# TAXATION: IS FLAT RATE BETTER THAN PROGRESSIVE RATE?

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#### **Abstract**

Our research aims to analyze the evolution in time and space of taxation rates and the impact of legislative changes on the microeconomic and macroeconomic environments, as well as the impact of legislative changes, the analysis of different models of tax systems based on the flat tax rate, used in Romania, or progressive tax rates, preferred in countries like France, Belgium and Luxembourg. Attempts at comparing personal income taxes are relatively rare and difficult to achieve precisely because of the tax legislation that is significantly different from one country to another in terms of tax base, tax rates or method of calculation of the various taxes and fees. Identifying the best taxation approach is the main goal of our paper. Our research is aimed at identifying the best taxation system, at determining the correlation between tax burden and tax income, thus analyzing the distributive effects of flat rates or progressive rates, and the effects of preferring one to the other, in other words determining whether they encouraged the formation of a middle class or on the contrary, they have deepened the inequity among the population, the effects that these systems have had on the social, economic and political environments in Romania and in the French-speaking countries included in our research: France, Belgium and Luxembourg.

**Key words**: taxation, best taxation rate, flat rate, progressive rates

Economics researchers have developed the principle of equity, which they consider one of the pillars of an optimal tax system. In his famous book entitled the 'Principles of Political Economy', John Stuart Mill (Mill, 1885) argued that equality should be at the core of any tax system, just like it should be at the core of all government policies. Henry Sidgwick (Sidgwick, 1907) defined the general principle of equity as follows: 'An action which a person considers fair for themselves is implicitly considered fair for all similar circumstances'. However, research on fiscal policies in terms of equity relies on Stacy J. Adams' theory of social equity (Adams, 1965). He claims that every individual expects a comparable level of effort and benefits, and is tempted to change their behavior if they perceive any treatment differences.

From a fiscal point of view, theories claim that taxation should take into account the taxpayer's financial power and resort to progressive taxation, which should be a tool for redistributing and equalizing wealth within society. Two important taxation principles are linked to the idea of the ability to pay: the principle of horizontal equity and the principle of vertical equity.

- The principle of vertical equity states that wealth should be directed from the high-income socio-professional categories to lower-income categories; according to this principle, individuals in similar circumstances should be treated equally by the tax system.
- The principle of horizontal equity require higher-income individuals to pay more taxes, as they have a greater ability to pay; according to this principle, some of the wealth that they produce is reallocated, thus pursuing other objectives than that of reducing the gap between income levels by granting child allowances, overtaxing unmarried, etc. The principle of horizontal equity is considered the most important principle in the theory of taxation analyzed by Elkins (Elkins E., 2006), which states that the rule of horizontal tax equity requires equal tax treatment for taxpayers who are in similar situations or circumstances. The principle of horizontal fiscal equity does not seek to define the manner in which taxes are charged, but requires government bodies to justify nonuniform fiscal policies (Repetti J.R., 2012).

In the light of the theories described above, in our opinion, the income levels of both individuals and business entities is the most

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relevant basis for comparison in determining the requirements of the horizontal tax equity principle.

Literature review has revealed that all theories on taxes and fees strive to substantiate their necessity for both taxpayers (individuals or business entities) and for the state budget. However, these theories actually conceal the truth, namely the fact that they are more favorable to the state than to taxpayers.

Theories are developed to justify tax burden and taxation level, in order to demonstrate a certain fiscal fairness, the increase or introduction of new taxes and duties, which are tools used to regulate the economy that must keep inflation within certain limits, hence the need to redistribute income and wealth from taxpayers to the state. Based on the various theories on the necessity and fairness of income distribution in society described above, and taking into account the economic and political backgrounds, modern states redistribute income and wealth at levels varying from one country to another and from one time to another.

Therefore, public authorities use taxation, either progressive or flat rate taxation, to cover public expenditure needs for allowances, subsidies, provision of collective goods and services.

According to the level of the tax rate (Bistriceanu E., 1995), there are:

- proportional rates: regardless of the size of the tax base, the same tax rate applies, which means that the same proportion is kept between the taxable base and the amount of the tax actually levied:
- **progressive rates**: is characterized by the increase of the tax rate as the tax base increases. It is a tax calculation method that best meets the principle of tax equity.
- simple progressive tax (or global taxation) involves the use of increasing rates, as the tax base increases (the transition from one scale to another is disadvantageous for those whose earned income level is at the bottom of the scale, compared to those at the top of the previous scale),
- compound progressive tax (on tranches), when the income to be taxed is divided into tranches on which increasing tax rates are levied. The amount of the tax levy results from the sum of the partial amounts calculated for each income tranche.
- regressive rates, which decrease as the tax base increases,
- degressive rates, which increase at different rates up to a certain value of the taxable base, and after reaching a preset level of the amount of tax, they decrease constantly in relation to the total income.

Progressive taxation is dwelt on by M. Slade Kendrick in his work The Ability-to-Pay Theory of Taxation (Kendrick M.S., 1939), which is explained in terms of sacrifice. According to him, sacrifice is the basic principle that underlies tax collection. Therefore, one's ability to pay taxes must be analyzed based on their wealth and on the ease with which they acquired that wealth. A classic criterion for the distribution of taxes is that everyone should equally sacrifice the loss of utility. This tax distribution method is continuous and has the following four properties: the way in which taxpayers distribute a given tax total depends only on their own taxable income; a tax increase means that everyone pays more; each tax increase is made according to the taxpayers' current income; the ranking of taxpayers according to pre-tax income and after-tax income is the same, there is a function of relative utility to which all taxpayers sacrifice equally. Relying on this concept of sacrifice, Kendrick developed three theories of progressive taxation in his book (Kendrick M.S., 1939):

- Theory of equal sacrifice, according to which taxes should be set so that the taxpayer's sacrifice in paying taxes is the same;
- Theory of proportional equality, according to which taxation should be made based on the income earned, therefore equality is to be found in proportion and not in the extent of sacrifice;
- Theory of minimum sacrifice, which is construed in the sense of a group, the goal being the least sacrifice for the group, so taxes should first be set according to the income of the very rich. Moderate-income individuals would be taxed only after the income of the very rich and of the rich has dropped to the level of average income. This theory virtually requires the gradual elimination of high income through taxation.

The issue of tax progressiveness has generated some of the oldest and most controversial debates in the field of fiscal policy, in terms of achieving fiscal fairness. Most opinions refer to the progressiveness of income tax, but there are specialists who claim that progressiveness should affect the whole set of taxes borne by taxpayers. As stated in the Laffer curve ('trop d'impôt tue l'impôt'), tax progressiveness must be approached not only from the viewpoint of fiscal fairness, but also from the viewpoint of efficiency, as too much tax destroys the tax base.

However, flat rate taxation, also called capitation, does not abide by the principle of social equity, as it does not take into account the taxpayers' amount of income or wealth or their personal situation. Flat rate taxation is currently used in developing countries (Romania, Hungary),

when calculating direct taxes such as corporate income tax and indirect taxes: VAT, customs duties.

Arthur B. Laffer is the one who provided the most convincing explanation for the relationship between the tax rate enforced by the government and the income on which tax is levied. The 'Laffer Curve' (Laffer A.B., 1765) graphically shows the trade-off between tax rates and tax revenues, and explains how a non-progressive tax can help increase tax revenues. The Laffer analysis explains how the government can earn the same amount of income in two different ways: by collecting a high tax from a small part of the population (a high tax on a narrow tax base), which is the equivalent of progressive taxation, or by levying a low tax on a wide taxable base, i.e. a single rate of tax.

## MATERIAL AND METHOD

The methodology used to achieve this goal consisted of data collection methods, statistical and economic analysis of data on the main categories of taxes that have significant shares in national tax systems, namely: income tax, profit tax, social contributions, VAT. As concerns the research methods employed, in our paper, the most common method is the comparative method, as it allows to determine the differences and similarities between the analyzed tax systems, comparisons that have been synthesized in tables or charts. The research techniques and procedures used are documentary analysis, analysis of important legislation, collection and processing of information, creation of tables, figures and charts to synthesize and highlight the research results.

According to Richard's opinion (Richard J., 1995), 'the entire accounting legislation in Romania is based on French financial accounting with all the characteristics of static accounting, macroeconomic and fiscal objectives'. Starting from this idea, we set out to identify and compare the wage levels, tax bases and tax calculation methods used in Romania and in the French-speaking countries included in our research: France, Belgium and Luxembourg.

Among the European Union Member States, we only chose the French-speaking countries with the highest effective tax rates and drew comparisons between the minimum reference wage and average gross wage also taking into account other indicators such as: unemployment rate, labor productivity and consumer price index.

The tax systems of the European Union Member States were analyzed in terms of income tax of individuals and legal entities, indicators of progressivity, income inequality, tax rates, tax and contribution withholding method, with an emphasis on the tax systems of French-speaking countries: France, Belgium and Luxembourg and a comparative study on wage income tax calculation.

In order to highlight the wage differences between Romania and the French-speaking countries (France, Belgium and Luxembourg), and between the flat tax rate specific to Romania and the progressive tax rate system existing in the abovementioned French-speaking countries, we made wage calculations according to the legislation of each country, starting from the minimum wage and average gross wage.

## RESULTS AND DISCUSSIONS

The trend in developed countries is still to tax in progressive rates to the detriment of flat rates, as authorities consider this method of collection to be more equitable.

The minimum wage in Romania is among the lowest in Europe. In 2020, the minimum wage amounts to 2,230 LEI (approximately 470 EUR) per month, i.e. a net wage of 1,346 LEI (approximately 280 EUR) per month. Skilled workers (i.e. holders of a higher education degree) earn a minimum gross wage of 2,350 lei (approximately EUR 467) per month, i.e. a net wage of 1,413 LEI (approximately EUR 296) per month. Workers in the constructions industry earn a minimum gross wage of 3,000 lei (approximately 628 EUR) or a minimum net wage of 2,362 LEI (approximately 494 EUR) per month due to the tax and social security contribution exemptions applying to employees in this industry. The minimum wage in Romanian has continued to rise in recent years: for instance, the minimum gross wage has increased by 125% between 2014 and 2019, from 200 to 450 EUR per month. Part of this increase is, however, purely artificial and employees did not benefit from it, since in January 2018 the government announced a massive increase in the minimum gross wage, which went from 1,450 RON per month to 1,900 RON per month (i.e. approximately EUR 415 per month), yet at the same time transferred the employers' obligations to pay wage taxes and social security contributions to their employees, which neutralized the effect of this increase. Employees did not benefit from this spectacular 30% increase of the minimum gross wage, as this increase was accompanied by the full transfer of employers' obligations to pay wage taxes to their employees. In Romania, the average gross wage in 2020 is 5,429 lei, approximately EUR 1,136 (wages in Romania were calculated using the exchange rate of 31.12.2019, 1 euro = 4.7793).

In France, on the 1<sup>st</sup> of January 2019, the gross monthly amount of the minimum interprofessional growth wage (SMIC) was 1,521.22 euros for a number of 151.67 work hours/month, with an increase of 1.5% between

January 2018 and January 2019. In ten years, the minimum gross hourly wage increased by 13.7%, going from 8.82 euros in July 2009 to 10.03 euros in 2019, while prices, except for tobacco, increased by 9.8%. (https://www.insee.fr/en/recherche/recherche-statistiques?q=salaire+moyen).

According to the National Institute of Statistics and Economic Studies (INSSE), the average gross wage in France is 37,000 EUR per year, 3,083.33 euros/month, while the average net wage is 2,300 euros per month.

In Luxembourg, the wage is freely negotiated between the employer and employee, taking into account the work performed. In Luxembourg, there is a minimum social wage (SMIC) that any employer must observe. This minimum wage is differentiated according to the employee's skills in unskilled and skilled minimum wage. As of the 1st of January 2020, the minimum unskilled social wage amounts to 12.3815 euros per hour, which is equivalent to 2,141.99 euros gross per month for a full-time job of 40 hours per week. The minimum wage of skilled workers amounts to 2,570.39 euros gross per month. The qualification must be proven by a formal certification or a minimum number of years of work experience. The average wage in Luxembourg is 3,591.58 euros. In Luxembourg, wages are also indexed to the cost of living. When the price index has increased by + 2.5% over the

last 6 months, all wages must be increased accordingly.

In Belgium, on the 1<sup>st</sup> of January 2019, the minimum guaranteed average monthly income (RMMMG) is 1,593.81 euros for a 38-hour work week, with a maximum of 9 work hours per day and 45 work hours per week. Exceptions are possible up to 11 work hours a day and 50 work hours a week, yet they are subject to strict regulations and mutual consent. The average gross wage in Belgium in 2020 is 2,008.9 euros. Belgium is one of the European countries where the evolution of wages between 2010 and 2019 was the least favorable for workers.

According to a study conducted by the European Trade Union Confederation (ETUC), the average wage was almost frozen in Belgium during this period, with an increase of 1.5%. The sharpest decline in average wages was in Greece, where income dropped by about 15%. The evolution of the average wage in the European Union Member States between 2010 and 2019 is shown in *figure 1*.

According to data in Figure 1, in addition to Greece (-15%), five other countries have seen declining average wages in the last ten years: Cyprus (-7%), Croatia (-5%), Spain (-4%), Portugal (-4%) and Italy (-2%). The average wage was almost frozen in three countries, with increases close to zero: Finland (+ 0.1%), Belgium (+ 1.5%) and the Netherlands (+ 1.5%).

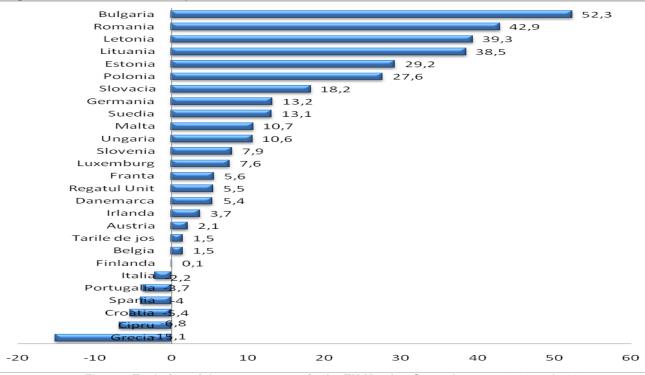


Figure 1 Evolution of the average wage in the EU Member States between 2010 and 2019
Source: personal processing of data taken from <a href="https://www.lalibre.be/economie/conjoncture/les-salaires-belges-ont-stagne-ces-dix-dernieres-annees-5e399cfa9978e234870aa827">https://www.lalibre.be/economie/conjoncture/les-salaires-belges-ont-stagne-ces-dix-dernieres-annees-5e399cfa9978e234870aa827</a> accessed on 25.05.2020

Table 1
Comparative study of minimum, average wages and statistical indicators

Indicator	Romania	France	Luxembourg	Belgium
Minimum reference wage	466.60	1,521.22	2,141.99	1,593.81
Average gross wage	1,135.94	3,083.33	3,591.58	2,008.9
MinWage/AverWage*100 ratio	41.08%	49.34%	59.64%	79.34%
Unemployment rate in 2019	3.9	8.4	5.6	5.4
Labor productivity \$ in 2019	58.003	96.446	199.367	103.779
Consumer price indices (CPI) in 2019	3.8%	1.1%	1.7%	1.4%
Purchasing power in 2018	15,377€	25,358€	33,332€	25,911€

Source:personal processing of data taken from the llostat database accessed on 13.05.2020 <a href="https://ilostat.ilo.org/fr/topics/unemployment-and-labour-underutilization/">https://ilostat.ilo.org/fr/topics/unemployment-and-labour-underutilization/</a> accessed on 22.05.2020

#### CONCLUSIONS

When looking at the table above, one notices that the highest minimum monthly wage is earned by people working in Luxembourg, i.e. 2,141.99 euros, while the lowest is in Romania, i.e. merely 466.60 euros. Belgium and Luxembourg have very close minimum wages. The same cannot be said about the average gross wage, which is significantly higher in Romania than in the other analyzed countries and reveals the existing wage inequalities and the high number of individuals working for the minimum wage, on the verge of poverty. The mechanism suggested in the European Social Charter is that the ratio between the gross national minimum wage and the gross national average wage should be at least 60%, which is the case in Luxembourg and Belgium. The unemployment rate reflects the inability of an economy to create jobs for people willing to work, but who are unemployed, although they are available and are actively looking for a job. Therefore, it is considered to be an indicator of the efficiency and effectiveness of an economy in absorbing workforce and labor market performance. A country's unemployment rate is a key indicator used to monitor economic cycles. When the unemployment rate is high, the country is not able to provide enough jobs for available workers, and this could be a sign of economic recession. Therefore, the government's goal is to implement policies and measures to bring unemployment incidence to a more acceptable level. Paradoxically, low unemployment rates may well hide significant poverty, as is the case in Romania, while high unemployment rates may occur in highly developed countries with low poverty incidence. In countries where is no safety net for unemployment and social benefits, many people, despite the strong solidarity of their families, simply cannot afford to be unemployed. Rather, they have to make a living as often as they can, in the informal economy or in informal working conditions. In countries with well-developed social welfare systems or where savings or other supports are available, workers can better afford to make time to find better jobs. Therefore, in many developing countries the problem is not so much unemployment as the lack of decent and productive work, which leads to various forms of underutilization of the workforce (i.e. work not legally declared, low income and low productivity).

Consumer price indices (CPI) measure the evolution over time of the price level of goods and services consumed. In many countries, they were initially introduced to measure changes in the cost of living of workers, so that wage increases may be linked to changes in price levels. Consumer price index is a macroeconomic indicator of inflation, a key statistical datum for governments and central banks to target inflation and monitor price stability.

The purchasing power of a given amount of money actually depends on the cost of living, i.e. the general level of prices, and measures how much money we need to buy goods and services. This indicator is used to compare the wage levels of the analyzed countries according to the prices of goods and services that differ from one country to another. Luxembourg has the highest minimum wage, the highest purchasing power and the highest labor productivity, followed by Belgium, France and, far behind, Romania. The indicators in the table above allow us to conclude that although in French-speaking countries taxation is levied in very high progressive rates compared to Romania, labor productivity and the consumer price index are very high.

According to the analysis conducted, although Romania has the lowest tax rate in terms of wage income tax, i.e. 10%, the average tax rate for the minimum and average wage is much higher than in French-speaking countries. The situation changes considerably, with an increase in wage income. Belgium has the highest effective tax rate,

i.e. 50.21%, while France and Luxembourg still have lower effective tax rates than Romania.

Efficient tax reform can be achieved in two different ways. On the one hand, if the current tax rate is higher than the optimal rate in the Lauffer curve, then reducing the tax rate would increase revenue by increasing the tax base. On the other hand, if the tax rate is lower than the optimal rate, then the increase in the tax rate would increase the income, despite the decrease in the tax base.

Supporters of the fixed annual tax system are convinced that the existing progressive tax system prevents overtime, reinvestment or saving. They believe that taxes are higher than the optimal tax rate described by the Laffer analysis and that a moderately low single tax rate would increase tax revenues. They argue that if taxes were lower, people would have a greater incentive to work and invest, which would stimulate the whole economy.

The comparison between Romania and the French-speaking countries that we carried out in terms of wage income taxation revealed that not the level of tax rates is essential for the welfare of the economy, but actions should be taken to improve living standards by investing in education and healthcare, by granting tax relief to key development industries (research, medicine, information technology), by attracting foreign investors, and by reducing and using more efficiently public spending.

In the modern world, there are no perfect inequity-free tax systems, but improving them in that direction is a priority for any country.

Although, no magical cure has been discovered so far to solve the problem of taxation, in a framework of absolute equity and effectiveness, my intention is to contribute, through this paper, to the diagnosis and improvement of these systems.

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