table 4 presents the prediction results for all countries and for other sub-models covering various groups of countries. To test whether there is a changing variance problem in the model, Table 4 also shows the test results of Breusch-Pagan. When the problem of heteroscedasticity problem was detected, it was fixed with the help of a suitable weight factor and was re-estimated using the WLS method. The error variance of the model was determined as the square of

the export/GDP (2002 US\$) ratio, and all the variables were rescaled with  $1/(\text{export})^2$ . The data were gathered from World Bank.

Table 4 shows a quite high and positive relationship between EF and HDI. The findings, indicate a statistically significant relationship between economic freedom and HDI, which is below the 1 % level of significance. Accordingly, enhancing economic freedom causes social welfare to improve. As for the other independent variables, for all countries, POP, URBAN, and EDU have the expected sign and statistical significance. For developed countries, while the EF and EDU variables are statistically significant, POP and URBAN do not have the expected sign. In developing countries EF and, unlike in developed countries, URBAN are statistically significant. EDU does not have the expected sign. For the EU members, all variables are statistically significant and the highest R2 is obtained. However, the population variable does not have the expected sign and is statistically significant at the level of 1 %. Accordingly, an increase in population causes social welfare to improve in EU countries. This result may not be surprising for the EU, which has an aging population. For the G20 countries, EF and URBAN have statistical significance. For the OECD countries, EF and EDU are statistically significant.

The hypothesis of this study is that economic freedom will reduce tax evasion and enhance social welfare. With the help of the multiple regression method, a negative and statistically significant effect is found between economic freedom and tax evasion. The relationship between economic freedom and social welfare is also tested with the multiple regression method. The findings show a positive and statistically significant relationship between economic freedom and social welfare.

## **CONCLUSION**

In this study, the effect of economic freedom on tax evasion and social welfare was analysed. The results show a statistically significant relationship between economic freedom, tax evasion, and social welfare. In the first part of this study, the way that economic freedom affects tax evasion was examined. According to the findings obtained through a multivariate model, there is a high, statistically significant and negative relationship between economic freedom and tax evasion. Hence, rising economic freedom reduces tax evasion. By reducing tax evasion, economic freedom helps increase government revenues and the social state to run properly. The reason is that governments, with their increasing revenues, have more resources to use for social welfare. Therefore, in the second part of this study, the relationship between economic freedom and social welfare was examined. According to the results of the multivariate model, increasing economic freedom improves social welfare.

This study emphasises the importance of the effect of economic freedom on tax evasion and social welfare. Increasing the level of economic freedom depends on many factors, such as the loan market, the labour market, the public

economy, international trade, economic regulations, and private property rights. Thus, it may take much time for countries to improve their level of economic freedom. Especially in developing countries, preventing tax evasion might be harder due to widespread corruption. On the other hand, economic freedom may cause the level of corruption to drop by helping the public economy to shrink and a more transparent public administration to be formed. To improve the level of economic freedom in these countries, serious and economically well-structured strategies should be developed, because in countries where the level of economic freedom is high, the level of tax evasion is found to be lower and social welfare higher.

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