

## THE TAX POLICY FROM AN ECONOMIC GROWTH PERSPECTIVE

**Dorel NOROC**

Academy of Economic Studies of Moldova (Republic of Moldova)

[norocdorel@gmail.com](mailto:norocdorel@gmail.com)

### **Abstract**

This article summarizes the evidence on the relationship between tax policy and economic growth, referring to several case studies providing more substance and detail. Potential negative effects of tax policy on economic growth have been addressed in the debates on whether to increase taxes to reduce the deficit and reform taxes by broadening the base to lower tax rates.

This is a key element of modern trends in public finance and macroeconomics. Many economists have tried to explain the correlation between tax policy and economic growth. However, many dilemmas have remained open, and the empirical relationship between taxes and growth seems much more complex than theoretical findings suggest. The impact of taxes on growth can be noticed both in terms of efficiency and changes in equity that taxes introduce to the economy.

The article analyzes the correlation between tax policy and economic growth through the prism of 3 components: (i) the level of taxation, (ii) the structure, and (iii) the complexity of the taxation system. In addition, the article reviews if there is a correlation between the level of taxation or its change and the country's development level.

**Keywords:** *tax policy, economic growth, tax revenues, structure of the taxation system, income redistribution*

### **1. Introduction**

Economic growth is the basic objective of nation-states, as it pursues ensuring the well-being of their citizens. The magnitude of economic growth depends on a variety of factors, some of which are related to the adoption of public policy measures by governments. One of these measures focuses on the country's tax policy, which – in the modern economy – serves as a tool to finance public spending, redistribute income and boost economic growth.

Tax systems differ from country to country depending on the level of state intervention in social and economic life. Where public spending is higher, driven by a stronger role for the state, the level of taxation is higher, and the other way around. Tax policy, like other economic policies, is marked by dynamism because economic and social life is also constantly changing and becoming more diverse. This is particularly important for countries undergoing extensive economic reform.

The goal of this article is to provide a review of theoretical and empirical research on how tax policy can either foster or hurt economic growth through its elements and characteristics.

### **2. Methodology**

Theoretical and empirical methods were used in this research. In this regard, based on theoretical methods, the works carried out by economic researchers who have analyzed the tax policy from the economic growth perspective are analyzed and synthesized. Also, the research uses the comparison and correlation of relevant indicators in different countries of the region. Quantitative analysis was used to study the effect of tax policy on economic growth at national and international level based on reports

from international institutions International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), European Union (EU) and national institutions (Ministry of Finance of the Republic of Moldova).

### 3. Results and discussion

#### 3.1. Theoretical approach to the issue

Governments use tax systems to achieve three key objectives: (i) to accumulate budgetary financial resources to finance public spending, (ii) to redistribute national income (iii) to influence economic processes, the primary objective being to boost economic growth.

While in the case of the first two objectives, there is certainty about the deployment of tax policy and budget revenues, and its impact on the redistribution of national income, in the case of the third objective – empirical studies show different outcomes of the effects of tax policy on economic growth.

Throughout history, several empirical economic studies investigated the existence or absence of a causal link between tax policy and economic growth. However, according to the neoclassical (exogenous) growth theory (Solow, 1956; Cass, 1965), changes in tax policy do not have an effect on long-run economic growth, but only on short-run economic growth. This means that a change in the level of taxation will lead to an increase or decrease in economic performance in the short run, but in the long run, the level of economic growth will be the same as if there was no change in the level of taxation.

On the other hand, endogenous theories posit that a change in tax policy entails a change in the rate of economic growth (Romer, 1986; Lucas, 1988).

The different perspectives behind the above theories can be explained by the following:

- *different periods*. Empirical studies by neoclassical researchers were carried out in earlier periods, when economic developments were largely influenced by parameters other than tax or even economic ones.

- *different economic systems*. The results of the studies are also determined by the economic situation and specificities of the countries under analysis. There are countries where the human and/or capital factor is the determining factor in economic growth, while other countries rely mainly on natural resources.

- *analytical tools used/types of variables used*. With scientific progress, research is becoming more precise and it is possible to isolate the factors that influence economic growth.

As regards tax system parameters, economic growth can be achieved as a result of the following 3 components of a tax policy:

- Tax rate;
- Structure of the taxation system;
- Complexity/Simplicity of the taxation system.

The first component, i.e., reducing tax rates or introducing different types of tax relief, is the simplest and most commonly used component, albeit not the most appropriate. First, this type of policy response has a direct effect on public revenue, which implies that the reduction in the tax rate could take place at the same time as a reduction in public spending, including investment. This means that, on the one hand, it fosters the development of the private sector, which can only be achieved through investment, and, on the other hand, it reduces public investment, ultimately leading to zero effect on economic growth in the short and long term.

Thus, before choosing the first component, a complex analysis needs to be carried out both from the perspective of increased resources available to companies as a result of a tax cut and from the perspective of reduced public spending.

In this respect, if the additional financial sources obtained by the private sector as a result of the tax cut are used more efficiently than if they were used by the government, then there could be a positive effect on economic growth in the long run, including benefits for tax revenue.

The decision to reduce the tax rate also needs to be analysed from the perspective of business behaviour, i.e. whether this measure will lead companies to make private investments and create jobs.

On the other hand, the theory of negative dependence between economic growth and the tax rate is challenged by current data on the share of tax revenue in the GDP in countries with different levels of economic growth. Most of the highly developed countries have a high tax rate (2021), such as: Denmark – 48.1%, France – 45.1%, Belgium – 43.6%, Austria – 43.3%, Italy – 43.3%, Finland – 43.0%, Sweden – 42.8%, Norway – 41.9%, Germany – 41.1% etc., and on the other hand, there are countries with a fairly low tax rate but a lower level of development as well, such as: Romania – 26.5%, Latvia – 30.4%, Bulgaria – 30.7% (EC, 2023), Moldova – 24.7% (MF RM, 2023; NBS RM, 2023), etc.

The level of economic development is, of course, influenced by a number of factors besides taxation, such as geographical position, natural resources, climatic conditions, etc., but the main takeaway here is that a high tax rate is not a hindrance to the country’s economic development and a low tax rate does not guarantee sustainable economic growth.

The second component, i.e., the structure of the taxation system, involves analysing each type of tax from the perspective of how it influences the investment decisions of companies and citizens, savings, etc. Irrespective of whether it is a citizen or a company, how it reacts to changes in the taxation system will largely depend on the success of tax policy in achieving economic growth objectives.

Given that in any national economy there are permanent changes in tax rates, which according to the theories referred to above may have different effects on economic growth, it is imperative to distinguish empirically which tax policy measures may have an effect on economic growth and which may not.

Thus, if a tax policy based on a reduction in tax rates fails to produce the expected boost for economic growth, the result will be a reduction in tax revenue and a contraction in public spending.

An analysis by the Organisation for Economic Co-operation and Development (2010) described the effects of tax implications, by type of tax, on economic growth. Thus, it stated that corporate income tax has the strongest effect on per capita GDP growth, followed by personal income tax and consumption tax (OECD, 2010).

In this context, we believe that the second component of tax policy, the structure of the taxation system, is the primary tool to be used by policymakers when drawing up the tax policy to support economic growth.

The importance of this type of action is further underscored by the fact that the influence on economic growth can be achieved without budgetary loss, since the reduction in one type of tax that has a stronger impact on business behaviour can take place at the same time as an increase in another type of tax that is more neutral, thereby achieving a zero effect on public revenue.

It is therefore necessary to distinguish between distortionary taxes that affect economic growth and non-distortionary taxes that have a neutral impact. The key conclusion emerging from the research is that the pace of economic growth is largely influenced by changes in the system of distortionary rather than

non-distortionary taxes. Distortionary taxes (Kneller, 1999) include income tax and property tax and non-distortionary taxes – consumption tax.

Research also shows a negative relationship between corporate income tax and economic growth (Schwellnus and Arnold, 2008; Lee and Gordon, 2005).

Thus, if the aim is to reduce the budget deficit and/or increase budget revenues to finance public expenditure, including investment, empirical studies and simulations based on econometric models confirm that the most efficient way consists in using consumption taxes (indirect taxes) and real estate taxes, as the latter seem to be the least detrimental to economic growth. Two actions can be taken in this regard, i.e. broadening the tax base on previously exempt transactions and/or increasing the tax rate.

Personal income tax, compulsory social security and health insurance contributions and, in particular, corporate income tax have the most negative impact on economic growth. A reduction in income tax and compulsory social security and health insurance contributions could potentially decrease labour costs, increase labour productivity, and reduce unemployment. A reduction in corporate income tax would result in changing the company's behaviour, i.e. focusing decisions on increasing investment levels.

On the other hand, consumption and real estate taxes do not affect directly production factors or labour and therefore have a limited and indirect impact on economic growth, instead, they have a high contribution to increasing budget revenue and public spending, respectively.

Moving from direct to indirect taxes is a way of stimulating economic growth via tax policy instruments. On the one hand, decreasing direct taxes would boost investments and lower labour costs or increase labour productivity, while increasing or consolidating indirect taxes would help offset budgetary losses and therefore not affect budgetary expenditures. The limitations of this reform are determined by the characteristics of direct and indirect taxes. A significant increase in indirect taxes will impact negatively people with medium and low income and will result in an inefficient redistribution of the national income. Fair redistribution of national income is achieved through direct taxes that take into account people's ability to pay.

In such circumstances, the decision to move from direct to indirect taxes must therefore factor in the level of income distribution dis-proportionality and people's income inequality; the higher the level, the more limited the margin of intervention. In this case, the first step is to shift the tax burden onto indirect taxes by identifying and analysing their tax reliefs. Eliminating tax relief is more appropriate than increasing general tax rates, the latter impacting a larger number of the population.

In many cases, governments use exemptions or lower indirect tax rates to support low-income people by increasing the affordability of different categories of goods (e.g. food). In terms of public finance efficiency, such a measure is very costly because it is granted to the entire population, including high-income individuals. Low-income people are supported by social programmes that target more accurately the groups in need of state support and reduce the budgetary cost, thus increasing the efficiency of public finances.

The third component of tax policy that impacts economic growth is the complexity, instability and uncertainty of the taxation system. The problem is that even if this component can be compared across countries using various indicators (e.g. time taken to calculate, declare and pay taxes by companies), it is virtually impossible to quantify the correlation between it and economic growth.

It is a fact that a difficult and uncertain tax system tends to increase not only the administrative costs for tax authorities but also the costs incurred by businesses, especially small ones, in calculating and declaring taxes.

An unstable and uncertain tax policy is another less visible and more difficult to quantify cost. It makes it difficult for entrepreneurs to develop long-term plans, and therefore decreases both the returns of the existing firms and the interest of potential foreign and domestic investors (Brezeanu, 2010) The words of Lyndon Baines Johnson, the 36th President of the United States, that the most disastrous thing you can do to an American businessman is to keep him in uncertainty and guessing about the tax policy (Lyndon, 1964) are worth noting in this regard.

Compliance costs are usually much higher for small companies than for large ones. In addition, multiple changes to tax legislation increase the overall complexity of the national tax system, which not only creates loopholes conducive to tax abuse but also brings uncertainty for honest companies.

If decisions on increasing or decreasing, introducing or eliminating certain taxes must be taken periodically depending on the phases of the economic cycle, the requirement for simplicity, stability and predictability must be ensured on a continuous basis. In this regard, the Government must ensure the simplest and clearest possible way for citizens and companies to declare and pay taxes.

### 3.2. Empirical approach to the problem

A brief review carried out at the EU Member State level, of the correlation between the tax rate (the first component of tax policy described above) and the GDP per Capita is presented below. It describes best the development and welfare of a country.

Figure 1 shows that there is no negative correlation between economic growth and the tax rate. Except for Ireland, we see the reverse of this theory, i.e. the higher the country's tax rate, the higher the GDP per Capita.

Countries with high tax rates and high GDP per capita:

	GDP per Capita, EURO	Total Taxes as % of GDP
Norway	71 150	41.9%
Denmark	50 010	48.1%
Sweden	44 950	42.8%
Finland	37 250	43.0%
Austria	36 950	43.3%
Belgium	36 010	43.6%
Germania	35 480	41.1%
Italy	26 780	43.3%

Countries with lower tax rates and lower GDP per capita:

	GDP per Capita, EURO	Total Taxes as % of GDP
Moldova	4 423	24.4%
Bulgaria	6 950	30.7%
Romania	9 610	26.5%
Latvia	12 980	30.4%
Croatia	13 510	35.6%
Hungary	13 710	33.9%

In the EU Member States, the average GDP per Capita constitutes EUR 27 900, and total taxes as % in GDP - 40.7%.

The above analysis is static, reflecting the situation of countries in 2021, and is the result of the specific economic and tax systems of EU Member States formed over a long period of time, which does not allow for good comparability of data and formulation of conclusions or recommendations.

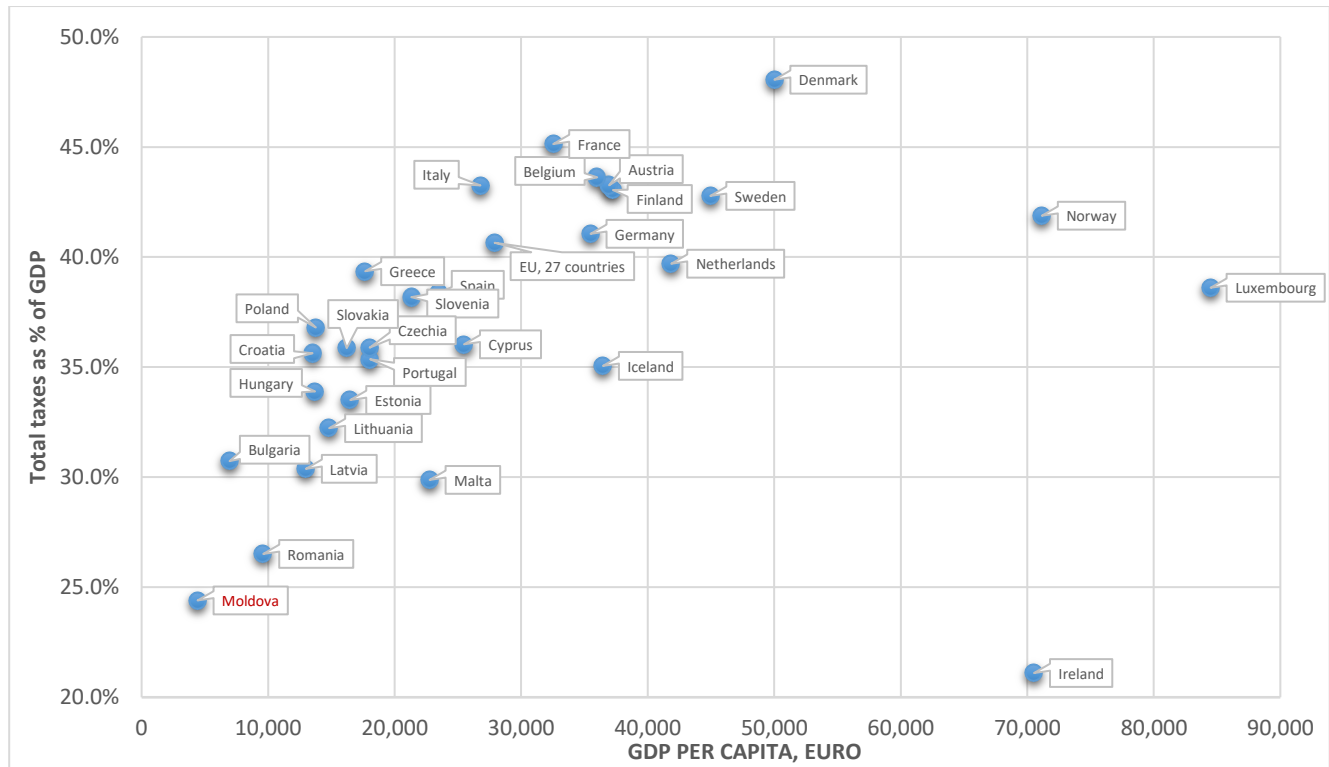


Figure 1. The correlation between GDP per CAPITA and Total taxes, % in GDP

Source: prepared by the author on the basis (EC, 2023; MF RM, 2023; NBS RM, 2023)

To ensure a better understanding and exclude country-specific factors, Figure 2 analyses the evolving situation in each country, comparing the dynamics between (i) the change in GDP per CAPITA 2021/2009 and (ii) the change in Total taxes, % in GDP, change 2021/2009.

Most of the European Union countries analysed during 2009 -2021 show both a growth in GDP per Capita and in Total taxes as % in GDP (quadrant II).

In the European Union, the average GDP per Capita increased in this period: from EUR 24 410 in 2009 to EUR 27 900, or by 14%, and Total taxes as % in GDP increased in the same period from 38.0%, to 40.7%, or by 6.9%.

The following countries are an exception to the above rule (quadrant IV): Sweden, Croatia, Malta, Hungary, Estonia, and Ireland, where GDP per Capita increased, and Total taxes as % in GDP decreased. This development shows (by way of exception to most cases) that a reduction in the tax rate could give an economic boost.



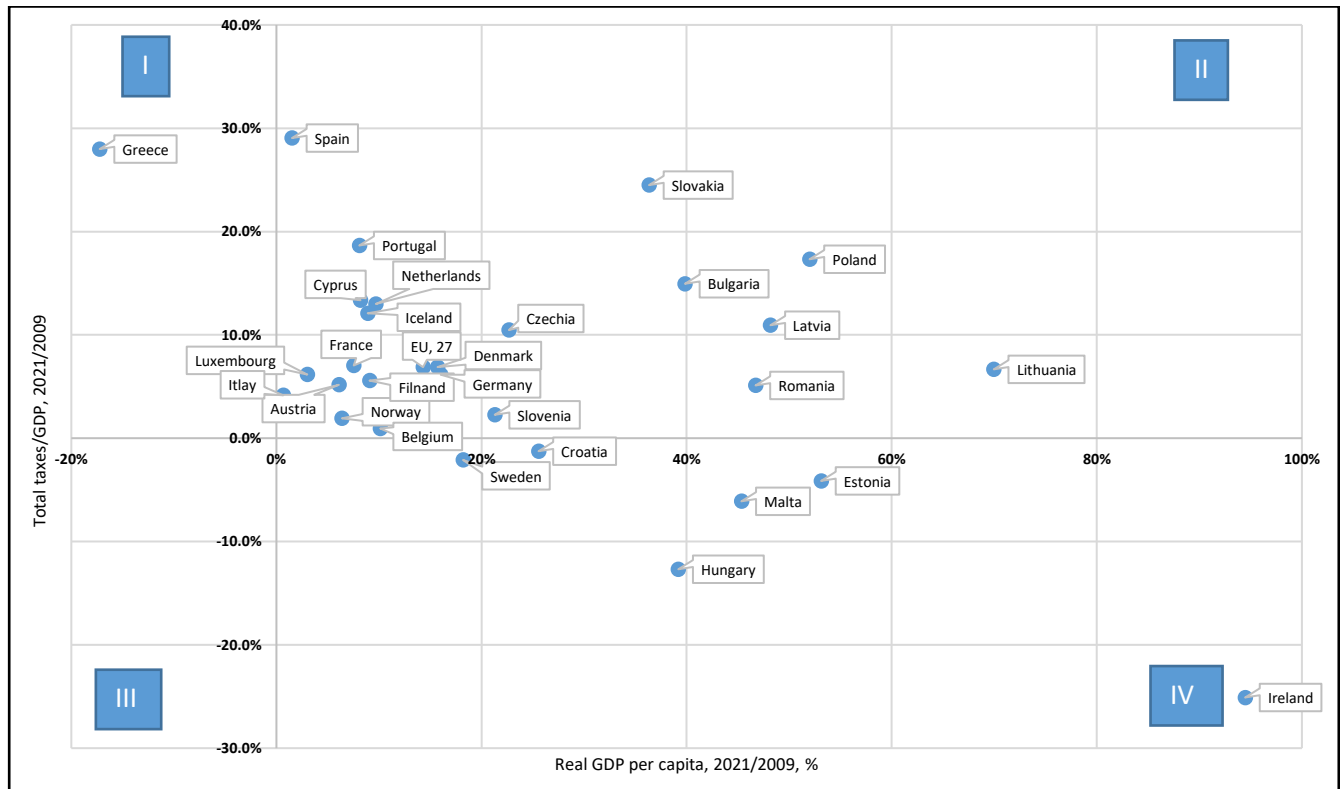


Figure 2. The correlation between (i) the change in GDP per CAPITA 2021/2009 and (ii) The change in Total taxes, % in GDP, change 2021/2009

Source: prepared by the author on the basis (EC, 2023; MF RM, 2023; NBS RM, 2023)

Note that Figure 2 shows the growth of GDP per Capita, which is influenced by a number of factors, and the tax rate is not a defining one in this respect. For example, it is worth highlighting the significant increase in GDP per Capita in the countries that have recently joined the European Union (Romania, Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovakia and Slovenia), which demonstrates the significantly positive effects of the EU accession.

#### 4. Conclusions

Drawing on the above, the following conclusions are relevant to the topic under investigation:

- Most empirical studies, especially the most recent ones, find a negative correlation between tax rates and economic growth;
- the reviewed studies show that corporate and individual income taxes are able to influence economic growth to a greater extent than the consumption tax. This implies that when adopting economic growth-oriented tax policies it is necessary to focus in particular on direct taxes, and when collecting additional budget revenues - on indirect taxes;
- tax policy measures should focus in particular on improving the structure and the complexity of the taxation system compared to the change in tax rates;
- certainty, stability and simplicity - principles stipulated in tax laws, are mandatory conditions of any taxation system; a lack of such principles impacts negatively the long-term investment decisions of businesses, which are the driving force of sustainable economic growth;

- a high level of taxes is not a ‘brake’ on the country's economic development, and a low level of taxation does not guarantee sustainable economic growth, requiring an economic policy mix tailored to the specifics of the country;

### References

1. Solow, Robert M., (1956), “A Contribution to the Theory of Economic Growth,” *Quarterly Journal of Economics* (New York), Vol. 70, pp. 65–94.
2. Cass, David, (1965), “Optimal Growth in an Aggregative Model of Capital Accumulation,” *Review of Economic Studies* (Edinburgh), Vol. 32 pp. 233–40.
3. Romer, Paul M., (1990), “Endogenous Technological Change,” *Journal of Political Economy* (Chicago), Vol. 98, S71–102.
4. Lucas, Robert E., Jr., (July 1988) “On the Mechanics of Economic Development,” *Journal of Monetary Economics* (Amsterdam), Vol. 22 , pp. 3–42.
5. EC (2023) European Commission. Data on Taxation Trends. [https://taxation-customs.ec.europa.eu/taxation-1/economic-analysis-taxation/data-taxation-trends\\_en](https://taxation-customs.ec.europa.eu/taxation-1/economic-analysis-taxation/data-taxation-trends_en). (Accessed on March 27, 2023)
6. MF RM (2023) Datele Ministerului Finanțelor al Republicii Moldova Finanțelor privind executarea BUAT. <https://mf.gov.md/ro/trezorerie/rapoarte-privind-executarea-bugetului/rapoarte-anuale>. (Accessed on March 25, 2023)
7. NBS RM (2023) Conturi Naționale. [https://statistica.gov.md/ro/statistic\\_indicator\\_details/12](https://statistica.gov.md/ro/statistic_indicator_details/12). (Accessed on March 20, 2023).
8. OECD (2010), Tax Policy Reform and Economic Growth, OECD Publishing. [https://read.oecd-ilibrary.org/taxation/tax-policy-reform-and-economic-growth\\_9789264091085-en#page1](https://read.oecd-ilibrary.org/taxation/tax-policy-reform-and-economic-growth_9789264091085-en#page1), <https://doi.org/10.1787/9789264091085-en>; (Accessed on March 29, 2023)
9. Kneller, R., M.F. Bleaney, and N. Gemmell (1999), “Fiscal Policy and Growth: Evidence from OECD Countries”, *Journal of Public Economics*, 74, pp. 171-190. [https://www.mathematik.uni-ulm.de/wipo/lehre/ws200708/public\\_economics/Kneller\\_Bleaney\\_Gemmell](https://www.mathematik.uni-ulm.de/wipo/lehre/ws200708/public_economics/Kneller_Bleaney_Gemmell); (Accessed on March 29, 2023)
10. Schwellnus, C. and J. Arnold (2008), “Do Corporate Taxes Reduce Productivity and Investment at the Firm Level? Cross-country Evidence from the Amadeus Dataset”, OECD Economics Department Working Papers, forthcoming. <https://doi.org/10.1787/236246774048>.
11. Lee, Y., & Gordon, R. H. (2005). Tax structure and economic growth. *Journal of Public Economics*, 89(5), 1027-1043, <https://doi.org/10.1016/j.jpubeco.2004.07.002>.
12. Brezeanu P., (2010). Fiscalitate: concepte, teorii, politici și abordări practice. București: Editura Wolterskluwer,. p. 19, ISBN: 97319174-X.
13. Lyndon Baines Johnson 1964, State of the Union 8 January 1964 <http://www.heritage.org/index/explore?view=by-variables>; (Accessed on March 30, 2023)