

# The Impact of Tax Avoidance in Romania: Corporate Profit Shifting to Tax Havens

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## Abstract

*This study investigates the impact of tax avoidance on Romania's economy, specifically its relationship with GDP, comparing Romania's situation to other EU member states. The research utilizes a quantitative methodology, analyzing data from 2015 to 2020 through statistical methods, including regression analysis.*

*The findings indicate a substantial increase in profits transferred from Romania to tax havens, rising from 4 billion USD in 2015 to 7 billion USD in 2020, with a peak of 8 billion USD in 2019. The share of profits lost as a percentage of GDP ranged from 2.25% to 3.19%, with an average of 2.63%. Transfers to non-EU tax havens increased significantly, while those to EU tax havens remained constant. Regression analysis shows a positive and significant relationship between GDP growth and profits lost, with an increase of 0.039904 units of profits lost for each additional unit of GDP. These results highlight the economic impact of tax avoidance and underline the need for effective policy measures to address this issue.*

**Key words:** tax avoidance, profit shifting, tax havens, Romania

**J.E.L. classification:** H26, H32, F23

## 1. Introduction

In recent years, the issue of tax avoidance has become a topic of intense debate in academic, economic, and political circles, both nationally and internationally. With the rise of globalization, a strong competition has emerged among countries to provide a favorable climate for multinational companies, aiming to attract foreign direct investments.

In this context, globally, there are countries that practice high tax rates and countries that practice low rates to be more attractive to companies. The problem of tax avoidance that has been created stems from the fact that these companies apply various methods to access promising markets with high rates, subsequently avoiding the tax burden by transferring profits to countries with low rates.

The consequences of this practice can be multiple. In general, states with higher tax rates lose some of their tax revenue, which can reduce the funds available to finance public services such as health, education and infrastructure, also contributing to increased economic and social inequality.

Tax avoidance practices also distort market competition by giving multinational companies an unfair advantage over local businesses, which do not have the same opportunities to shift their profits to low-tax jurisdictions. This situation can lead to an inefficient allocation of economic resources and the erosion of the national tax base.

As part of the European bloc, Romania is a state that has participated in the phenomenon of globalization, attracting a significant number of multinational companies in recent years. This has brought a number of advantages, including through foreign direct investment and employment. However, in Romania the corporate tax rate is 16% and in the European Union there are tax havens that practice levels of corporate tax rates much lower, which subjects Romania to the risk of tax avoidance by allocating profits to tax havens.

Therefore, the purpose of this paper is to find out what was the impact of tax avoidance in Romania in recent years in relation to the GDP, compared to the other member states of the European Union.

The present paper is composed as a part of a more comprehensive research through which we aim to determine the impact that the implementation of the new tax reform plan proposed within the OECD/G20 framework will have on the member states of the European Union.

## 2. Literature review

One of the most significant changes in global tax policy since the 1980s has been the reduction in corporate tax rates. From 1985 to 2018, the global average corporate tax rate decreased from 49% to 24%. This decline can be attributed in part to international tax competition (Tørsløv, Wier and Zucman, 2023).

Tax havens exacerbate tax competition problems by forcing states to reduce taxes below optimal levels to attract investment (Slemrod and Wilson, 2009).

As traditional understandings suggest, a tax haven is identified by the application of extremely low or zero taxes. In addition, these jurisdictions are also distinguished by the high degree of confidentiality and by the existence of a robust financial infrastructure that allows the adoption of advanced strategies to meet the financial objectives of so-called offshore companies (Mara, 2015).

There are several methods of tax avoidance practiced by multinational companies with the help of tax havens, the best known being used through affiliated entities, for example the practice of transfer pricing, royalty payments or intracorporate loans. Given these practices, Global Taxation is an important topic in the context of global decisions, as most Foreign Direct Investments (FDI) and international operations are deeply influenced by tax considerations. This issue is of overwhelming importance, as approximately \$10 trillion of global trade is transacted between affiliated companies (Contractor, 2016).

In Romania, currently, the corporate tax rate is 16%, representing an average level, compared to other jurisdictions from the European Union that practice low rates such as Hungary that practices 9% and Bulgaria that practices 10% and compared to jurisdictions that practice higher rates, such as Spain (23%) and France (25%). Also, there are jurisdictions in the European Union, such as the Netherlands, which practice high tax rates, namely 25.8%, but offer very favorable tax optimization conditions for foreign companies, thus being categorized as tax havens.

The level of the tax rate in Romania is substantial to become a target of tax avoidance strategies. Also, in the current literature, there are studies that have analyzed this issue in Romania and the main aspects identified in the case of companies that avoid taxation are the lack of consistency in filing financial statements and the ability to influence political power in their favor, meaning they negotiate the tax burden or influence tax legislation. It has also been determined that the larger a company is, the more inclined it is to tax avoidance (Mocanu, Constantin and Răileanu, 2021).

Certainly, while these practices reduce tax revenues, they have a negative impact both on the state budget and, at a competitive level, on the smaller companies that support the national economy.

## 3. Research methodology

The study aims to analyze the impact of tax avoidance in Romania, specifically examining the relationship between profits lost due to profit shifting and the country's GDP.

The methodology involves a quantitative approach where statistical methods are used, including the calculation of percentages (Profits Lost/GDP), absolute and relative changes in profits lost and GDP, and regression analysis.

The regression model assumes a single-factor linear regression model to quantify the relationship between GDP and lost profits, where the equation of the linear regression model is:

$$Y = a + bx + u \quad (1)$$

Y represents the real values of the dependent variable (Profits lost); x represents the real values of the independent variable (GDP); a and b are the model parameters; and u represents the residual variable that signifies the influence of other factors on Y.

#### 4. Results

In this part, we will examine the profit transferred to tax havens in Romania, using the latest available data, covering the period 2015-2020.

The table below shows the evolution of the profits transferred to tax havens in Romania, as well as the evolution of the gross domestic product in the same period.

Table no.1. The evolution of profits transferred to tax havens in Romania, relative to GDP

Year	Profits lost (billion USD)	GDP (billion USD)	(Profits Lost/GDP)*100 (%)
2015	4	177.9	2.25
2016	5	185.3	2.70
2017	5	210.1	2.38
2018	6	243.3	2.47
2019	8	251.0	3.19
2020	7	251.4	2.78

Source: (EU Tax Observatory, 2024); (World Bank Group, 2024)

According to these data, profits lost have evolved from 4 billion USD in 2015 to 7 billion USD in 2020, representing an absolute increase of 3 billion USD, respectively a relative increase of 75%. The highest value of profits lost was 8 billion USD in 2019.

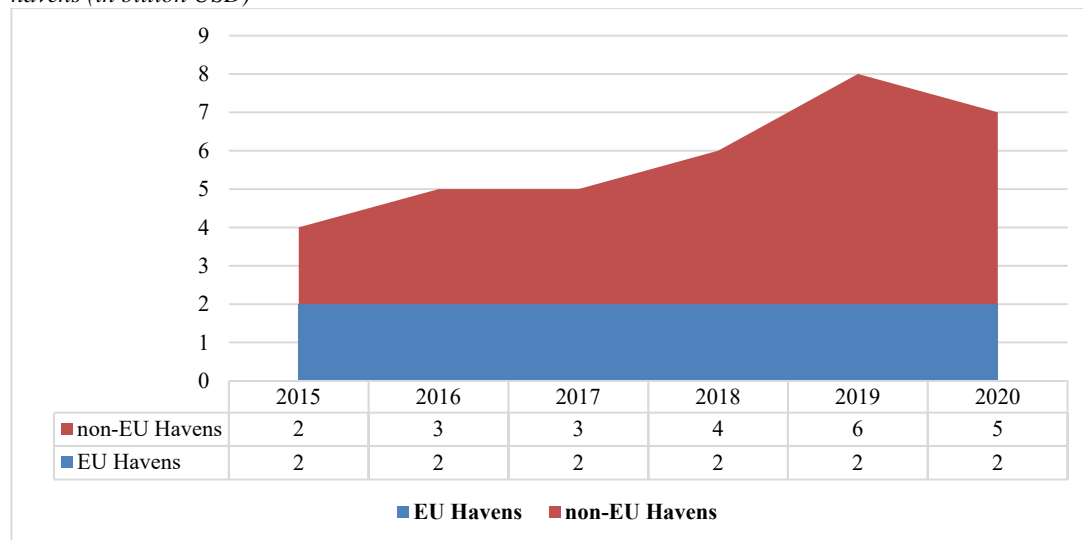
As regards the Gross Domestic Product (GDP), it evolved from 177.9 billion USD in 2015 to 251.4 billion USD in 2020, representing an absolute increase of 73.5 billion USD, respectively a relative increase of 41.32%.

It is noted that the profits lost increased more significantly compared to the increase in GDP. During the period, profits lost increased by 75%, while GDP increased by 41.32%. Certainly, the extent of the modified values must also be taken into account.

The share of profits lost in GDP is in the range of 2.25% – 3.19%, in the analysed period. The average being 2.63% and the median 2.59%.

In the following graphic, we will follow the evolution of the profits lost depending on the destination of the tax havens where they have arrived, respectively depending on their membership in the European community block.

Figure no.1. The amount of profits lost in Romania due to the transfer of profits to EU and non-EU tax havens (in billion USD)

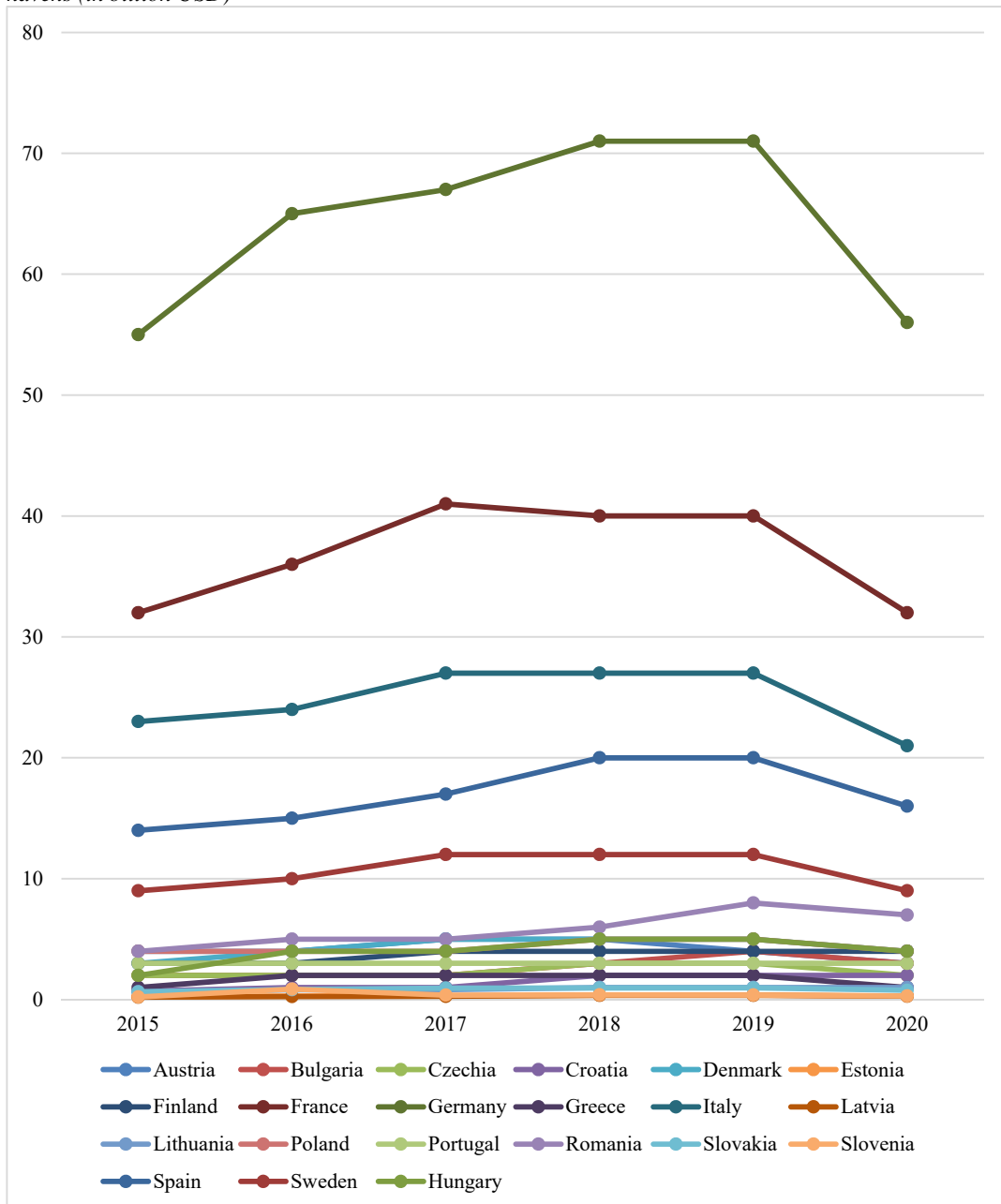


Source: (EU Tax Observatory, 2024)

According to the graph, during the analyzed period, the interest of companies to transfer profits to tax havens outside the European Union increased, so that the amount transferred to EU tax havens remained constant at 2 billion USD, while in the case of non-EU tax havens, this increased from 2 billion USD in 2015 to 5 billion USD in 2020, identifying an absolute increase of 3 billion USD, respectively a relative change of 150%, the average of the profits transferred in non-EU heavens being 3.83 billion USD and the median 3.5 billion USD.

In the following graph, we will track the evolution of profits transferred to tax havens from all European Union countries to identify Romania's situation compared to member states in terms of the value of transferred profits.

Figure no.2. Evolution of profits transferred to tax havens from European Union states, excluding tax havens (in billion USD)



Source: (EU Tax Observatory, 2024)

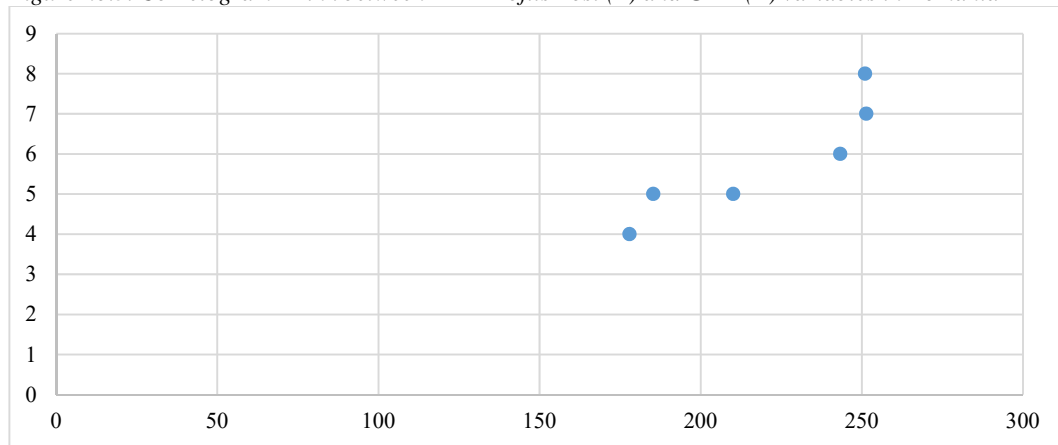
According to the graph, Romania is in 6th place in the European Union in terms of the value of profits transferred to tax havens in 2020. The following tax havens were excluded from the analysis of the 27 European Union states: Belgium, Cyprus, Ireland, Luxembourg, Malta, Netherlands.

The most affected countries in the European Union before Romania are Germany, France, Italy and Spain and the least affected are Latvia, Estonia and Slovenia.

We will continue to use the one-factor linear regression model to attempt to determine the parameter  $b$ , which indicates by how much the profits lost increase when the gross domestic product (GDP) increases by one unit, under the condition that the value is statistically significant. It should be noted from the outset that the analysis is limited due to the small number of 6 observations.

In the following graph, I have constructed a correlogram between the dependent variable (Y), representing profits lost, and the independent variable (x), representing gross domestic product, in order to analyze whether the regression is linear based on the provided data, examining the distribution of data points on the graph.

Figure no.3. Correlogram - Link between PL - Profits Lost (Y) and GDP (X) variables in Romania



Source: Authors' own data processing in Excel, based on the data from Table 1

According to the correlogram, the data points appear to follow an approximately linear pattern, in that as X (GDP) increases, Y (PL) also increases. The points seem to align in a manner suggesting a positive relationship between GDP and PL. There are no apparent deviations suggesting a strong nonlinear relationship, such as a significant curve or wide dispersion of data points.

Figure no.4. Estimation of the impact of GDP (X) on Profits lost (Y) in Romania

Dependent Variable: PL  
Method: Least Squares  
Date: 07/13/24 Time: 16:33  
Sample: 2015 2020  
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.938887	2.089725	-1.406351	0.2323
GDP	0.039904	0.009416	4.237872	0.0133
R-squared	0.817847	Mean dependent var		5.833333
Adjusted R-squared	0.772309	S.D. dependent var		1.471960
S.E. of regression	0.702375	Akaike info criterion		2.392504
Sum squared resid	1.973325	Schwarz criterion		2.323091
Log likelihood	-5.177512	Hannan-Quinn criter.		2.114636
F-statistic	17.95956	Durbin-Watson stat		2.776537
Prob(F-statistic)	0.013286			

Source: Authors' own data processing in EViews, based on the data from Table 1

These results reflect the analysis of the relationship between the profits lost (PL) and the gross domestic product (GDP) of Romania, with PL as the dependent variable and GDP as the independent variable.

The intercept is the estimated value of profits lost when GDP is zero. The intercept value (-2.938887) is not statistically significant (p-value of 0.2323 is greater than 0.05), suggesting that the intercept is not significantly different from zero, when GDP is zero.

The GDP coefficient (parameter b) suggests that for each additional unit of GDP, the profits lost increases by 0.039904 units. This relationship is statistically significant (p-value of 0.0133 is less than 0.05), indicating a positive and significant relationship between GDP and lost profit.

The R-squared value of 0.817847 suggests that 81.78% of the variation in profits lost can be explained by the variation in GDP, which indicates a good fit of the model.

The F test assesses the overall significance of the model. The large value and associated probability (0.013286) below 0.05 indicates that the model is significant.

Also, the Durbin-Watson Test is used for autocorrelation of residuals. Values close to 2 suggest no significant autocorrelation. A value of 2.776537 indicates a slight negative autocorrelation trend, but it is not very significant.

## 5. Conclusions

The analysis highlighted a substantial increase in profits transferred from Romania to tax havens, rising from 4 billion USD in 2015 to 7 billion USD in 2020, with a peak of 8 billion USD in 2019. During the same period, Romania's GDP grew from 177.9 billion USD to 251.4 billion USD. The percentage of profits lost as a share of GDP ranged from 2.25% to 3.19%, with an average of 2.63%.

Transfers to non-EU tax havens increased significantly, while those to EU tax havens remained constant. In 2020, Romania ranked sixth in the EU for transfers to tax havens, following Germany, France, Italy, and Spain.

In the regression analysis, the GDP coefficient indicates a positive and significant relationship between GDP growth and profits lost, suggesting that for each additional unit of GDP, profits lost increase by 0.039904 units.

The limitations of the research are given by the reference period, namely 2015-2020, since the data available for the profits lost included only this period, which is why the regression analysis is also limited to 6 observations.

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