UDC 336.226.11(497.11:4-672EU)
Original scientific paper
Received: -
Accepted: September 27, 2021.
Corresponding author: babic.violeta@ni.ac.rs

# COMPARATIVE ANALYSIS OF CITIZENS 'INCOME TAX IN SERBIA AND EUROPEAN UNION COUNTRIES

**Violeta Babic**
Faculty of Agriculture in Krusevac, University of Nis, Nis, Serbia
**Ljiljana Stankovic**
Faculty of Business Studies and Law, University „Union - Nikola Tesla", Beglrade, Serbia
**Marija Vucic**
Faculty of Business Studies and Law, University „Union - Nikola Tesla", Beglrade, Serbia

***Abstract:*** *With the taxes they collect from citizens and the economy, modern states provide funding for numerous state functions, without which there would be neither civilized society, nor lasting economic and social progress. Citizens' income tax is an extremely important category of taxes in the countries of the European Union, given the significant share in GDP and total public revenues. Tax rates are different, so countries with high personal income tax rates have the largest share of this tax in GDP, as well as the largest share in total public revenues (Denmark, Sweden, Norway), while in the countries of Central and Eastern Europe, personal income tax rates are lower, which is why the share of this tax in GDP and in total public revenues is very low. The share of personal income tax revenues in GDP and in total public revenues, in Serbia, is far less than these indicators in European Union countries, and VAT is the dominant tax form, with the largest share in GDP, tax revenues and total public revenues.*

***Keywords:*** *personal income tax, Serbia, European Union.*

## INTRODUCTION

Taxes are the basic and main source of regular state revenues and one of the most complex units in public finances, with the essence and existence of which many problems of political, economic and legal nature in society are connected.

Personal income tax has a special place in the structure of modern tax systems. According to the share in the total revenues of the EU countries, one of the most important tax forms, including social security contributions and value added tax, is the personal income tax. Over 25% of public revenues is collected by it. The percentage of public revenues generated by collecting this tax varies depending on the state, but it is an indisputable fact that its balance sheet significance is very high, as it treats many taxpayers, which contributes to large sums of money flowing into the state treasury. The relatively high share of personal income tax in the total fiscalities of developed countries is extremely important, given that the progressive nature of this tax form can reduce the regressive effect of other direct taxes, as well as sales tax.

Personal income tax is an extremely complex form of tax, which can be introduced only at a certain level of development of the productive forces, when an individual can earn a certain level of income, which represents the basis for the introduction of taxes (OECD, 2006). The subject of taxation is not the individual and his property, but the income he earns. National income must be high enough for there to be savings and investments, which are also the basis for the introduction of personal income tax.

The personal income tax causes effects at the macro and microeconomic level, and is considered the fairest tax of all taxes, because no other tax can cope with the problem of modern economic inequality. What is the significance of personal income tax in the European Union and in Serbia, as well as its contribution to GDP and total public revenues will be analyzed in this paper.

Attention will be paid to our neighbors (Hungary, Bulgaria, Croatia and Romania), which have similar macroeconomic and fiscal indicators, and whose share of direct taxes in total tax revenues is significantly lower than in developed European Union countries. Using domestic and foreign literature and official data published by domestic and European statistics, the paper will present a comparative analysis of the contribution of personal income tax to GDP, total tax and total public revenues, all in the last twenty years.

## 1. CITIZENS 'INCOME TAX IN SERBIA

### 1.1. Elements of personal income tax in Serbia

The development of personal income tax in our country has gone through various phases. The tax system of the socialist state fully corresponded to the overall socio-economic and political system, and each tax reform contributed to the creation of a tax system that corresponded to the economic conditions of business, until 1998, when the Law on Personal Income Tax was brought, thus creating a system of public revenues and public expenditures that basically meets the requirements of a market economy.

The basic elements of personal income tax (income, taxable income, method of taxation, annual income tax, taxpayer, tax relief, tax rates, etc.) are regulated by the Law on Personal Income Tax. On the basis to this Law, income is the sum of taxable income, realized in a calendar year. Taxable income is the difference between gross income and expenses incurred by the taxpayer in realizing that income. The following types of income are subject to personal income tax: salaries, income from self-employment, income from capital, income from real estate, income from copyright and industrial property rights, capital gains and all other incomes that are not taxed on another basis or are not exempt from taxation by this law. The tax on these incomes is paid after deduction or on the basis of the decision of the competent tax authority, the annual personal income tax is paid on the income earned in one calendar year, and the taxpayer is an individual who is obliged to pay the tax. (Official Gazette of RS a))

**1.2. Income that subject to taxation**

The tax base of personal income tax is income, as the sum of taxable income from all sources. The personal income tax is levied on salaries, income from self-employment, income from copyright and related rights and industrial property rights, income from capital, income from real estate and capital gains, the basic characteristics of which are shown in Chart 1. We see that in all individual forms of personal income tax, the taxpayer is always a natural person, which generates a certain income, that the tax base is the size of that income, realized on different bases, as well as that the tax rates range from 10 to 20 percent.

These revenues are taxed, regardless of whether they are generated in cash or in-kind, by doing or otherwise.

**Chart 1.** Basic characteristics of citizens 'incomes that are taxed according to the Law on Citizens' Income Tax in the Republic of Serbia

| Type of income | Taxpayer | Tax base | Tax rate |
|---|---|---|---|
| Earnings | A natural person who earns salary | Paid, i.e. Earned earnings | 10% |
| Income from self-employment | A natural person who earns income by performing self-employment | Taxable profit, and for a flat rate entrepreneur it is a lump sum determined income (Official Gazette of RS b)) | 10% |
| Revenues from copyright and related rights and industrial property rights | Author of patents, trademarks, written and spoken works, sketches, drawings, art and cinematographic works | Taxable income consisted of income from copyright and industrial property rights, i.e. It is made up of the difference between the gross income and the expenses incurred by the taxpayer in realizing that income | 20% |
| Income from capital | Owner of capital | Income from capital consisted of realized interest on the basis of loans, savings deposits and debt securities | 15% |
| Real estate income | A natural person who earns income by leasing or subleasing real estate | Realized rent and value of all realized obligations and services to which the lessee or sub-lessee is obliged | 20% |

| | | | |
|---|---|---|---|
| Capital gains | A person who realizes a positive difference between the sale and purchase price of a certain right, share or securities | Capital gain determined as a positive difference between the sale and purchase price of a certain right, share or securities | 15% |

(**Source**: Author, according to the Law on Personal Income Tax)

Income from agriculture and forestry is considered to be income from self-employment, as well as income from permanent or seasonal use of land for non-agricultural purposes (extraction of sand, gravel and stones, production of lime, brick, tile, charcoal, etc.), incubatory production of poultry and other similar activities, regardless of whether they are registered as independent activities with the competent authority. (Law on Personal Income Tax, Article 31)

## 2. CITIZENS 'INCOME TAX IN SERBIA AND THE EUROPEAN UNION

Modern tax systems of countries differ from each other, and the differences are conditioned primarily by the political and economic system. Taxes are an extremely efficient means for the realization of various goals of state policy, so it is necessary to build such a tax system that can and should act in the direction of achieving the established goals of economic policy.The personal income tax is a tax form that is present in almost all countries of the world. The exceptions are those in which there are no tax systems or tax amounts are very low (tax havens). The percentage of public revenues generated by collecting this tax varies depending on the state, but it is an indisputable fact that its balance value is very large, because it treats many taxpayers, which ensures the inflow of large sums of money into the state budget.

Consumption taxes are currently the main source of tax revenue in all member states and are becoming increasingly popular among OECD governments. Generally speaking, these are two types: general consumption tax whose archetype is value added tax (VAT), but also specific consumption taxes, mainly excises (on fuels, tobacco, alcohol, pollutants, etc.). Each of these two categories can be considered a possible choice for a European tax instrument. (Le Cacheux, 2020)

Citizens' income tax, together with VAT, is one of the most important forms of taxation in any modern state. Its importance is reflected not only in its great financial generosity, but also in its elasticity and usefulness for achieving the numerous goals of economic and social policy. Within it, the application of the principle of taxation according to the economic power of the taxpayer comes to full expression, taking into account the conditions in which the taxpayer lives and works.

Countries increase the highest income tax rates during the financial crisis. An increase in public debt leads to higher maximum income tax rates only when caused by the crisis. The increase in the highest income tax rates serves the function of restoring fiscal equity.

In the conditions of the financial crisis, the rich can profit, directly or indirectly, by buying state shares, so higher tax rates for the rich are aimed at compensating for unequal treatment. If higher debt is perceived as an unfair result of (pre) crisis measures, the highest income tax rates will rise to compensate for this unequal treatment. (Limberg, 2019)

**2.1. Fiscal significance of personal income tax in the European Union**

The main structural factor influencing the tax structure is globalization. Variations in tax progressiveness are mainly caused by reliance on indirect taxes (especially on consumption), in some states, and greater use of progressive income taxes in others.

In modern tax systems, personal income tax rates are mostly progressive, which achieves an even and fair coverage of the economic power of the taxpayer. The rates of corporate income tax, personal income tax and sales tax, i.e. VAT, in the selected EU countries are quite different, and how much they currently amount to (2020) is shown in the following chart.

We see that the corporate income tax rate is the lowest in Hungary and is only 9%. Hungary, at the same time, has the highest sales tax rate of 27%. Germany and France have the highest corporate income tax rates at 33%. Germany and Romania have the lowest sales tax rates of 19%. The countries in our immediate vicinity, Bulgaria and Romania, have the lowest personal income tax rates, at 10%. In Germany, Greece, Spain, France, Portugal and Italy, personal income tax rates exceed 40%, while they are far higher in Belgium, Austria and Denmark, where they exceed 50 and 60%, respectively.

**Chart 2.** Corporate income tax rates, personal income tax and sales tax, i.e. VAT, in selected EU countries, 2020, in%

| Country | Corporate income tax rate | Individual income tax rate | Sales tax rate or VAT |
|---|---|---|---|
| Belgium | 29 | 25-50 | 21 |
| Bulgaria | 10 | 10 | 20 |
| The Czech Republic | 19 | 22 | 21 |
| Denmark | 22 | 38-65 | 25 |
| Germany | 30-33 | 14-45 | 19 |
| Greece | 28 | 22-45 | 24 |
| Spain | 25 | 19-41 | 21 |

| | | | |
|---|---|---|---|
| France | 33,3 | 14-45 | 20 |
| Croatia | 18 | 24/36 | 25 |
| Hungary | 9 | 15 | 27 |
| Austria | 25 | 25-55 | 20 |
| Sweden | 21,4 | 0-57 | 25 |
| Italy | 24 | 23-43 | 24 |
| Slovenia | 19 | 16-50 | 22 |
| Slovakia | 21 | 19-25 | 20 |
| Romania | 16 | 10 | 19 |
| Poland | 9/19 | 18/32 | 23 |
| Portugal | 21 | 14,5-48 | 23 |
| Serbia | 15 | 10-20 | 20 |

**(Source:** http://worldwide-tax.com/, Tax Rates Around the World 2020, Last partial update May 16, 2020)

In Serbia, the corporate income tax rate is 15%, the personal income tax rate ranges from 10-20%, depending on the type of personal income that is taxed, and the general rate of value added tax is 20%. We see that these tax rates in Serbia are far lower than the tax rates of the observed EU countries, but also the countries of our nearest surroundings.

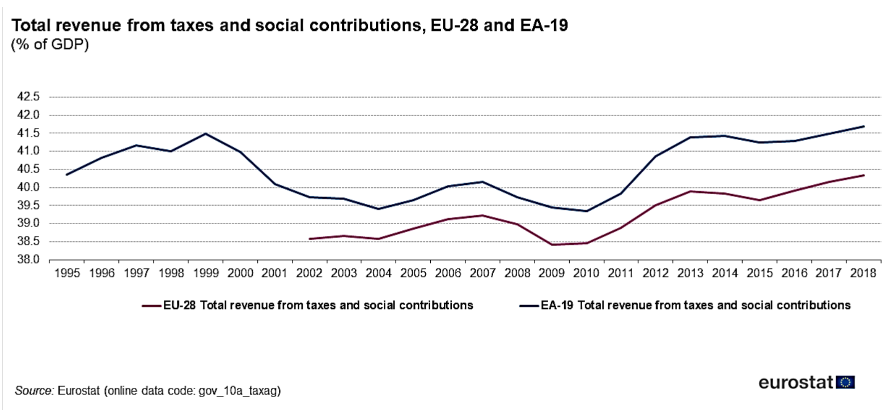
Tax revenue in% of GDP increased, from about 5% in most countries by 1700, to about 9% by 1900 and 20% by 1950 in OECD countries, after which they are still on the rise path. (Scheve, Stasavage, 2016) There are several reasons why these states have not been able to generate large tax revenues. There was not much to tax, and economic growth is the main long-term driver of tax revenue growth.Where capitalism developed earlier, tax revenues were higher. Because landowners and rulers competed to extract resources from the peasants, aristocrats often sided with the peasants in their attempts to prevent the rulers from raising taxes. Demand for government spending was limited. War was the main source of demand for tax revenues, and tax revenues of states began to grow in early modern Europe thanks to a dramatic increase in the frequency and scale of warfare. The state's capacity to collect taxes was very limited, and tax revenues were weakly linked to economic production or wealth. (Kiser, Karceski, 2017)

As a result of the development of industrial capitalism, the demands for spending on infrastructure and education increased. Modern government spending on social protection began in Bismarck's Germany and increased significantly with Keynesian policy in response to the depression of the 1930s. Tax revenues in% of GDP in 2010 averaged about 33% in OECD countries (OECD, 2010) and about 10–15% in less developed parts of the world. (Bird et all, 2008) There are two main reasons for this difference.

The first is Wagner's law which says that tax revenues grow with per capita income, and the second are administrative problems, because it is not uncommon for half or more of all taxes to remain uncollected. Differences in the forms of democratic institutions explain most of the differences in tax revenues. Democracy alone does not provide effective institutions. Democracy increases tax revenues, but if democracy develops before strong state capacities, as was the case in many less developed countries, it will not increase tax revenues. (Profeta et all, 2013)

The total share of taxes in GDP in 2018 in the European Union was 40.3%, which is a slight increase compared to 2017 (40.2%). The share of taxes in GDP varies significantly between Member States, with the largest share of taxes and social contributions in the percentage of GDP in 2018 recorded in France (48.4%), Belgium (47.2%) and Denmark 45.9%), followed by Sweden (44.4%), Austria (42.8%), Finland (42.4%) and Italy (42.0%). In contrast, the lowest share of taxes in GDP in 2018 was in Ireland (23.0%) and Romania (27.1%), Bulgaria (29.9%), Lithuania (30.5%) and Latvia (31, 4%). (EUROSTAT, 2019)

In 2018, taxes on production and imports accounted for the largest share of tax revenues in the EU (representing 13.6% of GDP), followed by net social contributions (13.3%) and taxes on income and wealth (13.2 %). Looking at the main categories of taxes, there is a clear diversity in the EU Member States. In 2018, the share of taxes on production and imports was the highest in Sweden (where they participate with 22.4% of GDP), in Croatia (20.1%) and Hungary (18.6%), while the lowest in Ireland (8.0%), Romania (10.7%) and Germany (10.8%). For taxes related to income and wealth, the largest share so far has Denmark (28.9% of GDP), ahead of Sweden (18.6%), Belgium (16.8%) and Luxembourg (16.4%). In contrast, Romania (4.9%), Lithuania (5.7%) and Bulgaria (5.8%) record the lowest income and wealth taxes as a percentage of GDP.




**Graph 1**. Total revenues from taxes and social contributions in the European Union, in the period from 1995 to 2018, in% of GDP

Citizens' income tax is an extremely important category of tax in the countries of the European Union, given its significant share in GDP and total public revenue. In the observed ten-year period, from 2009-2018., the share of personal income tax in GDP and in total public revenues is growing, which is shown in the following chart. Countries with high personal income tax rates have the largest share of this tax in GDP, as well as the largest share in total public revenues (Denmark, Sweden, Norway), while the lowest rates are in Bulgaria, Romania, Croatia and Hungary, so in these countries the share of personal income taxes in GDP and in total public revenues is much lower.

**Chart 3.** Personal income tax in selected EU countries, in% of GDP and in% of total public revenues, in the period from 2009 to 2018.

| Country | 2009. | 2012. | | 2015. | | 2018. | | |
|---|---|---|---|---|---|---|---|---|
| | % GDP | % total revenue | % GDP | % total revenue | % GDP | % total revenue | % GDP | % total revenue |
| EU-28 | 11,3 | 29,4 | 11,7 | 29,6 | 11,9 | 30,0 | 12,3 | 30,5 |
| Belgium | 14,6 | 32,1 | 15,8 | 33,0 | 16,0 | 33,7 | 16,4 | 34,7 |
| Bulgaria | 5,2 | 19,1 | 4,6 | 17,1 | 5,2 | 18,0 | 5,6 | 18,7 |
| The Czech Republic | 6,8 | 21,1 | 6,7 | 19,5 | 7,0 | 20,5 | 7,8 | 21,6 |
| Denmark | 27,0 | 58,3 | 27,8 | 59,4 | 29,3 | 61,9 | 27,3 | 60,3 |
| Germany | 10,9 | 27,3 | 11,4 | 28,6 | 11,8 | 29,5 | 12,9 | 31,0 |
| Greece | 7,5 | 22,8 | 8,5 | 21,9 | 8,2 | 20,8 | 8,9 | 21,5 |
| Spain | 8,9 | 29,0 | 9,7 | 29,0 | 9,6 | 27,6 | 10,2 | 28,9 |
| France | 9,6 | 21,7 | 11,2 | 24,0 | 11,4 | 23,9 | 12,3 | 25,5 |
| Croatia | 6,7 | 18,5 | 5,7 | 15,9 | 5,5 | 14,8 | 5,9 | 15,3 |
| Hungary | 9,4 | 23,9 | 6,5 | 16,6 | 6,6 | 16,9 | 6,5 | 17,3 |
| Austria | 11,8 | 28,1 | 12,3 | 28,9 | 13,4 | 30,5 | 12,7 | 29,7 |
| Sweden | 18,0 | 40,6 | 17,0 | 39,7 | 17,9 | 41,3 | 18,2 | 41,0 |
| Italy | 13,7 | 32,7 | 14,2 | 32,8 | 14,2 | 32,8 | 13,5 | 32,1 |

**(Source:** https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do, Main national accounts tax aggregates[gov_10a_taxag], Last update: 24-06-2020)

When it comes to the characteristics of the economies in our environment, we can say that the economies of our closest neighbors (Croatia, Hungary, Romania, Bulgaria) are comparable to ours. These are economies that not only belong to the same geographical area, but have similar characteristics and are at approximately the same level of economic development. Although our neighbors are members of the European Union, the level of their economic development is closer to our economy than to the developed countries of Western Europe. When it comes to tax rates on corporate income tax, personal income tax and VAT, we see that tax rates are lower than in developed countries of the European Union. The exception is Hungary, which has the lowest corporate tax rate in the European Union of 9% and the highest VAT rate of 27%. Tax rates in our economy, Bulgaria and Romania are at approximately the same level, not lower than 10%, nor more than 20%. Lower tax rates in our economy and neighboring economies are the cause of lower share of tax revenues in total revenues and in the structure of GDP.

**Chart 4.** Basic indicators of fiscal developments in Bulgaria, Romania, Croatia and Hungary, in the period 1995-2019. year, in% of GDP

| Country | **Indicator/year** | | **1995.** | **2005.** | **2015.** | **2019.** |
|---|---|---|---|---|---|---|
| Bulgaria | Total Revenue | | 26,3 | 37,8 | 38,7 | 38,4 |
| | Taxes | | 14,7 | 20,8 | 21,1 | 21,6 |
| | | Direct | 8,5 | 16,1 | 15,5 | 15,4 |
| | | Indirect | 6,1 | 4,5 | 5,4 | 5,9 |
| | Budget deficit | | -5,5 | 1,0 | -1,7 | 2,1 |
| | Public debt | | 70,7 | 26,6 | 26,0 | 20,4 |
| Romania | Total Revenue | | 32,3 | 32,7 | 35,5 | 31,7 |
| | Taxes | | 19,9 | 18,3 | 19,9 | 15,4 |
| | | Direct | 9,3 | 13,0 | 13,3 | 10,6 |
| | | Indirect | 10,6 | 5,4 | 6,6 | 4,8 |
| | Budget deficit | | 2,0 | 0,8 | -0,6 | -4,3 |
| | Public debt | | 22,5 | 15,9 | 37,8 | 35,2 |
| Croatia | Total Revenue | | 61,8 | 43,3 | 45,3 | 47,5 |
| | Taxes | | 25,8 | 24,7 | 25,2 | 27,0 |
| | | Direct | 19,3 | 18,3 | 19,1 | 20,3 |
| | | Indirect | 6,6 | 6,4 | 6,1 | 6,7 |
| | Budget deficit | | -0,3 | -3,7 | -3,3 | 0,4 |
| | Public debt | | 35,7 | 41,3 | 84,7 | 73,2 |
| Hungary | Total Revenue | | 46,6 | 41,6 | 48,6 | 44,0 |
| | Taxes | | 25,8 | 24,2 | 25,6 | 24,9 |
| | | Direct | 17,3 | 15,3 | 18,7 | 18,2 |
| | | Indirect | 8,4 | 8,8 | 6,8 | 6,7 |
| | Budget deficit | | -8,6 | -7,8 | -2,0 | -2,0 |
| | Public debt | | 84,1 | 60,6 | 76,2 | 66,3 |

(**Source**: https://ec.europa.eu/eurostat/documents/3217494/10791451/KS-EK-20-001-EN N.pdf.pdf/8ef43a5f-4b9e-591e-d664-a595419f4a0c?t=1588242190000 (last upate 26.05.2021.))

Revenues collected from taxes in Denmark and Sweden are 3-4 times higher than in Bulgaria, Croatia and Hungary. In the late 80's and early 90's of the XX century, the synthetic income tax, which is characterized by high progressive rates on corporate profits and personal income, left the Scandinavian countries. Due to the global mobility of capital, and the growing problem of capital outflows, which manifested itself in reduced investment, employment and declining rates of economic work, there was a reform of tax systems. Dual taxation is approached, respectively different taxation of labor income and capital income. The idea of the dual concept of taxation is that labor income is taxed at progressive rates, and capital income is taxed at a flat rate, which is equal to the lowest tax rate at which labor income is taxed. (Jeremic et all, 2019)

Our neighbors have similar indicators of fiscal trends, as shown in chart 4. In the observed twenty-five-year period, the observed economies managed to maintain a low budget deficit and reduce public debt. The share of tax revenues in total budget revenues and direct taxes in total tax revenues is growing, while indirect taxes are decreasing.

The more developed the economy, i.e. if it has a higher per capita income, direct taxes will be more represented (income tax and property tax). If the level of economic development is lower, indirect taxes (sales tax, excises and customs duties) will prevail. This means that in lower-income economies, better effects are achieved by using taxes that affect consumption. Income tax is closely related to realized GDP. Taxes reproduce themselves, i.e. the use of taxes to perform the tasks and functions of the state contributes to increase the income of taxpayers and national income, which creates a new tax force and encourages economic development.

The argument that reducing income taxes increases growth is often repeated, but there are also opposing claims. Tax cuts offer the potential to boost economic growth by improving incentives to work, save and invest. But they also create income effects that reduce the need to engage in productive economic activity, and can subsidize old capital, which has unexpected gains for asset owners that undermine incentives for new activities. In addition, tax cuts that are not accompanied by spending cuts increase the budget deficit. An increase in the deficit will reduce national savings and future national income, which will negatively affect investments. Therefore, the net effect of tax reduction on growth is theoretically uncertain and depends on the structure of the tax itself, as well as on the time and structure of its financing. (Gale, Samwick, 2014)

### 2.2. Personal income tax in Serbia

Over the past four years, Serbia has made significant progress towards establishing macroeconomic stability, but despite that, the growth of its economy is among the slowest in the region of Central and Eastern Europe. The key reasons for the slow growth are not in fiscal and monetary policy, but in the bad economic environment, i.e. in the weak institutions. One of the important causes of the bad economic environment in Serbia is the inefficient state, which burdens economic life with high costs and risks, whose services are of low quality, and the price of these services, which is charged through taxes, is relatively high. An efficient state should provide legal security, social stability, good relations with the world, macroeconomic stability, good infrastructure, an educated workforce, as well as encouraging innovation through moderate taxes. This would stimulate economic activities of the private sector, while reducing costs and risks.

From the next chart, which shows the basic indicators of macroeconomic and fiscal trends in the Republic of Serbia, in the period from 2009 to 2019., we see in recent years, on the one hand, a significant increase in public revenues, and a decline in public spending, on the other hand. This has resulted in a decline in the deficit and public debt in the last medium term.

Tax revenues are growing, which is a consequence of the growth of all types of tax revenues, with the largest growth being recorded on the basis of corporate income tax, which can be related to the low base effect.

**Chart 5.** Basic indicators of macroeconomic and fiscal trends in the Republic of Serbia,in the period from 2009 to 2019.

| | | 2009. | 2012. | 2015. | 2019. |
|---|---|---|---|---|---|
| GDP (in billion dinars) | | 3.052 | 3.810 | 4.312 | 5.416 |
| Public incomes | (in billion dinars) | 1.200,77 | 1.472,11 | 1.694,83 | 2.278,55 |
| | % GDP | 39,34 | 38,63 | 39,30 | 42,07 |
| Public expenditure | (in billion dinars) | 1.327,91 | 1.717,30 | 1.843,96 | 2.289,67 |
| | % BDP-a | 43,50 | 45,07 | 42,76 | 42,27 |
| Deficit | (in billion dinars) | 127,13 | 245,18 | 149,13 | 11,11 |
| | % BDP-a | 4,2 | 6,4 | 3,5 | 0,2 |
| Public Debt | (in billion dinars) | 944,40 | 2.014,75 | 3.018,58 | 2.815,63 |
| | % GDP | 30,9 | 52,9 | 70,0 | 52,0 |

(**Source:** Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December, 2019, pp.13)

In the structure of consolidated public revenues of the Republic of Serbia, in the period from 2009 to 2019., tax revenues are dominant, accounting for 87% of total public revenues, while non-tax revenues account for about 13% of total public revenues.

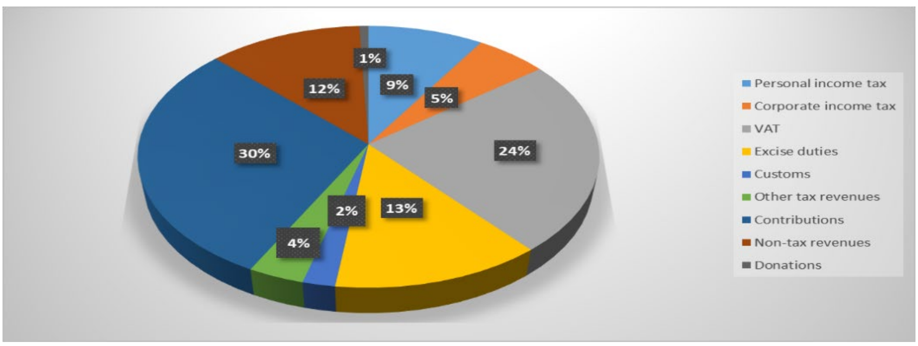
**Chart 6.** Structure of consolidated public revenues of the Republic of Serbia, in the period from 2009 to 2019., in billion dinars

| | 2009. | 2012. | 2015. | 2019. |
|---|---|---|---|---|
| Total public revenues (with donations) | 1.200,77 | 1.472,11 | 1.694,83 | 2.278,55 |
| 1. Current income | 1.194,30 | 1.469,17 | 1.687,61 | 2.263,69 |
| 1.1. Tax revenues | 1.054,58 | 1.292,56 | 1.463,59 | 1.993,67 |
| Citizens' income tax | 133,48 | 165,26 | 146,77 | 203,73 |
| Tax on profits | 104,31 | 125,79 | 108,93 | 147,52 |

| | | | | |
|---|---|---|---|---|
| Other personal income taxes | 29,17 | 39,46 | 37,84 | 56,20 |
| Corporate income tax | 31,21 | 54,77 | 62,66 | 126,71 |
| VAT | 296,92 | 367,47 | 416,05 | 550,56 |
| Excise taxes | 134,78 | 181,09 | 235,78 | 306,54 |
| Customs | 48,03 | 35,78 | 33,32 | 48,09 |
| Other tax revenues | 37,07 | 42,60 | 63,29 | 82,14 |
| Contributions | 373,07 | 445,56 | 505,69 | 675,87 |
| 1.2. Non-tax revenues | 139,71 | 176,60 | 224,02 | 270,01 |
| 2. Donations | 6,47 | 2,94 | 7,21 | 14,86 |

**(Source:** Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December, 2019, pp.35-37.)

The structure of tax revenues is dominated by VAT, which accounts for almost ¼ of total tax revenues, while personal income taxes account for about 9% of total public revenues. In the structure of personal income tax, the dominant share of tax on profits is over 70%. Contributions account for about 30% of total tax revenues, while other tax forms have a significantly smaller share. Excise duties make up 13.5% of total tax revenues, and corporate income tax only 5.6% of total tax revenues. The share of customs duties is even lower, 2.1%. The structure of consolidated public revenues in the Republic of Serbia, in the period from January to December 2019, is shown in the following graph.




**Graph 2.** Structure of consolidated public revenues, in the Republic of Serbia, in the period from January to December 2019 (**Source:** Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December 2019, pp.40)

In the budget of the Republic of Serbia, in the last decade, revenues from personal income tax have increased until 2012, when a gradual decline begins, which lasts until 2016, after which the growth of this tax category begins again. The same tendencies are observed in the share of personal income tax in GDP and in total public revenues.

**Chart 7.** Personal income tax in% of GDP and% of total public revenues in the budget of the Republic of Serbia, in the period from 2010 to 2019.

| Year | GDP (in billion dinars) | Public revenues (in billion dinars) | Citizens' income tax | | |
|---|---|---|---|---|---|
| | | | Billion dinars | % GDP | % total revenues |
| 2010. | 3.052.100 | 1.278.400 | 139,0 | 4,5 | 10,8 |
| 2011. | 3.250.600 | 1.362.600 | 150,8 | 4,6 | 11,0 |
| 2012. | 3.612.300 | 1.472.100 | 165,2 | 4,5 | 11,2 |
| 2013. | 3.810.100 | 1.538.000 | 156,0 | 4,1 | 10,1 |
| 2014. | 4.121.200 | 1.620.700 | 146,4 | 3,5 | 9,0 |
| 2015. | 4.160.500 | 1.694.800 | 146,7 | 3,5 | 8,6 |
| 2016. | 4.521.300 | 1.842.600 | 155,1 | 3,4 | 8,4 |
| 2017. | 4.754.400 | 1.973.400 | 167,8 | 3,5 | 8,4 |
| 2018. | 5.068.600 | 2.105.200 | 179,4 | 3,5 | 8,5 |
| 2019. | 5.416.800 | 2.278.500 | 203,7 | 3,7 | 8,9 |

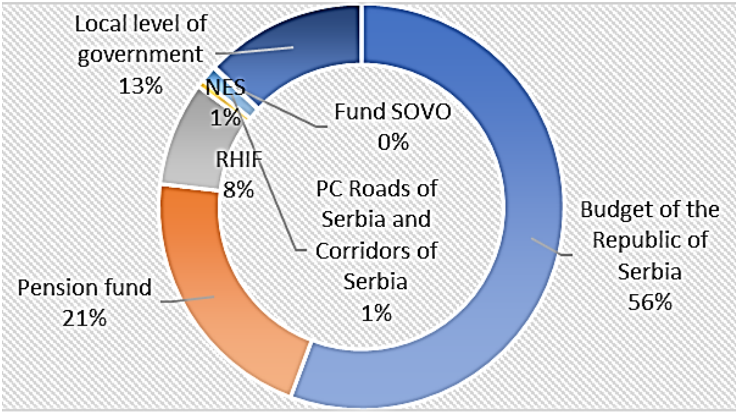
(**Source:** Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December 2019, pp.47.)

From the Chart 7 we see that although the total income tax revenues of citizens in 2019 are far higher than the revenues in 2010, their share in GDP and in total public revenues in 2019 is not higher than the share in 2010. The share of personal income tax revenues in GDP in 2019 was 3.7%, and the share in total public revenues was at the level of about 9%, which is far less than in the European Union countries.

Public revenues are generated by mandatory payments of taxpayers (legal entities and individuals). These are also the revenues generated by the organizations of mandatory social insurance. These public funds are at the disposal of the Republic of Serbia, local authorities and organizations of mandatory social insurance. Users of budget funds are direct and indirect, public companies and organizations of mandatory social insurance. Users of public funds are direct (bodies and organizations of the Republic of Serbia and bodies and services of local government) and indirect users (budget funds, judicial bodies, funds, agencies and directorates, founded by the Republic of Serbia or local authorities, public companies), and the beneficiaries of the funds of the organizations for mandatory social insurance are the Republic Pension and Disability Insurance Fund, the Republic Health Insurance Fund and the National Employment Service. (Official Gazette of RS c))

In the consolidated public revenues, in the Republic of Serbia, in the period January-December 2019, the largest share is the republic level of government, followed by the pension fund and the Republic Health Insurance Fund, while the participation of the National Employment Service, the Social Insurance Fund of Military Insured Persons (SOVO) and the public companies Corridors of Serbia and

Roads of Serbia is insignificant. The local level of government participates with 13% in consolidated public revenues.




**Graph 3.** Share of government levels in consolidated public revenues, in the Republic of Serbia, in the period from January to December 2019 (Source: Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December 2019, pp.40.)

In the last five years, tax revenues in Serbia have grown faster than GDP growth. This is the result of an increase in tax rates, at the end of 2014, an increase in wages and consumption, but also due to increased tax collection, in order to combat the gray economy. The increase in wages contributed to the increase in taxes and contributions on wages, as well as to the increase in domestic consumption, which, on the one hand, increased revenues from taxes, excises and VAT, and on the other hand, contributed to the growth of the foreign trade and current account deficit.

**Chart 8.** Contribution of individual revenue categories to the annual growth rate of nominal government revenue in the period from January to December 2019

| | **Nominal growth index** | **Real growth index** |
|---|---|---|
| Total public revenues (with donations) | 108,2 | 106,2 |
| 1. Current income | 108,3 | 106,3 |
| 1.1. Tax revenues | 109,4 | 107,4 |
| Citizens' income tax | 113,6 | 111,4 |
| Tax on profits | 112,9 | 110,8 |
| Other personal income taxes | 115,3 | 113,2 |
| Corporate income tax | 112,7 | 110,6 |
| VAT | 110,2 | 108,1 |
| Excise taxes | 105,7 | 103,7 |
| Customs | 110,2 | 108,1 |

| | | |
|---|---|---|
| Other tax revenues | 106,5 | 104,5 |
| Contributions | 109,1 | 107,0 |
| 1.2. Non-tax revenues | 100,6 | 98,7 |
| 2. Donations | 101,3 | 99,4 |

(**Source:** Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December 2019, pp.42.)

It is estimated that the total economic activity in the Republic of Serbia in 2019, measured by the real movement of gross domestic product (GDP), achieved a growth of 4.0% compared to 2018. The average nominal growth of tax revenues was 9.4%, and the real annual growth of tax revenues was 7.4%. We see that tax revenues continue to grow faster than GDP, and what is the contribution of individual income categories to the annual rate of nominal growth of state revenues in the period from January to December 2019, is shown in the previous chart. The growth of the annual nominal income rate is mostly contributed by social contributions, VAT and personal income tax.

The tax system in Serbia has undergone significant changes in the previous decade, and the intensity of reforms has been different, depending on the type of tax. The most significant reforms were carried out with the consumption tax, less with the income tax, and the least with the property tax, which is why the tax form of VAT is dominant, which records the highest percentage share in GDP, tax revenues and total public revenues.

## CONCLUSION

Taxes are the main source of regular state revenues, a very complex whole in public finances, which captures the attention of economists and experts, but also all stakeholders, because they are an instrument that achieves goals of microeconomic and macroeconomic nature, but also social policy goals.

According to the share in the total revenues of the EU countries, one of the most important tax forms, including social security contributions and value added tax, is the personal income tax. Over 25% of public revenues are collected by it. The relatively high share of personal income tax in the total fiscalities of developed countries is extremely important, given that the progressive nature of this tax form can reduce the regressive effect of other direct taxes, as well as sales tax.

According to the Law, the taxpayer of personal income tax is a natural person who is obliged to pay taxes, the tax base is the sum of net income of a particular natural person from all sources, and tax rates are, as in most modern tax systems progressive, making it fairer and more even capture of the economic power of the taxpayer. Citizens' income tax is levied on: salaries, income from self-employment, income from capital, income from real estate, income from copyright and industrial property rights, and capital gains.

The personal income tax has a stimulating effect on the supply of labor, investments and savings, and has a strong effect on the realization of economic stability and the redistribution of national income. Income tax is considered the fairest tax of all taxes, because no other tax is able to cope with the problem of modern economic inequality. The tax systems of modern countries differ from each other. The differences between them are conditioned primarily by the political and economic system. Taxes are an extremely effective means of realizing various state policy goals. The basic problem is to build such a tax system that can and should act in the direction of achieving the established goals of economic policy.

The personal income tax is present in almost all countries of the world, the percentage of public revenues generated by collecting this tax is different, but its balance value is very high, because it treats many taxpayers, which contributes to pouring large sums of money into the state treasury.

Citizens' income tax, together with VAT, is one of the most important forms of taxation in any modern state. The great importance of this tax form is reflected not only in its great financial generosity, but also in its elasticity and suitability for achieving many goals of economic and social policy. The application of the principle of taxation according to the economic power of the taxpayer comes to full expression, taking into account the conditions in which the taxpayer lives and works.

Citizens' income tax rates vary across the EU countries. The countries in our immediate vicinity, Bulgaria and Romania, have the lowest personal income tax rates, at 10%. In Germany, Greece, Spain, France, Portugal, Norway and Italy, personal income tax rates exceed 40%, while they are far higher in Belgium, Austria and Denmark, where they exceed 50% and 60%, respectively. In Serbia, the personal income tax rate ranges from 10 to 20%, depending on the type of personal income that is taxed.

The total share of taxes in GDP, in 2018, in the European Union was 40.3%. The share of taxes in GDP varies significantly between Member States, with the highest shares of taxes recorded in France, Belgium and Denmark, while the lowest shares of taxes in GDP were in Ireland, Romania and Bulgaria.

In 2018, taxes on production and imports represented the largest share of tax revenues in the EU, followed by social contributions and taxes on income and wealth. Looking at the main categories of taxes, there is a clear diversity in the EU Member States. In 2018, the share of taxes on production and imports was the highest in Sweden (where they participate with 22.4% of GDP), in Croatia (20.1%) and Hungary (18.6%), while the lowest in Ireland (8.0%), Romania (10.7%) and Germany (10.8%).

For taxes related to income and wealth, the largest share so far has Denmark (28.9% of GDP), ahead of Sweden (18.6%), Belgium (16.8%) and Luxembourg (16.4%). In contrast, Romania (4.9%), Lithuania (5.7%) and Bulgaria (5.8%) record the lowest income and wealth taxes as a percentage of GDP.

In the structure of consolidated public revenues of the Republic of Serbia, in the period from 200 to 2019, tax revenues are dominant, accounting for 87% of total public revenues, while non-tax revenues account for about 13% of total public revenues. The structure of tax revenues is dominated by VAT, which accounts for almost ¼ of total tax revenues, while personal income taxes account for about 9% of total public revenues. In the structure of personal income tax, the share of payroll tax of over 70% is dominant. Citizens' income tax participates in GDP with about 4%, which is below the level of transition economies of the EU and the surrounding countries.

The more developed the economy, i.e. if it has a higher per capita income, the more direct taxes will be present in it, such as income tax and property tax. If the level of economic development is lower, indirect taxes such as sales tax, excise duties and customs duties will prevail. This means that in lower-income economies, better effects are achieved by using taxes that affect consumption. Income tax is closely related to realized GDP. Taxes reproduce themselves, i.e. the use of taxes to perform state functions contributes to an increase in taxpayers' income and national income, thus creating a new tax force. The tax thus creates conditions for the uninterrupted process of reproduction, which encourages economic development.

## REFERENCES:

1. Bird R. M, Martinez-Vazquez J, Torgler B. 2008. Tax effort in developing countries and high income countries: the impact of corruption, voice and accountability, Economic analysis and policy, 38(1):55–71
2. Fundamental Reform of Personal Income Tax: OECD Tax Policy Studies, 2006, p. 184.
3. Gale, G. W., Samwick, A. A. 2014. Effects of Income Tax Changes on Economic Growth, The Brookings Institution and Tax Policy Center
4. https://www.brookings.edu/wpcontent/uploads/2016/06/09_effects_income_tax_changes_economic_growth_gale_samwick.pdf
5. Jeremic, N., Kamenkovic, S. Grubisic Z. 2019, Comparative analysis of the tax systems of Scandinavian and Mediterranean countries, Business economics, XIII/2, pp. 1-27.
6. Kiser, E., Karceski, S. M. 2017. Political Economy of Taxation, Annual Review of Political Science, Vol. 20, pp.75-92, https://doi.org/10.1146/annurev-polisci-052615-025442

7. Le Cacheux, J. 2020. Funding the EU Budget with a Genuine Own Resource: The Case for a European Tax
8. https://institutdelors.eu/wp-content/uploads/2020/08/europeantaxlecacheuxnemay07-2.pdf
9. Limberg, J. 2019. 'Tax the rich'? The financial crisis, fiscal fairness, and progressive income taxation, European Political Science Review, 11, p.p. 319–336 doi:10.1017/S1755773919000183
10. Ministry of Finance of the Republic of Serbia, Public Finance Bulletin 184, December 2019.
11. Profeta P, Puglisi R, Scabrosetti S. 2013. Does democracy affect taxation and government spending? Evidence from developing countries, JOURNAL OF COMPARATIVE ECONOMICS, 41(3), pp. 684–718, DOI: 10.1016/j.jce.2012.10.004
12. Scheve K, Stasavage D. 2016. Taxing the Rich: A History of Fiscal Fairness in the United States and Europe. Princeton, NJ: Princeton Univ. Press, 2016., pp.10
13. Official Gazette of RS,
    a) Law on Personal Income Tax, "Official Gazette of RS", no. 24/2001, 80/2002, 80/2002 - oth. law, 135/2004, 62/2006, 65/2006 - corr., 31/2009, 44/2009, 18/2010, 50/2011, 91/2011 - decision US, 7/2012 - harmonized din. amo., 93/2012, 114/2012 - decision US, 8/2013 - harmonized din. amo., 47/2013, 48/2013 - corr., 108/2013, 6/2014 - harmonized din. amo., 57/2014, 68/2014 - oth. law, 5/2015 - harmonized din. amo., 112/2015, 5/2016 - adjusted din. amo., 7/2017 - adjusted din. amo., 113/2017, 7/2018 - adjusted din.amo., 95/2018, 4/2019 - adjusted din. amo., 86/2019 and 5/2020 - adjusted din. amo.)
    b) Decree on detailed conditions, criteria and elements for flat-rate taxation of taxpayers of income from self-employment, ("Official Gazette of RS", No. 94/2019 and 96/2019 - corr.)
    c) Law on Budget System, (Official Gazette of RS no. 54/2009, 73/2010, 101/2010, 101/2011, 93/2012, 62/2013, 63/2013 - corrected, 108/2013, 142/2014, 68 / 2015- oth. law, 103/2015, 99/2016, 113/2017, 95/2018, 31/2019 and 72/2019)
14. https://ec.europa.eu/eurostat
15. http://worldwide-tax.com/
16. https://data.oecd.org/tax/tax-revenue.htm