

# **ECONOMIC GROWTH OR REGRESS – SCENARIOS AND BIBLIOMETRIC ANALYSIS ON SINGLE TAXATION VS. PROGRESSIVE TAXATION**

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## **Abstract**

The discussion on single taxation vs. progressive taxation returns periodically and always in times of budgetary crisis, which in turn induces the economic crisis and not the other way around, as normal. The purpose of this article is to observe the evolution of taxation in progressive tax rates compared to taxation in single rates in Romania, but also in other European countries. The research methodology involved the qualitative analysis of the various scenarios, already existing at national and international level on the single taxation vs. progressive taxation, as well as documentation by quantitative analysis of the focus of literature on the evolution of taxation in progressive quotas. Following the analysis, it was found that the tax system in progressive quotas existing in Romania until 2004 generated a low level of revenues to the budget. In many European countries, however, a progressive taxation system is applied, which reinforces the OECD's assertion that there is no tax system "unique to all".

## **Keywords**

tax efficiency, tax system, taxes, tax reform, single taxation, progressive taxation.

## **JEL Classification**

M41, H21, H22, H71

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## **Introduction**

Lately, one of the most contested topics was the one regarding the two tax systems, namely the one that uses the proportional share and the one based on the progressive quotas.

The introduction of the single tax rate was largely supported by the economic analysts of the Romanian Academic Society, who considered that, applying this method of taxation would result in more money for the budget, but also a state of social equity, job creation, attracting foreign investments, and so on. However, as there were and are

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arguments for the single quota, we also come across arguments against the single tax rate, emphasizing only the advantage of reducing the fiscal bureaucracy, imposing the increase of the budget deficit, as well, the increase of the trade balance deficit through the higher disposable incomes that meant a higher consumption, especially of imported goods, the increase of the current account deficit and strong inflationary pressures, effects that have occurred since 2007. Among the objectives reached by the fiscal system entered into force in 2005 and adjusted in 2007, economic analysts are considering the increase of foreign investments (9.1 billion euros in 2006), high economic growth (7.7% in 2006) and the expansion of large, financially strong firms.

One of the negative consequences of tax progressivity is the lack of equity in taxation, critics of progressive rates argue that diligent payers should not be punished by higher taxes, but the tax should be proportional, thus, countries such as Sweden, Norway, and some former socialist states have already introduced the single tax rate, and from the assessments of the results obtained after its introduction, it is concluded that tax revenues have increased significantly.

In order to clarify certain aspects regarding the evolution of taxation in progressive tax rates compared to taxation in single quotas in Romania, the analysis of information already existing at national and international level on the historical evolution of the two types of taxation was used.

### **1. Review of the scientific literature**

When we reach the “single quota or progressive taxation” dilemma, the visions are different, so the question arises: „Is it good to have a progressive tax in Romania? Some say it's good, others say it's not good. Who to believe?” (Georgescu, 2023). The debates go even further appreciating that “we will return to progressive taxation, but when we are rich” (Rădulescu, 2021), “the truth is that the Romanian state has enough money. It always had more money than it could manage efficiently, evidence of widespread waste, found by both public control institutions and any citizen. Paradoxically, the introduction of the single quota had this very disadvantage: it boosted the economy and thus brought to the budget growing revenues ...” (Glăvan, 2021), progressive payroll tax „must be regarded as paracetamol and leukoplast”, that „we are talking about an ambulance, not a reform” and even with these reform proposals Romania will remain „a country with a borderline tax system, will continue to crawl compared to neighbors in the Visegrad group” (Ban, 2023).

The options expressed in the literature for the single tax rate belong to liberal economic thought. Proportional taxation (opposed to progressive taxation) or single-quota taxation also called „flat tax“ (in anglo-saxon literature) was relaunched in the '60s when the renowned economist Milton Friedman (1962) proposed for the U. S. a federal tax of 23.5% after a century of progressive income taxation. Referring to the alternative „progressive or unique tax rates”, it states that it finds no justification for the application of progressive tax rates solely for the purpose of income redistribution, this being a clear example of using coercion to take from some and give to others, which conflicts with individual freedom. In conclusion, the tax structure that I find best is that of a uniform tax on income” (Friedman, 1962). In his opinion, the application of a single tax

rate of 23.5% on taxable income, as it is reported and currently defined by tax legislation, that is, after the deduction of the non-taxable minimum and after the application of all admissible deductions, it would lead to obtaining even a higher fiscal yield than that achieved by applying progressive quotas as a result of the increase of the base of tax due to reduction of tax evasion. Later, Milton and Rose Friedman (1979) will plead for a 20% federal tax on the income of individuals, a proposal also partially taken over by Hall and Rabushka (1985). The shift to single-quota taxation of the Baltic States did not attract the attention of researchers even after they adopted this form of taxation in the mid-'90s, the report said, these were considered three small countries that had just gained independence, their example not being followed by any other state until 2001. The transition of the Russian Federation to the single rate, taxation which until then seemed only a „Baltic experiment“ could be considered the beginning of a tax revolution, because from that moment, almost every year, at least one country has adopted the single quota.

### **Bibliometric analysis of the literature – scientific mapping on taxation in progressive quotas**

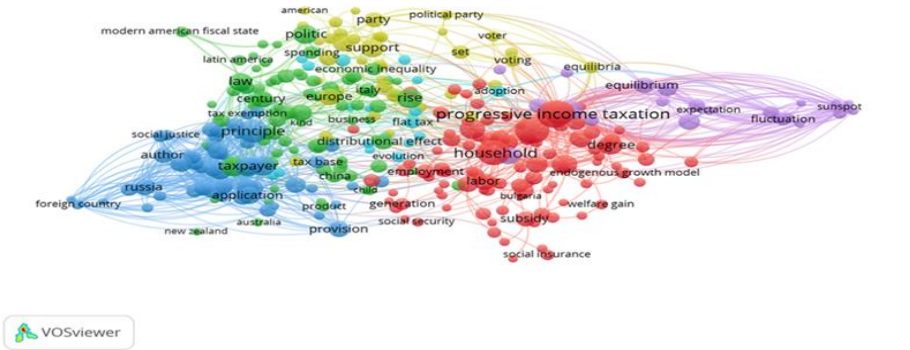
*The main objective* was to document, through quantitative analysis, the evolution of research on taxation in progressive quotas, and for this purpose we tried to answer the following research question:

*What is the focus of literature on progressive odds taxation?*

To perform scientific mapping, the 1021 publications in the Web of Science Core Collection database have been exported in a simple text format (txt) which contains full registration and cited references in the VOSviewer software, using the full counting method, we extracted terms with at least 5 appearances in titles and abstracts, the software found 9283 terms.

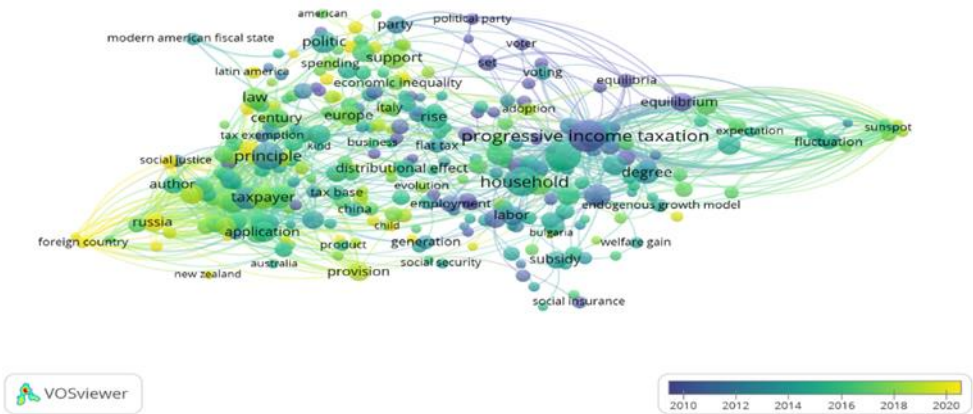
The program selected only 60% of the most relevant terms, also many terms were removed because they were common words such as article, author, data, model, study, theory, value and year, or because they were synonymous. In the end, we had a list of 544 terms in our research.

VOSviewer supports three different types of view for bibliometric mapping: network view (Figure no. 1), superimposed view (Figure no. 2) and density view (Figure no. 3):



**Figure no. 1 VOSviewer network view map**  
 Source: own processing using data from VOSviewer

Colored circles were used to identify keywords. The number of keyword appearances in titles and summaries is related to the size of letters and circles. Letters and circles increase as a keyword appears more frequently (Figure no. 1).



**Figure no. 2 VOSviewer overlapping viewing map of the publication year**  
 Source: own processing using data from VOSviewer



Income distribution	Finance	European countries	Set	Government spending	Which brings high incomes
Capital income	The welfare state	implementation	Support	Strong contrast	Progressive rate
Single tax reform	Business	advantages	support	indeterminacy	Tax competition
Antrepreneurship	Perception	aspects	Sufficient conditions	Cyclic fluctuation	Tax obligation
Public debt	Political economy	Progressive system	Public support		Romania
Profit					

Source: own processing using data from VOSviewer

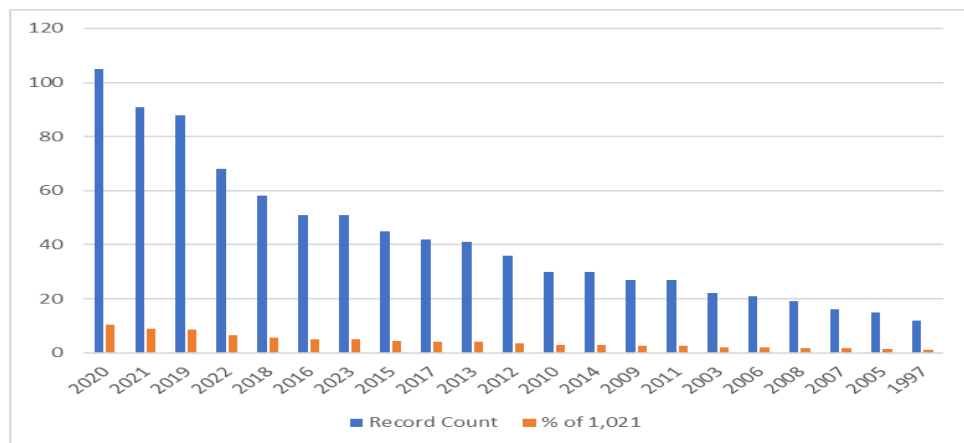


Figure no. 4 Analysis of results based on publication years

Source: own processing using data from the WOS database

## 2. Research methodology

The research methodology involved the qualitative analysis of the various scenarios, already existing at national and international level on the single quota vs. progressive quota, as well as documentation by quantitative analysis of the focus of literature on the evolution of taxation in progressive quotas using the Web of Science Core Collection base through scientific mapping using VOSviewer software.

## 3. Results and discussions

### Pros and cons: are we going back to the progressive tax?

Proportional taxation (single quota in the case of our country) expresses a manifestation of the principle of equality before taxes, maintaining a constant ratio between income and tax, but at the same time, violates the principles of fiscal equity, because it does not take into account the fact that the contributing power increases with the increase of revenues achieved by different social categories.

Therefore, the single quota represents the application of the same tax rate regardless of the amount of income that constitutes the basis of calculation and:

- ( + ) ensures mathematical equality between taxpayers (all pay 10%), but not a fiscal equity;
- ( + ) easy to calculate;
- ( - ) for low-income taxpayers can reduce income below a decent level
- ( \* ) favored the adoption of single taxation systems in Central and Eastern European countries ( ECE ) in 1990 and 2000.

The progressive quota consists in setting different tax rates, depending on certain income tranches and:

- ( + ) ensures better tax equity;
- ( - ) is more difficult (not difficult) to calculate, but the budget estimate is more relative;
- ( - ) depending on tranches and percentages would raise the tax rate to those with higher incomes beyond a level considered acceptable (compared to 10% currently);
- ( - ) may discourage more competitive employees compared to the least competitive ones.

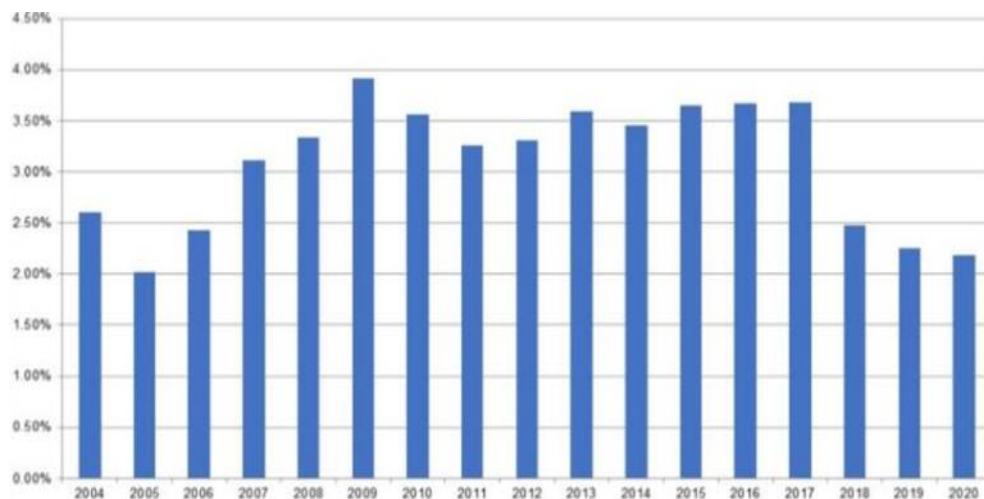
Following a study focusing mainly on 4 scenarios on quotas and thresholds for a progressive payroll tax, the authors of the study (Ban and Buciu, 2023) state that the mere introduction of the progressive tax has its limits in terms of the amounts collected in the budget, the 4 scenarios regarding the application of a progressive tax assuming:

- maintaining the current share of 10% on all income, but 16% on any amount exceeding 2200 euros gross, in this case only the richest 10% among taxpayers end up paying at the increased rate, but the problem generated by this scenario is that they collect only 5.73 billion lei more money in the budget, a way too small amount to have a significant impact on the problems.
- the share of 10% and 19% respectively on any amount exceeding 2,200 euros gross, this being the scenario supported by the IMF in its technical assistance report on the fiscal reform in Romania, the impact being slightly higher, there
- is the possibility to collect 7.5 billion lei more money in the budget, but the amount represents only the fourth part of the 2023 budget hole.

- the scenario considered to be the optimal solution in the authors' opinion would bring 15 billion more lei to the budget and involves a return to the fiscal burden of 2017 for the vast majority of taxpayers, applying the 16% share, but maintaining 10% for earnings below the minimum wage (including), then applying to the upper decil the 21% share, a modest increase compared to the old single tax of 16%.
- the Slovak scenario, with steps of 19 and 25%, keeping the rate of 10% for those who earn up to the minimum wage would bring to the budget 20 billion lei more, but the deviation from the previous scenario is not, in the authors' opinion, large enough to deserve the political cost.

### **Evolution of income tax in Romania**

The minimum wage in the economy saw a decrease in the real share from 21% in different periods of the years '90 to approx. 7.3% in 2018, on an upward trend to 10% even after the reform of the 2018 deduction system. The seemingly progressive systems of the period 1991-2004 were too unproductive: income inequalities after the tax decrease were only insignificantly lower than gross income inequalities except for the period 1995-1997. The history of income tax revenues shows that a significant percentage (constant over 75% of revenues) comes from payroll tax, the rest coming from income tax from self-employment, capital gains, dividends, rental income, copyright, etc.



**Figure no. 5. Evolution of income tax (% GDP)**

Source: Biriş, G., 2020. Income tax. Single quota or progressive quota? , <https://cursdeguvernare.ro/gabriel-biris-impozit-pe-venit-cota-unica-sau-cota-progresiva.html>



As illustrated in Figure no. 5, we see a sharp decrease in 2005, followed by a significant increase in 2006 – 2007, then a significant stabilization (over 3.5% GDP) from 2007 to 2017, after which we faced a sharp decline in 2018, decrease that continued in 2019 and 2020 (Biriş, 2020), we find the explanation for these variations in the way in which taxation evolved during the mentioned period, as follows:

#### Until 2004:

Individual taxpayer income was subject to a progressive tax (18% – 40%):

- 18% tax for monthly income less than 240 lei;
- Fixed fee of 43 lei plus a tax of 23% for the amount in the range of 240 lei - 580 lei;
- Fixed fee of 121 lei plus a tax of 28% for the amount in the range of 580 lei - 930 lei;
- Fixed tax of 210 lei plus a tax of 34% for the amount in the range of 930 lei - 1,300;
- Fixed tax of 345 lei plus a tax of 40% for the amount exceeding 1,300 lei.

To this progressive tax were added significant social contributions, of approximately 45% (employee + employer), so that for every 1 lei net salary, the employer had a total cost of 2.8 lei. Quotas apply only to income from salaries and those from self-employment. Dividends were subject to a 5% tax, gains from the sale of shares or shares were imposed by only 1%, and earnings from real estate transactions - 0% share%.

In conclusion, the basis of taxation was low or medium labor income, since 2001, most labor contracts with large ventures have been transformed into management contracts, consulting or other services with the micro-enterprise (employee detail), system for declaring taxable income was complicated, with high administration costs, the system prevented the emergence and development of the middle class (by overtaxation) and helped create a very thin layer of very rich people.

#### Period 2005 – 2006:

During this period, from 1 January 2005, “single quota” was introduced, the progressive quota tax (18% – 40%) being replaced by the 16% tax, the tax on earnings from the sale of shares remained 1%, real estate speculation remained untaxed. Under these conditions the reduction of the salary tax rate (no and the contributions) was not sufficient to bring to light large salaries, the tax base did not increase, the quotas decreased, and the result was a sharp decline in revenue.

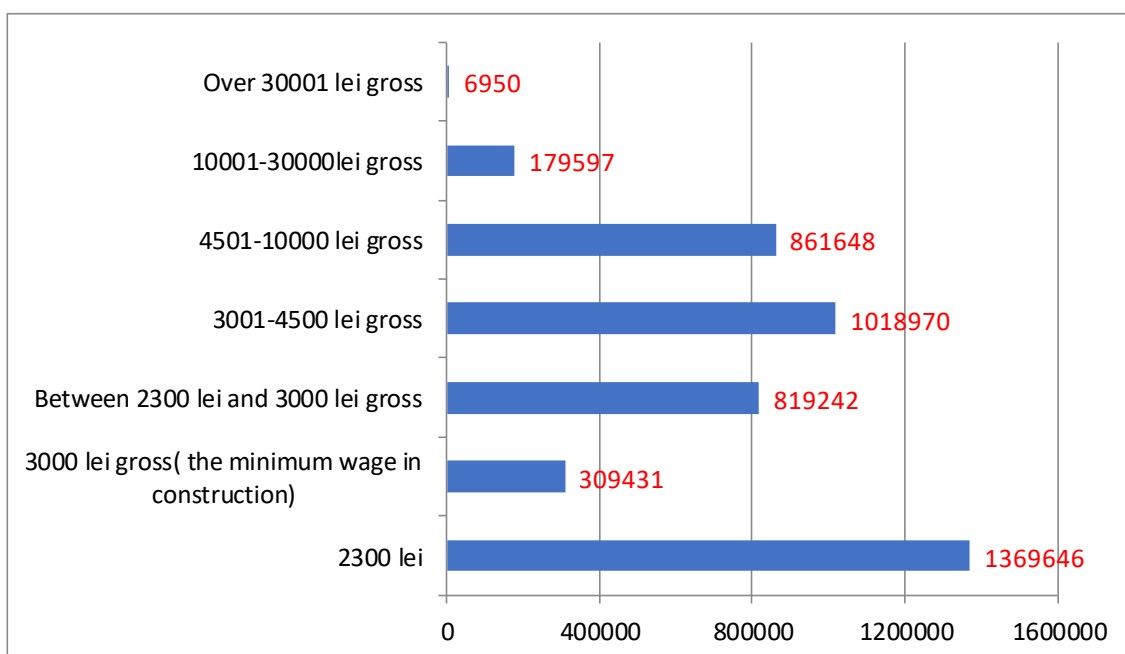
#### Period 2007-2013:

The increase in 2007 is due to the expansion of the tax base, the introduction, (partial) of the real estate transaction tax, the 16% increase in the dividend tax, plus restrictions introduced for the use of micro in consulting and management. The share of income tax increased until 2009 (3.9%) and decreased in 2010 and 2011 (crisis, salaries for public employees) were cut and subsequently increased, remaining constant around 3.5% GDP until 2017. Arithmetic says that the share of 3.5% GDP obtained with a single share > by over one third above the level of 2.6% GDP obtained with progressive quotas.

**Period 2018 – 2020:**

During this period we are witnessing a sharp decrease in budget revenues by 2020 ( 2.19% GDP) due to the fact that in 2018 CASS grew from 21% to 25% and the increase in CAS from 8.9% to 10% brought in compensation, so in order not to decrease the employees' net a decrease in income tax to 10%, by 37% of the single quota, the threshold for micro-enterprises has been increased from 100,000 euros to 1,000,000 euros, and restrictions on consulting and management have disappeared, generating the migration back to micro of high salaries. In 2019, the share of income tax continued to decrease as a result of the salary tax exemption of construction employees, for the production of construction materials, but also for construction services that brought a minus of approximately 2 billion lei income tax (but, and the CNASS budget, they are also exempted from paying CASS 10%).

The phenomenon of income tax reduction continued, introducing facilities in agriculture and food industry. According to ITM statistics, in 2020 a quarter of Romanian employees were paid with the minimum wage on the work book, followed as a number of those who earn between 3,000 and 4,000 lei per month, there were over 300,000 employees paid with the minimum construction salary (3000 lei) and only 7,000 with the salary that exceeded 30,000 per month (Figure no. 6):



**Figure no. 6. Number of employees per income tranche -2020**

Source: [https://economie.hotnews.ro/stiri-finante\\_banci-25178897-cota-unica-impozit-progresiv-cum-impart-romanii-dupa-nivelul-salariilor-care-sunt-argumentele-pro-contrainpunerii-progresive.htm](https://economie.hotnews.ro/stiri-finante_banci-25178897-cota-unica-impozit-progresiv-cum-impart-romanii-dupa-nivelul-salariilor-care-sunt-argumentele-pro-contrainpunerii-progresive.htm)

Also, in a top 5 by counties, the statistics indicate the next variation of the average net salary in 2023 compared to 2022 (Table no. 2):

**Table no. 2. Average net salary variation 2023/2023**

Position	County	Old value	New value	Variation
1	Cluj	4.538	5.260	722 (15,91%)
2	București	4.944	5.643	699 (14,14%)
3	Sibiu	3.874	4.519	645 (16,65%)
4	Timis	4.129	4.763	634 (15,35%)
5	Ilfov	3.821	4.410	589 (15,41%)

Source: <http://statisticiromania.ro/performerii-lunii>

### Taxation in progressive rates in the European Union

In most EU countries (central and western) the progressive quota applies.

**The Czech Republic** has abandoned the concept of super-bridled salary as the only way to determine the tax base, a change associated with the elimination of the flat-rate tax rate, elimination of the solidarity surcharge and reintroduction of progressive taxation with a share of 23% for revenues of over 1.7 million crowns annually (approx. 69000 euro).

In **Switzerland**, income taxes are levied at three different levels: at the federal level (equal), at the cantonal level (to the tax rates of the canton) and at the municipal level (have the right to establish their own communal tax rate in certain parameters); some cantons have recently introduced single-quota taxation.

In **Italy** there are the following main tax thresholds for annual income:

- 0-15000 euros - 23% tax.
- 150001 - 28000 euros - 25%.
- 28000-50000 euros - 35%.
- For revenues higher than 55000 euros - 43%.

As far as **Spain** is concerned, the tax thresholds for citizens' incomes are as follows:

- 0 - 12450 euros - taxation by 19%
- 12450 euros - 20200 euros - taxation by 24%
- 20200 euros - 35200 euros, taxation by 30%
- 35200 euros - 60000 euros, taxation by 37%
- 60000 euros - 300000 euros, taxation by 45%

In the case of Germany, the main tax rates are between 14% and 42% for people with incomes between 9744 euros and 57918 euros, while for revenues over 57918 euros and up to 274612 euros, the tax is 42%. Revenues above this latter threshold are taxed at 45%.

### Conclusions

Whether we are talking about single-quota taxation or progressive-quota taxation, the tax process itself is an important way of redistributing part of GDP.

The increase from 2.6% GDP (2004) to over 3.5% GDP (after 2007) was generated by the single quota and measures to broaden the tax base. The decrease in income from 3.68% to 2.2% of GDP in just two years is due to the reduction of the tax rate from 16% to 10%, tax exemptions introduced in 2017 (for seasonal workers in HoReCa) and 2019 (for construction employees and the production of construction materials).

The advantages of the single-quota tax system relate to issues such as the fact that it responds more to the criteria of fairness in the tax field, increases the transparency of the tax system, and, whereas the single rate easily ensures that each taxpayer can calculate the size of its tax liabilities, it ensures equal tax treatment for all taxpayers, regardless of the evolution of the size of the income; on them will be applied the same tax rate to determine the size of the tax burden, encourages the increase of labor efforts, and it contributes to the reduction of tax evasion, to the reduction of the underground economy and, implicitly, to the increase of public revenues, to the increase of the return on taxes as a result of the reduction of expenses once they are established and collected, and so on.

The idea of the single tax has been revived several times, with a significant number of countries adopting a variant or another of the single tax regime. And yet, to this day, no "major" western economy has gone back to the single tax regime.

The tax system in progressive quotas existing in Romania until 2004 generated a low level of revenues to the budget.

However, many European countries apply a progressive taxation system, which reinforces the OECD's assertion that there is no „unique tax system to all”.

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