Comparative Analysis of Some Member States of the European Union in Central and Eastern Europe Regarding the Evolution of the Fiscal Pressure on Taxes

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Abstract. *With the intensity of the implementation of budgetary policy, there has been a tendency to increase the taxation of different areas since 1970 in most EU Member States. This upward trend in taxation, also called progressive taxation, has lasted for more than three decades, dating back to the 2000s, with the expansion of various economic sectors, and the increase in spending, implicitly with the accumulation of various public debts. In this regard, at the conclusion of the Maastricht Treaty and then the Stability and Growth Pact, the most important Member States were forced to adopt various legislative measures to stabilize fiscal policies due to many budgetary shortcomings and public debt. Each Member State of the European Union has interpreted the treaties concluded in the early 1990s, as a result some states have reduced spending and others have imposed greater tax burden on taxpayers by increasing taxes and duties. However, the real winners were the states that took advantage of this fiscal instability and reduced their tax burdens on some taxes, such as income tax, corporate tax and social security contributions.*

Keywords: fiscal pressure, fiscal burden, direct taxes, indirect taxes, social contributions, crisis. J.E.L.

JEL Classification: H200, H300, E62, H20, H21, H26, H71

1. Introduction

The concept of fiscal pressure also depends on how to approach it, as the first syntax this concept is defined by Țulai Constantin as “relative expression of the tax burden borne by the taxpayer” 1.Tulai Constantin appreciates in his paper that fiscal pressure "It means how burdensome the taxes are or, in other words, how big the tax burden is on the shoulders of taxpayers" 2. Starting from this idea, in this article we want to analyze the general pressure of some developed and emerging countries in the European Union in the period 2010-2018, and then to make an analysis of the evolution of fiscal pressure displacement indices on each tax category and social contributions related to the gross domestic product of each state for the period 2010-2018. The countries for which the analysis is made were selected to compare the developed countries, namely Italy, Belgium, Germany, France, the Netherlands and the developing countries Romania and Malta. Following the analysis at the end of the article, we compared the most important years of economic development, 2010 and 2018, through which we observed the percentage differences of the fiscal pressure and the level of the share of fiscal revenues during the 9 years analyzed.

According to the latest report from the European Commission on tax trends in the European Union, taxes and fees in EU Member States have risen slightly, with the economic sector implementing an area with high tax rates. In 2010, the average fiscal pressure,

including social contributions in the EU-27, amounted to 38.92% of GDP, being one of the continents with the highest rates of taxation, followed by the US (24.8%) and

Japan (26.9%). According to OECD data, the European Union is next to Canada and New Zealand with overall fiscal pressure rates of over 30% of GDP.

2. General fiscal pressure for the period 2010-2018 in the European Union and in Italy, Belgium, Germany, France, the Netherlands, Malta and Romania

The high fiscal pressure harms the competitive economic sector between the EU member states but also with the other states of the globe. According to the data expressed in table no. 1, it shows that at EU-27 level, during the analyzed period 2010-2018 there was an increasing trend of fiscal pressure (by about 2 percentage points between margins). The percentage increase has increased since 2010, with the attempt to recover from the economic crisis (2007-2008) of the EU Member States, by burdening taxpayers with taxes and fees beyond their affordability. The representatives of the states tried to recover the economy by increasing the tax quotas, this is observed by the tendency to increase the level of the general fiscal pressure at the U.E. level.

Each state analyzed approached a different or less different economic strategy over the period analyzed. The first effects of the global economic crisis were already felt on government revenues in 2008, although economic growth became negative in the EU only the following year, when the lowest level of mandatory taxes on GDP was recorded (38.4%), a level that stabilized in 2010 in the context of a slight resumption of economic growth. According to the data questioned at the level of the report of the European Union Commission, the largest reduction of fiscal burdens among the above mentioned states were registered in Germany, a developed state (3.2 pp) and Romania, an emerging state being at the opposite pole where the fiscal burden grew. In the other states, the changes, in one way or another, were less significant, often below one percentage point.

Table no.1 General fiscal pressure

	2010	2011	2012	2013	2014	2015	2016	2017	2018
U.E. 27	38.92	39.34	40.30	40.70	40.84	40.60	40.70	40.85	41.03
Italy	41.2	41.1	43.1	43.2	42.9	42.8	42.1	41.8	41.7
Belgium	43.6	44.4	45.3	46.1	45.7	45	44.2	44.7	44.8
Germany	38.8	39.1	39.7	39.9	39.6	40	40.5	41	41.5
France	44.2	45.4	46.4	47.5	47.7	47.7	47.6	48.3	48.4
Netherlands	46.4	47.4	48.1	49.2	47.9	37.6	38.9	39	39
Malta	33.2	33.4	33.7	33.8	33.5	31.7	32.1	32.9	32.6
Romania	26.6	27.7	28.1	27.4	27.3	27.8	26.5	26.2	27.1

Note: * as % of GDP
Source: own calculations based on data from https://ec.europa.eu/eurostat/.

At the same time, the fiscal pressure registered an increasing degree in relation to the GDP compared to the level of the European Union in the Netherlands, Belgium, France and Italy, Germany managing to be at the line of the average level of the U.E. The Netherlands is the state that applied the most burdensome tax burden among the analyzed states in the period 2010-2014, managing to cut it drastically starting with 2015, when the share of fiscal pressure reached 37.6% below the EU27 level. Instead according to table no. 1 presented France has the highest share of the level of consecutive general fiscal pressure for the period 2015-2018

As we can see in table no. 1 emerging states Romania and Malta, present lower indicators of fiscal pressure, constantly, with small variations of about 1 percent each, percentages that differ depending on the political instabilities of the period, but also differ depending on the possible shifts of fiscal pressure to other tax bases.

Incorrect redistribution of taxes, fees and contributions is a cause of high fiscal pressure

2. Comparison of the evolution of the fiscal pressure towards other tax bases for Italy, Belgium, Germany, France, the Netherlands, Malta and Romania.

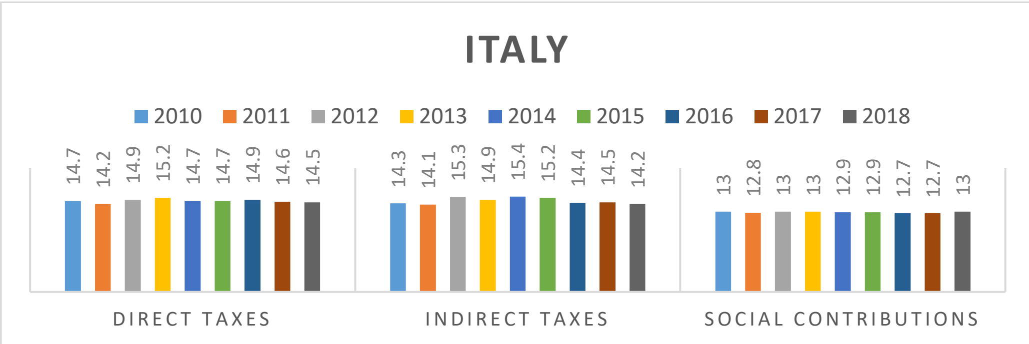

Figure no.1 Evolution of the fiscal pressure related to direct, indirect taxes and social contributions in Italy in the period 2010-2018.

Note: * as % of GDP

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

In the analyzed period 2010-2018, Italy registers an average of the general fiscal pressure of 42.21% above the EU level of only 40.36%. According to fig.nr.1 the fiscal policy of this state did not occur large percentage changes on the shift of the fiscal pressure to another tax base, although we see a decrease of the fiscal burden of direct taxes (from 14.7 to 14.5) and indirect ones (from 14.3 at 14.2), the fiscal burden of social contributions remaining constant at 13% of GDP.

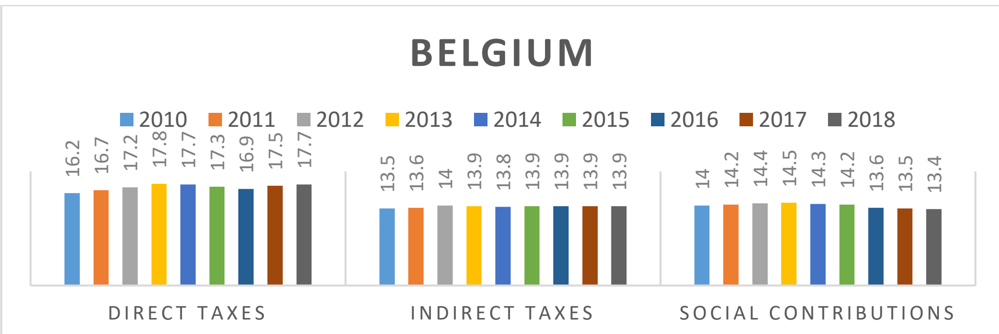

Figure no.2 Evolution of the fiscal pressure related to direct, indirect taxes and social contributions in Belgium in the period 2010-2018

Note: * as % of GDP

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

Belgium has an average overall tax pressure rate of 44.87% above the EU average. with about 4.5pp. This state applies a burdensome tax system. According to figure no.2 in the analyzed period 2010-2018 Belgium there were percentage fluctuations in order to shift the tax burden to other tax bases, such as increasing the tax burden of direct taxes (from 16.3% - to 17.7%), and indirect taxes (from 13.5% - to

13.9%), decreasing the burden of taxing tax contributions, thus fluctuating the degree of fiscal pressure (from 14% - 13.4%).

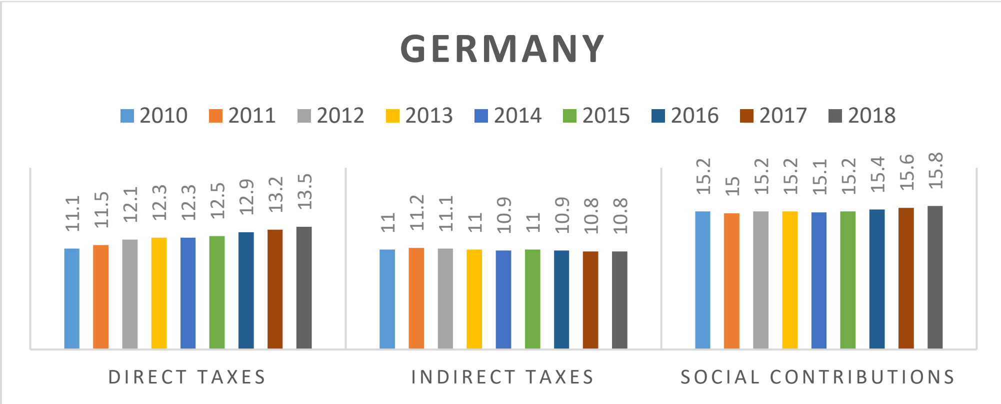

Figure no.3 Evolution of the fiscal pressure related to direct, indirect taxes and social contributions in Germany in the period 2010-2018

Note: * as % of GDP

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

Germany has an average tax pressure rate of 40.01% below the EU average. Germany is a developed state model that manages to stabilize the fiscal pressure of its state. In figure no.3 we notice that the fiscal policy of Germany regarding the shift of the fiscal pressure worked by increasing the direct taxes (from 11.2% to 13.5%), decreasing the indirect taxes (from 11% to 10.8%), and the moderate increase of the fiscal pressure of social contributions (from 15.2% to 15.8%).

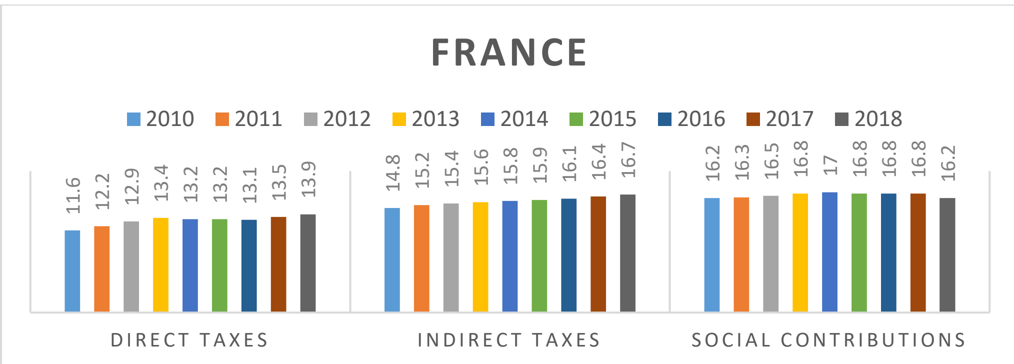

Figure no.4 Evolution of the fiscal pressure related to direct and indirect taxes and social contributions in France in the period 2010-2018.

Note: * as % of GDP

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

France has the highest calculated average level of fiscal pressure rate of 47.02% of the seven countries analyzed, with 6.6% pp above the average level of the European Union. According to figure no.4 we notice that this country has shifted its fiscal burdens in the period 2010-2018 to direct taxes with a 2.3 percent increase (from 11.6% to 13.9%) and indirect taxes (15.1% -16.7%), maintaining the pressure constant tax rate of tax contributions at 16.2%. We can say that the chosen model is similar to that of Germany, but the evolution is not so successful. The fiscal pressure related to taxes is quite high on all the analyzed sectors.

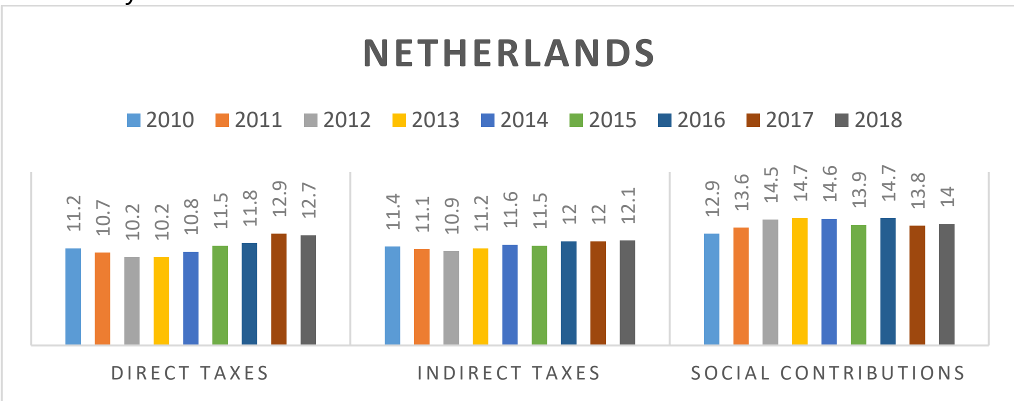

Figure no.5 Evolution of the fiscal pressure related to direct and indirect taxes and social contributions in the Netherlands in the period 2010-2018.

Note: * as % of GDP
Source: own calculations based on data from https://ec.europa.eu/eurostat/.

The Netherlands has an average value of the general fiscal pressure level of 43.72, above the average of the European Union level. We must keep in mind that this state started in 2010 from a very high share of the fiscal pressure of 46.4% and managed to stabilize it in 37.6% in 2017. According to figure no.5 in the analyzed period, the fiscal policy of the state The Dutch focused in the first phase on decreasing the direct and indirect tax burdens, later by increasing the direct and indirect tax rates by about 0.6%, and increasing the tax burden of social contributions for the entire period analyzed by about 1 pp (12.9% -14 %).

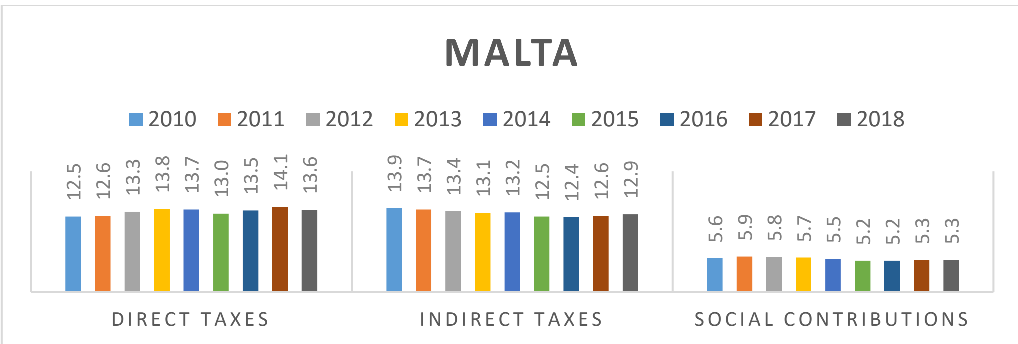

Figure no.6 Evolution of the fiscal pressure related to direct, indirect taxes and social contributions in Malta in the period 2010-2018.

Note: * as % of GDP
Source: own calculations based on data from https://ec.europa.eu/eurostat/.

Malta registers an average level of fiscal pressure for the period 2010-2018 of 32.99% below the EU average.According to figure no.6, the state of Malta redirected in the period 2010-2018 the increase of the level of fiscal pressure with high rates towards direct taxes (12.5% -13.6 %), and the decrease in the level of indirect taxation (from 13.9 % to 12.9%), however the level of indirect taxation remains high. Regarding the social contributions, the strategy of maintaining the small quotas was adopted, occurring during the analyzed period a small decrease of about 0.3pp.

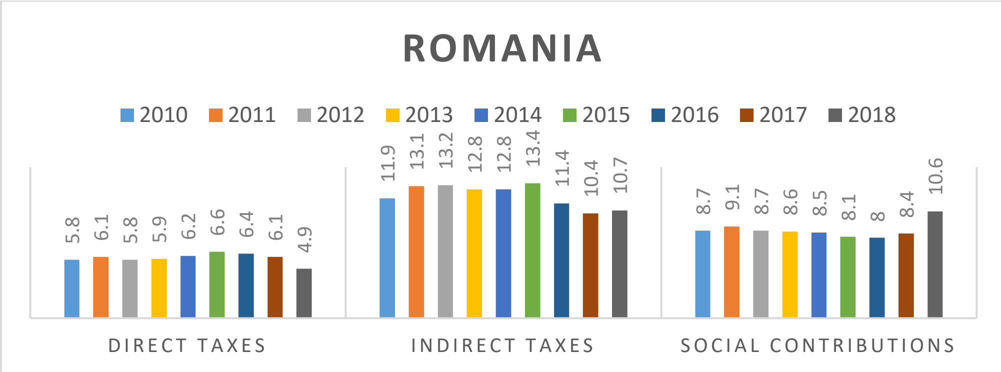

Figure no.7 The evolution of the fiscal pressure related to direct and indirect taxes and social contributions in Romania in the period 2010-2018

Note: * as % of GDP

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

Romania registers, among the states analyzed in the article, the lowest level of fiscal pressure of 27.19% well below the EU average, but the affordability of taxpayers is difficult. According to figure no.7, the Romanian government adopted in the period 2010-2018 a fiscal policy through which lower rates of direct taxes are maintained, lowering their fiscal burden from 5.8% to 4.9%. On the other hand, the fiscal burden of indirect taxes is quite high, unlike the other tax groups, however, in the period 2010-2018 it decreased, more precisely by 11.9% -10.7%. The fiscal burden of social contributions was also changed during the 9 years analyzed, this is observed by increasing the level of fiscal pressure from 8.7% in 2010 to 10.6% in 2018.

Finally, we note that the biggest legislative changes regarding the level of taxation were established in Belgium, Germany, France and the Netherlands (developed countries) by increasing the levels of direct and indirect taxation, and in Romania (emerging country) it was established otherwise, more specifically, lowering the level of taxation for direct and indirect taxes and redistributing the tax burden towards increasing the level of social security contributions. The Maltese state copies the policies of developed countries by setting a high level of direct and indirect taxation and reducing the tax burden on social security contributions.

4. Comparative analysis of the fiscal pressure by categories of compulsory levies (direct taxes, indirect taxes and social security contributions) related to the gross domestic product, for the years 2010 and 2018.

The structure of the tax burden induced by the three main categories of compulsory levies (indirect taxes, direct taxes and social contributions) can be analyzed on the basis of the data in Table 2. A first observation that can be made is that there is a distribution at EU-27 level. almost equal tax burden between the three main categories of compulsory taxes, with an insignificant difference in favor of indirect taxes. Contrary to these averages, the situation between the Member States of the European Union is very different, with few countries having a uniform approach to the collection of taxes and duties in relation to gross domestic product.

In this article we also analyzed the evolution of the collection of income related to gross domestic product for each category of direct, indirect tax and social security contributions, comparing two different periods in 2010 and 2018. Following the comparison we can see the traceability of the tax burden during the differences between them and the consequences of increasing the tax burden on each tax category.

Table 2. The structure of fiscal pressure in the EU in 2010/ 2018 (direct taxes)

		2010			2018			2010-2018		
		Direct taxes			Direct taxes			Differences (pp)		
No	Country	Overall compulsory levies % GDP	% of GDP	%of overall compulsory	Overall compulsory levies % GDP	% of GDP	%of overall compulsory	Overall compulsory levies % GDP	% of GDP	%of overall compulsory
1	**Italy**	42.3	14.7	34.8	41.8	14.5	34.8	-0.5	-0.2	0
2	**Belgium**	43.9	16.3	37.2	44.8	17.7	39.4	+0.9	+1.4	+2.2
3	**Germany**	38.1	11.2	29.4	40.1	13.5	34	+2	+2.3	+4.6
4	**France**	42.5	11.6	25.8	46.5	13.9	30	+4	+2.3	+0.5
5	**Netherlands**	33.8	11.2	31.5	38.7	12.7	33	-0.1	+1.5	+4.2
6	**Malta**	33.3	13.4	40.1	31.8	13.6	44	-1.5	+0.2	+3.9
7	**Romania**	26.4	5.8	21.9	26.3	4.9	19	-0.1	-0.9	-2.9
8	**UE 28**	37.3	12.4	33.2	39.2	13.4	34.3	+1.9	+1	+1.1
9	**UE 27**	37.9	11.9	31.5	40.2	13.3	31.3	+2.3	+1.4	-0.2
10	**EA 19**	38.1	11.7	30.8	40.5	13.3	32.8	+2.4	+1.6	+2

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

In table number 2 - The structure of fiscal pressure in the EU in 2010/2018 (direct taxes), there are developed countries Belgium, Germany, France and the Netherlands, which increased the fiscal burden of direct taxes in the period 2010-2018 by about 2 percent above the average level raised by the European Union.

From the data analysis it was found that direct taxes have higher percentages, the share of fiscal pressure of direct taxes exceeding the share of fiscal pressure of indirect taxes.

According to the OECD, direct taxes are more "highlighted" for taxpayers, as they have a higher level of taxation in countries where redistributive targets are more pronounced, especially in developed countries, this is also observed in this article. Compared to the developed countries, the emerging states in the analysis Romania and Malta focused more on the decrease of direct taxes by about 1 percent for the Romanian state, and Malta reports a small increase of 0.2%, insignificant compared to the average level of the European Union, which shows that at least the Romanian state has applied another strategy of redistribution of fiscal burdens.

Below we present the level of fiscal pressure of indirect taxes which, according to official data at OECD level, have a greater contribution in developing countries.

Table 3. The structure of fiscal pressure in the EU in 2010/2018 (Indirect taxes)

		2010			2018			2010-2018		
		Indirect taxes			Indirect taxes			Differences (pp)		
No.	Country	Overall compulsory levies % GDP	% of GDP	% of overall compulsory	Overall compulsory levies % GDP	% of GDP	% of overall compulsory	Overall compulsory levies % GDP	% of GDP	% of overall compulsory

1	**Italy**	42.3	14.3	33.5	41.8	14.2	33.9	-0.5	-0.1	+0.4
2	**Belgium**	43.9	13.5	30.3	44.8	13.9	31	+0.9	+0.4	+0.8
3	**Germany**	38.1	11	29.8	40.1	10.8	27	+2	-0.2	+2.8
4	**France**	42.5	15.1	35.5	46.5	16.7	36	+4	+1.6	+0.5
5	**Netherlands**	33.8	11.4	32.2	38.7	12.1	31	-0.1	+0.7	-1.2
6	**Malta**	33.3	13.9	41.8	31.8	12.9	41	-1.5	-1	-0.8
7	**Romania**	26.4	11.9	45.2	26.3	10.7	41	-0.1	-1.2	-4.2
8	**UE 28**	37.3	13	34.8	39.2	13.6	34.7	+1.9	+0.6	-0.1
9	**UE 27**	37.9	13.1	34.5	40.2	13.7	34.1	+2.3	+0.6	-0.4
10	**EA 19**	38.1	12.6	33	40.5	13.3	32.7	+2.4	+0.7	-0.3

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

Consequently, we emphasize that not all developed countries simultaneously apply the same fiscal strategies to cut the tax burden. We note in table no.3 that countries such as Belgium, France, the Netherlands compared to 2010, at the end of 2018 they still apply a high tax burden on indirect taxes, increasing the tax burden at the end of the 9 years analyzed with percentage values between 0.4% -1.6%. Italy and Germany while maintaining the same level of revenue without increasing pressure on taxpayers. Emerging states Romania and Malta do not maintain the classic strategy reported by the OECD by increasing the tax burden on indirect taxes, on the contrary they decrease it by about 1ppc in the 9 years analyzed. In the countries of the European Union compared to the situation of 2010, in 2018 the trend is to increase taxes and indirect taxes by approximately 6 ppc.

Table 4. The structure of fiscal pressure in the EU in 2010/2018 (Social contributions)

		2010			2018			2010-2018		
		Social contributions			Social contributions			Difference (pp)		
No.	Country	Overall compulsory levies % GDP	% of GDP	% of overall compulsory	Overall compulsory levies % GDP	% of GDP	% of overall compulsory	Overall compulsory levies % GDP	% of GDP	% of overall compulsory
1	**Italy**	42.3	13	31.5	41.8	13	31.5	-0.5	0	0
2	**Belgium**	43.9	14	32.2	44.8	13.4	29.8	+0.9	-0.6	+2.4
3	**Germany**	38.1	15.2	40.6	40.1	15.8	39.3	+2	+0.6	-1.3
4	**France**	42.5	16.2	38.3	46.5	16.2	34.8	+4	0	-3.5
5	**Netherlands**	33.8	12.9	36.4	38.7	14	36	-0.1	+1.1	-0.4
6	**Malta**	33.3	6	18.1	31.8	5.3	18	-1.5	-0.7	-0.1
7	**Romania**	26.4	8.7	32.8	26.3	10.6	40.5	-0.1	+1.9	+7.7
8	**UE 28**	37.3	12	32.2	39.2	12.2	31.1	+1.9	+0.2	-1.1
9	**UE 27**	37.9	13	34.2	40.2	13.3	33	+2.3	+0.3	-1.2
10	**EA 19**	38.1	13.9	36.4	40.5	14.1	34.7	+2.4	+0.2	-1.7

Source: own calculations based on data from https://ec.europa.eu/eurostat/.

Regarding the social contributions, we notice the shift of the significant fiscal burden by approximately 2 percent and we find the cause of the increase of the fiscal pressure in the developing countries, in our case Romania. From the comparative analysis of the two periods we can see the shift of the tax burden of labor taxation in Belgium, the only state that decreased at the end of the 9 years analyzed the level of tax pressure by 0.6pp, an insignificant decrease compared to the rather high tax rates applied in this state. The Italian state also has a high tax burden on each category of tax, it has continued to increase the tax burden and social contributions by about a percentage, which shows that the Italian government is trying to find different legislative solutions by stabilizing the tax burden at the three categories of taxes in order to improve the economic situation of the country, thus avoiding various external loans, but the tax burden is on the shoulders of taxpayers, the fiscal pressure exceeding the average level of the European Union throughout the analyzed period. Of the seven countries audited, France maintains the same percentage level (16.2%).

Thus, as detailed in table no.4, the increase in the weighted level of social security contributions exceeds the EU27 average in terms of fiscal pressure, while direct and indirect taxes are well below the European average. In Eastern European countries, the mainstay of the tax system is the main pillar of consumption taxes, which is especially active in countries with less developed economies and a lower level of individual income, which means that direct taxes do not have a solid fiscal base, we see a detailed example of the Romanian state.

Compared to the level of taxation recorded in 2010 for the questioned states, the fiscal pressure has a lower rate than in 2018, but keep in mind that all states have also experienced economic growth by collecting taxes and increasing the population, implicitly increasing the product gross internal.

5. Conclusions

The analysis of international practices and fiscal policy trends allow us to formulate some conclusions and perspectives on the complex problems of the tax burden. The article presented shows the analysis of the level and structure of taxation by which this level varies depending on the functions of taxation, especially in terms of social contributions; We can say that after the tax reforms developed in the states in Europe in the early 90's, a wide process of reducing the marginal tax rates in most states began. Unfortunately, some states quickly resumed these strategies with the global economic crisis of 2008, but economically developed countries quickly noticed that their high levels of taxation distort economic activity and encourage various forms of tax evasion, with increased tax pressure being the deciding factor. that not all the analyzed states managed to temper it, with the exception of Germany, which managed to place itself at the level of fiscal pressure on all categories of tax at the average level of the European Union. In order to encourage the economic emergence of new emerging states that have joined the European Union, an alignment of states has been established in terms of the level of taxation and redistribution to the values recorded in countries with lower taxation;

We conclude by the share of revenues in gross domestic product in the European Union (of which tax revenues about 90%), increased by only 1.9% of GDP in the period under review. While the increase in the share of expenditure in GDP was observed in Italy, the Netherlands and Malta. Of the three states that have seen declining tax revenues, Italy has also maintained a burdensome tax burden for taxpayers, trying to avoid possible external borrowing and rising public debt.

The tax burden and the level of taxation in Romania are only seemingly low, because, in fact, a low level of gross domestic product, an unequal distribution of taxes and a large number of taxes, for a large part of taxpayers is quite burdensome. In order to regulate the tax burden, a fairer tax redistribution is needed through a reanalysis of the relationship between direct and indirect taxes and the acquisition of a better tax collection system, as well as the reduction of their level. Stimulating investment and economic development should be a priority to increase net per capita income and reduce fiscal pressure.

Finally, we specify that it would be necessary to re-evaluate the level and forms of social protection in Romania, as well as a better management of labor taxation, because the achievement of a comprehensive social protection has a negative impact on economic development.

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