

PERSONAL INCOME TAX DEVELOPMENTS IN THE EUROPEAN UNION COUNTRIES IN 2020-2024²

The aim of the article is to analyse the most important changes in the area of individual taxation in EU Member States in recent years with a view to identifying the main trends, strengths and weaknesses in the application of the tax. In particular, the article investigates whether and how the recent crises affected the degree of progressivity of personal income tax and the amount of revenue from this tax in the EU countries. The methodology used in the article is a combination of observation and comparative analysis. The main conclusion reached in the article is that progressivity of taxation in the EU area increased in the period under consideration, mainly due to the shift of emphasis in most Member States from fiscal consolidation to mitigating the negative effects of inflation. Despite the base narrowing measures undertaken in many EU countries, PIT revenue has remained stable in most of them.

Keywords: personal income tax; tax reforms; fiscal revenue

JEL: H21; H24; H30

1. Introduction

Personal income tax (PIT) is one of the most important fiscal instruments used in modern tax systems because of its implications on social welfare, economic growth and budget revenue. Therefore, this fiscal instrument has been the focus of a large body of theoretical and empirical research. Despite the significant academic interest, the specialised literature has not come out with a clear answer to the question of whether the multi-bracket schedule or the flat tax regime is preferable from the point of view of accumulating more fiscal revenue. There are also other important considerations, such as income redistribution, reducing market distortions and macroeconomic stabilisation. It is the only tax that can be directly used as an instrument for income redistribution and reduction of income inequalities by means of a progressive rate structure. Tax progressivity also contributes to smoothing the macroeconomic fluctuations through automatic fiscal stabilisation. On the other hand, high tax rates and complexities in the tax code are considered harmful to economic growth because of the market distortions they cause. Moreover, in periods of high inflation, progressive

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taxation leads to the so-called bracket creep that results in increasing the fiscal burden and a reduction of after-tax disposable income of taxpayers.

In addition to the considerable scientific interest, this tax has also been subject to many reforms and modifications in the past decades, including the reduction of statutory tax rates in a number of countries. The present article focuses mainly on the changes in PIT introduced in the EU Member States in recent years with a view to identifying the main trends and analysing the relationship between the parameters of this tax (specifically top PIT rates) and fiscal receipts. The main aim of the article is to analyse the main changes introduced to this tax with a view to identifying the common trends and patterns in the EU countries against the background of the recent crises. The remaining part of the article is structured as follows: section two presents the theoretical aspects of the topic with a focus on the effects of multi-bracket progressivity and flat tax on fiscal revenue and economic growth; section three addresses the main developments in the area of PIT observed in EU countries in the period 2020-2024; section four concludes.

2. Theoretical Aspects of the Relationship Between Personal Income Tax, Fiscal Revenue And Economic Growth

The organisation of the personal income tax (PIT) is an important issue both in theory and in practice, since this tax affects social equity, economic efficiency and the amount of fiscal revenue. Slemrod (1996, p. 3) noted that the modern approach to evaluating progressivity focuses on the trade-off between the potential social benefit of a more equal income distribution and the economic costs caused by the disincentive effects of the high marginal tax rates required by a redistributing tax system. As Thomas (2023) pointed out, there is no single definition of progressivity, or single method for measuring the degree of progressivity of a tax – thereby necessitating a range of decisions and value judgements to be made in any analysis. The classic technique for progressive PIT is the so-called multi-bracket income tax progression, where the tax base is divided into several tax brackets, and a different marginal tax rate is applied to each bracket (Brussarski, 2021, p. 3). Most EU Member States have adopted a personal income tax system based on tax brackets. Progressive income taxation implies that the tax burden increases more than proportionally with income. The size of the brackets and the marginal personal income tax rates that apply to each bracket are important parameters of progressivity (European Commission, Taxation Trends, 2024, p. 82).

In the 1980s, American economists Robert Hall and Alvin Rabushka developed a concept for an "integrated flat tax" to replace personal income tax and corporate tax in the United States (Brussarski, 2021, p. 4). The flat tax system, as originally proposed, imposes a tax on businesses and individuals at the same single rate. The tax is essentially a two-part tax that taxes compensation of individuals and separately taxes businesses through a value-added approach, and is more accurately called a "flat rate consumption tax", given that its tax base is consumption (Adhikari, Alm, 2017, p. 4). Although the main goal of the flat tax proposal was to simplify the tax code in the United States, this idea has not found practical application in its pure form anywhere in the world.

The specialised literature has not come out with a clear answer to the question of whether a multi-bracket system or a flat tax regime is preferable from the point of view of accumulating more fiscal revenue. There are also other important considerations, such as the effects of the tax on incentives and economic growth. A progressive PIT scheme contributes to the reduction of income inequalities and generates more fiscal receipts from high-income individuals. On the other hand, due to its simplicity, the flat tax system is viewed as preferable from the point of view of tax compliance and market efficiency, which in turn leads to the accumulation of more revenue in national budgets.

One of the most famous theoretical models depicting the relationship between tax rates and the amount of fiscal revenue is the Laffer curve, named after the American economist Arthur Laffer. The Laffer curve shows that as tax rates increase from a low level, tax revenues also increase. However, beyond a certain point, increasing tax rates further reduces tax revenues, due to decreased incentives to work, invest, and produce. This theory suggests that there is an optimal level of taxation that maximises tax revenues without discouraging economic activity. The idea behind the Laffer curve is that there are two tax rates that can generate the same tax revenue: a low rate and a high rate. However, the high rate is detrimental to the economy because it discourages economic activity. Therefore, Laffer argues that reducing tax rates from very high levels can, paradoxically, increase tax revenues (Calvo, Sanchez de la Cruz, 2024, p. 12).

Although the concept behind the Laffer curve postulates against very high tax rates, it does not specify whether progressive or flat taxation is required. In an empirical study, Holter et al. (2019, p. 1318) found that the peak of the U.S. Laffer curve is attained at an average labour income tax rate of 58% when the current progressive tax system is in place and that at this average rate, tax revenue could be increased by 59%. Moreover, the authors reached a conclusion that the peak of the Laffer curve or the maximum level of revenue that can be attained goes up by 7% if the progressive tax code is replaced with a flat tax on labour income.

Guner et al. (2020, p. 371) pointed to the fact that it is not clear whether higher progressivity of personal income taxes is the best way to generate the needed revenue. According to these authors, higher tax rates might result in lower, not higher, revenue. The explanation lies in the fact that higher progressivity is associated with lower aggregate labour supply and capital, and as a result, the government collects higher taxes from a smaller economy. However, another finding of their empirical tests was that it is possible to generate higher total tax revenue by increasing taxes on the top earners. In particular, tax collection rises by 0.65% and 1.11% if a 3 percentage points tax increase is applied to individuals who are in the top 5% and 10% of the labour income distribution, respectively; with a 10 percentage points tax increase on the top 10% of earners, the total tax collection rises by 2.81%.

Kindermann and Krueger (2022) argued that high marginal labour income tax rates on top earners are an effective tool for social insurance even when households have high labour supply elasticity. According to their estimations, the optimal marginal tax rate for the top 1% earners amounts to as much as 79%, as long as the model earnings and wealth distributions display a degree of concentration as observed in the US.

Saavedra, Marcincin, and Valachy (2007, as cited in Barrios et al., 2020, p. 84) analysed the impact of flat tax reforms in Central and Eastern European countries on tax revenues, tax

structures and tax compliance. While these authors found no influence on tax revenues collected, they concluded that flat tax reforms lead to a shifting of the tax system toward indirect taxes, including consumption taxes. They also found some evidence of a positive impact on tax compliance, although only in the cases where the personal and corporate income flat tax rates were aligned.

According to Gray et al. (2007, p. 259), flat tax reforms do not appear to have had a significant impact on budget revenue, whether positive or negative. This is due to the fact that, in addition to other variables in the country's economy, a variety of design variables affect revenue outcomes, including the rates and allowances established. At the same time, a shift away from direct toward indirect taxes was noticeable.

Another strand of research has focused on empirically testing the effects of multi-bracket versus flat tax regimes on economic growth. PIT is considered a distortive tax as it impacts individuals' decisions to work, save and invest. These decisions affect the overall performance of the economy and the size of the tax base, hence the amount of fiscal revenue. Empirical evidence points to the existence of a positive, although limited, effects of a flat tax on economic growth. Stokey and Rebelo (1995, p. 520) pointed to the significantly different results in the empirical studies on the impact of tax reforms on economic growth, ranging from 0 to 8 percentage points. These authors concluded that potential tax reforms in the US would have modest effects on economic growth.

Caucutt et al. (2000) constructed a general equilibrium model of endogenous growth with the aim of investigating the growth effect of changes in the tax structure, in particular, in the progressivity of taxes. Their main objective was to explore the effects of decreased progressivity on investments by the rich and the poor and their impact on the aggregate growth rate. The authors' simulations for the US economy showed that the effects arising from the replacement of progressivity with a flat tax on growth can reach 0.52 percentage points.

Conesa and Krueger (2005) conducted a microsimulation analysis in order to analyse the potential effects of a switch from a multi-bracket progressive system to a flat tax with a personal allowance. Their results showed that the optimal income tax is well approximated by a proportional income tax with a constant marginal tax rate of 17.2% and a fixed deduction of roughly USD 9 400. Under such a tax code, aggregate labour supply is 0.54% higher and aggregate output is 0.64% higher than in the benchmark tax system, calibrated to roughly match the US system. At the same time, these authors recognised that progressive income taxation enhances a more equal income distribution; furthermore, it leads to less volatile household consumption by serving as a substitute for private insurance markets against idiosyncratic uncertainty.

Piketty et al. (2011) analysed a model of optimal labour income taxation on top incomes where the latter respond to marginal tax rates through three channels. On the basis of a sample of 18 OECD countries, they concluded that there is a strong negative correlation between top tax rates and top 1% income shares since 1960, implying that the overall elasticity is large.

However, according to these authors, top income share increases have not translated into higher economic growth.

Adhikari and Alm (2017) investigated the impact of flat tax reform on economic growth using a novel data-driven empirical method called synthetic control. They compared the difference in GDP per capita before and after the reform for eight countries from Eastern and Central Europe that had adopted a flat tax regime to a convex combination of similar countries but without such a reform. The authors found positive effects of tax reform on income in the analysed countries. In particular, their results pointed to a positive impact on investment per capita and employment, albeit with some time lags.

Gerber et al. (2018, p. 10) pointed to the decline of personal income tax progressivity in the 1980s and 1990s, which has been consistent with the decline in top income tax rates across the world. These authors studied the relationship between progressivity and economic growth. Their results showed that the reduction in progressivity did not boost growth in the sample of countries, suggesting that efficiency costs of progressivity may be small. They concluded also that, despite the absence of a fully comprehensive measure of progressivity, progressivity-enhancing measures could be taken without major risks to growth. This would be especially relevant in countries that are marked by great inequality (Gerber et al., 2018, p. 22).

Barrios et al. (2020) investigated the fiscal, redistributive and macroeconomic impact of introducing or increasing progressivity in the Central and Eastern European countries with flat tax schedules. Their results showed that cutting taxes for low- and medium-income individuals increases their incentives for being employed, while raising taxes on high-income earners lowers their employment rate. According to the authors, these counteracting forces lead to a relatively modest impact on employment and GDP. Their results suggested that enhancing progressive elements in the personal income tax system under alternative and plausible tax reform scenarios would have significant positive effects on redistribution and equity and would yield additional tax revenues. Budget-neutral reforms combining progressive personal income tax systems with a working tax credit or complementing a (higher) flat tax rate with tax allowances would yield similar results and would lead to further reduction in income inequality. However, there are substantial variations in results across countries depending on the existence of (pre-reform) tax allowances and tax credits. In the medium-term, the macroeconomic impact of the budget-neutral reforms appears to be positive, albeit small, for all countries (Barrios et al., 2020, p. 100).

Another important aspect of PIT is related to the capacity of this tax to smooth the fluctuations in the business cycle. Progressive individual taxation is more favourable to macroeconomic stabilisation since it enables the conduct of automatic counter-cyclical fiscal policies in times of recession or high inflation. Weller & Rao (2010) tested the effects of progressive taxes on stability using univariate and multivariate analyses based on panel data for emerging economies from 1982 to 2002 and compared those to the effects of a value-added tax (VAT). Their results indicated that progressive taxes are associated with greater income equality and a higher likelihood of countercyclical fiscal policies. The potential benefits from progressive income taxation, though, are lower with VAT. Tax policy is also

constrained by government expenditures and openness, but not by lower corporate taxes, suggesting that all income tax rates are constrained by openness.

On the other hand, in periods of high inflation, progressive taxation implies the so-called bracket creep (or fiscal drag). It occurs when the growth of taxpayers' nominal income moves them into higher tax brackets despite no corresponding growth in real incomes. Hence, by increasing the tax burden of households with relatively low incomes, bracket creep offsets part of the desired effects of tax reforms aimed at reducing the tax burden on labour for low-income workers, namely to increase work incentives and support inclusive growth (Kiss et al., 2024, p. 3). At the same time, inflation has positive implications for fiscal revenue, due to the increase in nominal incomes. Heinemann (2011, as cited in Kiss et al., 2024) found a positive effect of inflation on personal income tax revenues as a share of GDP in a panel data analysis across OECD countries for the period between 1972 and 1996. For every point of inflation, the share of personal income tax revenues in GDP was found to rise by almost 0.4 percentage points.

Another important aspect in the academic debate on flat and progressive tax regimes is the impact of both systems on simplicity and administrative burden. The specialised literature has not come out with conclusive evidence that either type of PIT is preferable with regard to administrative costs and tax compliance. According to Peichl (2014), although the application of flat rates could contribute to simplifying taxation of individual income, the main source of complexity rather stems from the tax base with its various exemptions. In this sense, the author suggests that reforms in the overall tax system based on rate cuts and base broadening can also increase compliance.

Finally, depending on its organisation, PIT can have effects on income redistribution. Progressive taxation in particular contributes to the reduction of after-tax income inequalities. Baldini (2020) examined the effects of PIT reforms in Italy on the redistribution capacity and progressivity of the tax. This author found that contrary to what might be expected from the reduction in top marginal tax rates, after 40 years, the Italian personal income tax has become more redistributive and slightly more globally progressive. In particular, the incidence of the tax has decreased on lower incomes, while increasing on middle and high incomes. At the same time, the lack of automatic adjustment mechanisms to inflation has produced a strong monetary fiscal drag effect, dampening the progressivity of the tax and increasing its burden.

Balladares and García-Miralles (2024) found that in the absence of indexation of the nominally defined parameters of the tax, a homogeneous increase in household income of 1% would lead to an increase in income tax revenue of 1.85%, in line with the average elasticity estimated for OECD countries. This effect is greater for middle and upper-middle incomes and produces an increase in effective tax rates across the entire distribution of tax filers, leading to a reduction in net income inequality.

3. Developments in Personal Income Tax in the EU Member States in 2020-2024

PIT is not subject to harmonisation in the European Union, thus considerable differences exist among individual countries in the organisation of this tax. Member States have chosen

different approaches towards the tax's parameters, including the number and range of tax brackets, the size of tax rates and the applicable exemptions, credits and allowances. Table 1 provides information about some of the most important specifics of PIT in EU countries as of 2024. While most adhere to a progressive schedule, the number of tax brackets varies notably among them. During the so-called flat tax revolution at the turn of the century, a number of countries from Central and Eastern Europe (CEE) replaced the multi-bracket schedule with a flat tax based on the application of a single marginal tax rate. The first country to adopt a flat tax regime in Europe was Estonia in 1994, and in the following years a number of countries followed suit, including Latvia, Lithuania, Slovakia, Czechia, Bulgaria and Romania. In parallel to the adoption of flat PIT systems, most CEE countries introduced or increased tax allowances and credits (Barrios et al., 2020, p. 84). However, in recent years, Latvia, Lithuania and Slovakia reintroduced multi-bracket progressive taxation on individual income (European Commission, 2025). Thus, as of 2024, only four EU countries, namely Bulgaria, Estonia, Hungary and Romania, have a flat tax regime in force. In most Member States, the number of tax brackets varies between two and six, but there are several exceptions, namely Luxembourg with twenty – three brackets, Portugal with nine brackets and Austria with seven brackets.

As can be seen in Table 1, marked differences exist also with regard to the top PIT rate, which varies from 10% in Bulgaria and Romania to 55.9% in Denmark and 55% in Austria. In fourteen Member States, the top rate exceeds 40%, suggesting a significant tax burden on high-income earners. In all these countries, the highest marginal tax rate is applicable only to the income above a certain threshold. For example, the top rate of 55% in Austria is levied only on annual income above 1 000 000 EUR (European Commission, 2024). Ten other Member States exhibit PIT rates ranging between 20% and 40%, while only three countries are characterised by low rates of 15% and below. Thus, the average top PIT rate in the EU stood at 38.1% in 2024.

At the same time, most Member States apply a zero bracket or a basic individual tax allowance (credit) aimed at reducing the fiscal burden on low-income groups. In some cases, these are combined with allowances (credits) for dependent children and other types of tax reliefs. Bulgaria and Hungary are the only countries that do not apply a basic individual allowance; however, both countries have children tax allowances in place, and Hungary also implements a basic tax allowance for couples.

Differences are observed also with regard to the taxation of active (labour) as opposed to passive (capital) income. In recent years, most EU countries have adopted a schedular income tax system where different income types are treated separately. A specific type of schedular tax system is the dual income tax system, where capital income, such as interest, dividends and capital gains, is generally taxed at a flat rate, while labour income is taxed at progressive rates (European Commission, 2024, p. 79). Currently, a dual PIT tax system is in place in almost all Member States, as capital income is subject to flat taxation. For example, in Germany, incomes from capital gains, dividends, as well as interests from bonds and bank savings accounts are levied with a flat rate of 25% (a solidarity surcharge amounting to 5.5% is also applicable). In Poland, the main types of capital income are taxed at a single rate of 19%. On the other hand, in Spain, these types of capital income are subject to progressive taxation, but according to a different schedule than labour income (PWC, 2025). Thus, the

only countries with an integrated PIT system in place are Bulgaria, Estonia, Hungary and Romania, which apply a flat tax towards all types of income.

Table 1. Selected parameters of PIT in the EU Member States as of 2024

Country	Minimum rate	Top rate	Number of brackets	Zero bracket/ Personal allowance or credit	Children's allowances or credits	Flat rate on capital income
Austria	0%	55%	Seven	Zero bracket up to 11 693 EUR	No	Yes
Belgium	25%	50%	Four	Basic yearly allowance for an individual is 10 570 EUR Basic yearly allowance for a couple is 21 820 EUR	Yes	Yes
Bulgaria	10%	10%	One	No	Yes	Yes
Croatia	20%	30%	Two	Basic yearly allowance for an individual is 6720 EUR	Yes	Yes
Cyprus	0%	35%	Five	Zero bracket up to 19 500 EUR	No	Yes
Czechia	15%	23%	Two	Basic yearly credit for a couple is 1027.5 EUR	Yes	Yes
Denmark	N.A.	55.9%	N.A.	N.A.	N.A.	Yes
Estonia	20%	20%	One	Basic yearly allowance for an individual is 7848 EUR	Yes	Yes
Finland	12.64%	51.4%	Six	N.A.	N.A.	Yes
France	0%	51.5%	Five	Zero bracket up to 11 294 EUR	No	Yes
Germany	0%	45%	Five	Zero bracket up to 11 604 EUR	Yes	Yes
Greece	9%	44%	Five	Basic yearly credit for an individual is 777 EUR Basic yearly credit for a couple is 1554 EUR	Yes	Yes
Hungary	15%	15%	One	Basic yearly allowance for a couple is 997.5 EUR	Yes	Yes
Ireland	20%	40%	Two	Basic yearly credit for an individual is 1875 EUR Basic yearly credit for a couple is 3750 EUR	No	Yes
Italy	23%	43%	Three	No	Yes	Yes
Latvia	20%	31%	Three	Basic yearly allowance for an individual is 6000 EUR	Yes	Yes
Lithuania	20%	32%	Two	Basic yearly allowance for an individual is 8964 EUR	No	No
Luxembourg	0%	45.8%	Twenty-three	Zero bracket up to 12 438 EUR	Yes	Yes
Malta	0%	35%	Four	Zero bracket up to 9100 EUR	No	Yes
Netherlands	9.32%	49.5%	Three	Basic yearly credit for an individual is 3362 EUR Basic yearly credit for a couple is 5532 EUR	No	Yes
Poland	12%	32%	Two	Basic yearly allowance for an individual is 7000 EUR	Yes	Yes

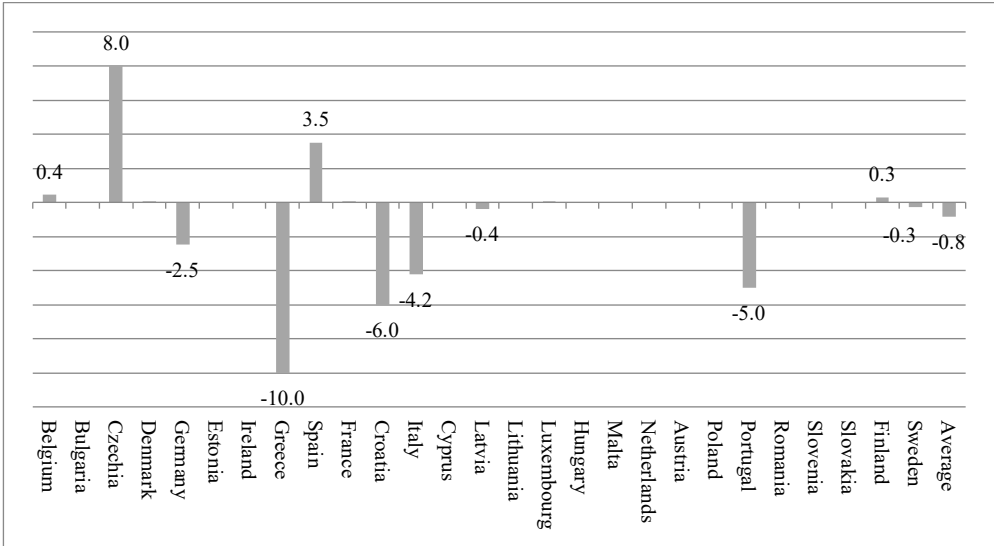
Country	Minimum rate	Top rate	Number of brackets	Zero bracket/ Personal allowance or credit	Children's allowances or credits	Flat rate on capital income
Portugal	13.25%	48%	Nine	Basic yearly credit for an individual is 250 EUR Basic yearly credit for a couple is 500 EUR	Yes	Yes
Romania	10%	10%	One	Basic yearly deduction for an individual, depending on the income level and number of children.	Yes	Yes
Slovakia	19%	25%	Two	Basic yearly allowance for an individual is 5646.5 EUR	Yes	Yes
Slovenia	16%	50%	Five	Basic yearly allowance for an individual is 5000 EUR	Yes	Yes
Spain	19%	47%	Six	Basic yearly allowance for an individual is 5550 EUR The basic yearly allowance for a couple is 3400 EUR	Yes	No
Sweden	N.A.	52%	Two	N.A.	N.A.	Yes

Source: European Commission, PWC.

Figure 1 illustrates the changes in the highest marginal PIT rates in the observed countries between 2020 and 2024. On average, the top PIT rate in the 27 Member States decreased by 0.8 percentage points, indicating stability in its level. Nevertheless, among individual countries, some important changes can be identified. Significant reduction was recorded in Greece (10 percentage points), Croatia (6 p.p.), Portugal (5 p.p.) and Italy (4.2 p.p.). The decline in Greece has been the result of the abolishment of the special solidarity contribution of 10 percentage points that had been adopted after the sovereign debt crisis. In 2023, the solidarity contribution for all types of income was removed, thereby lowering the fiscal burden on taxpayers (KPMG, 2025). Apart from reducing the top rate, Croatia also lowered the other marginal tax rate applicable in the first tax bracket by 4 p.p. to 20% (European Commission, 2021, p. 90). Poland and Portugal reduced the marginal tax rate applicable to the second tax bracket, while Austria reduced the tax rates applicable to the second, third and fourth brackets with the aim to reduce the fiscal burden on low and middle-income groups.

On the other hand, the top PIT rate went up notably in Czechia (8 p.p.) and Spain (3.5 p.p.). In 2020, Czechia carried out major reforms in the area of individual taxation. In the first place, the country introduced a new statutory marginal tax rate of 23% for income exceeding a certain amount, thus renouncing the flat tax regime. Furthermore, both tax rates (of 15% and 23%) have been imposed on gross salary, and not (as had been the case since 2008) on gross salary plus the amount of contributions paid by the employer. Thus, the effective tax rate for people with lower and medium incomes fell from 20.1% to 15%, while the effective tax rate for the second tax bracket, i.e. for those with the highest incomes, declined from 27.1% to 23%. The adopted package also included a significant increase in the tax-free amount, by approximately 37% (Centre for Eastern Studies, 2020).

Figure 1. Change in top statutory PIT rates in the EU Member States in 2020 – 2024 (in percentage points)



Source: European Commission, Trading Economics.

In 2020-2024, there were relatively few changes in the number of tax brackets in the Member States. In Italy, the number of brackets was reduced from five to three, although the top marginal tax rate was kept unchanged at 43%. Spain introduced a new tax bracket with a maximum marginal tax rate of 24.5% for taxable income over EUR 300 000 (European Commission, 2021, p. 84). As already mentioned, Czechia also adopted an additional bracket with a rate of 23%, thus reintroducing multi-bracket progression.

Furthermore, several Member States with progressive taxation modified the bands of the tax brackets as a measure to eliminate the bracket creeping (fiscal drag) resulting from inflation. In Ireland, the income bands of the progressive scale were increased, although the statutory tax rates were not subject to modifications. Luxembourg also introduced such changes by increasing the lower band of the tax brackets as a measure to neutralise the effects of inflation. In Portugal, the thresholds of each PIT tax bracket were raised by 5.1% (European Commission, 2024, p. 51). Poland increased the tax threshold for which the top rate of 32% applies.

Some Member States have introduced an automatic approach towards inflation adjustment of PIT, including Belgium, Denmark, Lithuania, the Netherlands, Slovakia and Sweden (European Commission, 2023, p. 62). For example, in Austria, the threshold amounts of the tax brackets (with the exception of the highest 55% bracket) as well as payable tax credits were automatically increased by 2/3 of inflation in 2022. Germany also introduced an adjustment for fiscal drag at the beginning of 2021.

In the period under observation, many Member States introduced changes in the applicable tax allowances and credits. In most cases, these changes involved increases of existing preferences or the introduction of new tax reliefs aimed at mitigating the negative effects of inflation on taxpayers' purchasing power, thus narrowing the tax base of PIT. The amount of the basic individual tax credit (allowance) was increased in Croatia, Estonia, Finland, Lithuania, Ireland, Poland and Slovenia (European Commission, 2025). In many countries, measures targeted at reducing the fiscal burden on workers have been put in place. Belgium, Denmark, Finland, Ireland and Sweden increased the amount of the earned income tax credit as compensation for rising energy prices. Luxembourg put in place a temporary new tax credit for wage earners and pensioners in order to compensate the latter for the loss of purchasing power. In Italy, the non-refundable tax credit for employees, temporarily introduced for 2020, has been made permanent as of 2021 (Taxation Trends, 2021, p. 93). In Austria, a one-time inflation tax credit for employees was applied in 2022. In Malta, the tax rate for part-time workers was reduced from 15% to 10%. The basic allowance for income from self-employment and unincorporated businesses went up in Estonia. Czechia increased the tax credit for each taxpayer who is an employee or self-employed. In response to rising energy prices, Germany increased many of the existing tax preferences, including the standard tax allowance for employees as well as the basic personal allowance, including for unincorporated businesses and self-employment income. There was also a rise in the basic allowance for children (European Commission, 2025). In Italy, the tax credit for spouse and children was replaced by a single allowance represented by a monthly cash transfer, based on several parameters and calculated on the equivalent economic status indicator. Main beneficiaries of the PIT reform are expected to be the middle-income class (European Commission, 2023, Taxation Trends, p. 113).

Tax allowances for minor children were significantly increased in Bulgaria, thus introducing progressive taxation for the eligible taxpayers. This measure put an end to the hegemony of proportional personal income taxation in the country that had prevailed for 13 years. However, for other taxpayers, the PIT remained proportional for all levels of the total annual tax base (Brussarski, 2021, p. 10). Tax reliefs for children were also increased in Austria, Croatia, Czechia and Slovakia. In Luxembourg, the existing tax credit for single parents with children was increased. On the other hand, Estonia abolished the additional allowance for second and more children as well as the additional basic allowance for a spouse (European Commission, 2025).

The prevailing upward trend in the amount of tax preferences implies an increased degree of progressivity of individual taxation in the Member States in response to the recent crises. This trend suggests a shift of the emphasis of tax policy from fiscal consolidation, which was a primary objective of budgetary policy after the euro area debt crisis, to mitigating the negative effects of inflation.

Table 2 presents data for the development of PIT revenue in the EU Member States in the period 2020-2023. Despite the base narrowing measures undertaken in many Member States, on average, the receipts from this tax in the EU-27 remained relatively stable by recording a small decline of 0.5 p.p. A fall was observed in eleven countries, most strongly in Czechia (3.8 p.p.), Poland and Sweden (2.1 p.p.). On the other hand, revenue went up in fourteen

Member States and most notably in Luxembourg (2.8 p.p.), Malta (2.1 p.p.) and the Netherlands (1.4 p.p).

Table 2. PIT revenue in EU Member States in 2020-2023 in percentage of total revenue

Country	2020	2021	2022	2023	Change 2020-2023 (p.p)
Austria	21.9	22.4	22.4	22.0	0.1
Belgium	25.8	24.9	26.4	26.1	0.3
Bulgaria	11.5	11.0	10.0	11.1	-0.4
Czechia	14.5	10.4	10.1	10.7	-3.8
Denmark	56.8	56.1	55.2	56.5	-0.3
Germany	23.0	22.5	22.9	22.2	-0.8
Estonia	17.7	20.0	18.9	18.4	0.7
Ireland	31.4	31.1	29.9	29.9	-1.5
Greece	15.0	14.0	12.8	14.6	-0.4
Spain	23.5	22.6	24.0	24.2	0.7
France	20.5	20.1	20.6	20.9	0.4
Croatia	9.4	8.0	8.4	9.5	0.1
Italy	28.9	28.5	26.9	28.3	-0.6
Cyprus	9.2	9.0	9.2	9.7	0.5
Latvia	18.8	19.1	18.9	19.3	0.5
Lithuania	22.9	23.0	23.6	23.9	1
Luxembourg	24.3	25.3	25.8	27.1	2.8
Hungary	14.6	12.0	15.2	15.4	0.8
Malta	24.9	25.7	26.6	27.0	2.1
Netherlands	21.3	20.8	19.9	22.7	1.4
Poland	14.4	14.2	12.8	12.3	-2.1
Portugal	18.6	18.5	18.3	18.4	-0.2
Romania	8.9	8.8	9.3	9.3	0.4
Slovenia	13.7	13.9	13.6	13.7	0
Slovakia	10.7	10.5	10.6	10.7	0
Finland	29.9	29.7	29.9	29.8	-0.1
Sweden	34.1	33.5	32.6	32.0	-2.1
Average	23.8	23.3	23.2	23.3	-0.5

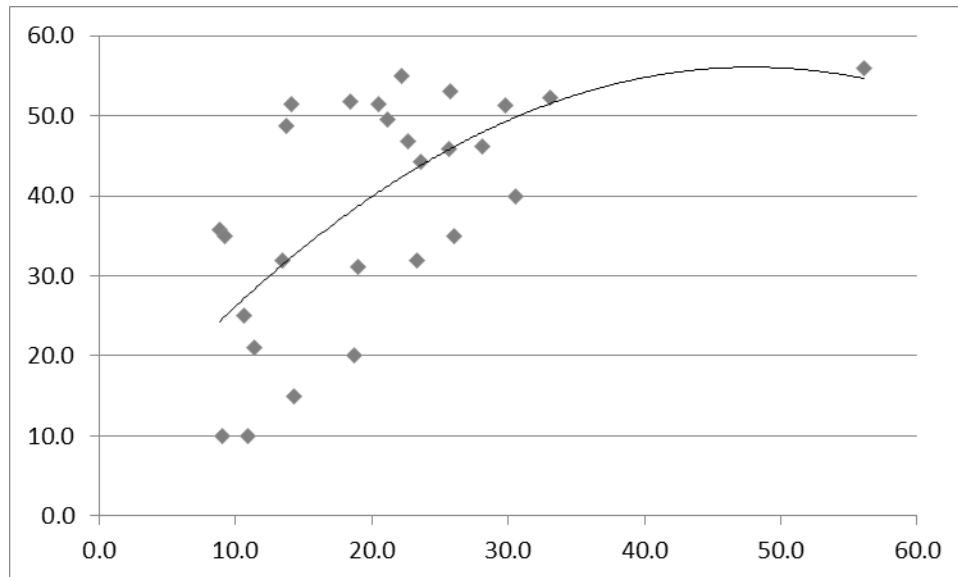
Source: Eurostat, author's calculations.

Average revenue in the EU-27 has been around 23% in the period under consideration, peaking at 23.8% in 2020. At the same time, as can be seen from the table, considerable differences exist among the Member States with regard to the share of PIT revenue in total budget proceeds. The highest proportion can be found in Denmark, where this tax accounted for more than half of fiscal revenue in the period under consideration, reaching 56.8% in 2020. High values of around 30% are also observed in Sweden, Finland and Italy. The significant amount of tax proceeds in these countries is in line with the applicable multi-bracket progressive system with high top marginal rates. In contrast, the share of PIT in total revenue in Romania, Croatia and Cyprus was below 10%.

In order to identify the existence of a possible relationship between the top personal income tax rate and the level of fiscal revenue in the observed countries, the Pearson correlation coefficient has been calculated for the period 2020-2023. The results show a correlation coefficient of 0.58, indicating the existence of a moderate positive relationship between the two variables. This value suggests that as the top personal income tax rate increases, fiscal

revenue goes up as well. Figure 2 presents the relationship between top PIT rates and fiscal receipts in the Member States. For the graphical representation, the quadratic trend line has been chosen because this type of model represents a non-linear relationship between two variables, specifically in cases where the rate of change is not constant. The quadratic model suggests that as tax rates increase, tax revenue initially increases, but after reaching a peak, it starts declining as suggested by the Laffer curve. The figure illustrates the moderate correlation between the two variables, suggesting that in some EU countries with high top PIT rates, this tax accounts for a significant portion of tax proceeds and vice versa. However, some Member States are characterised by a relatively low level of PIT revenue despite the applicability of high statutory top PIT rates. Such is the case in Croatia, Greece, Cyprus and Slovenia. This suggests that other factors, which are beyond the scope of the present article, also impact the amount of tax revenue.

Figure 2: Relationship between top PIT rates and tax revenue in the EU countries in 2020- 2023



Source: author's calculations.

Nevertheless, there is a potential for increasing the revenues from PIT and reducing income inequalities by shifting a larger part of the tax burden towards high-income individuals. As can be seen in Table 2, most Member States have in force preferable tax regimes towards capital income based on the application of a flat rate on capital income, such as dividends, interests from bonds and bank accounts and capital gains. Such tax preferences have been introduced since the 1990s, due to the high international mobility of capital. According to the European Commission (2024, p. 82), progressive taxation of all forms of personal income, including capital income, would increase the redistributive capacity of the tax. Income from labour constitutes a large share of overall personal income at all income levels, though its

relative importance tends to decline for higher income levels. As incomes rise, capital income becomes increasingly more important as a source of income. In this context, the taxation of all personal income by way of progressive income taxation can be a major tool for redistribution and contribute to a more equally distributed disposable income.

4. Conclusion

The economic literature does not give a conclusive answer to the question of whether multi-bracket progressivity or a flat tax is most favourable to economic growth and fiscal revenue. According to the theoretical concept behind the Laffer curve, very high marginal tax rates distort market decisions, thus curbing economic activity and narrowing the tax base. However, this theoretical concept does not specify the optimal tax rate or the degree of progressivity of PIT. Empirical research points to the existence of positive but moderate effects of a flat tax on economic growth, but there is an overall recognition that a multi-bracket progressive tax scheme contributes to income redistribution and reduction of social inequalities. Progressive taxation has the advantage of providing automatic fiscal stabilisation to smooth the business cycle, but on the other hand, it causes bracket creep in periods of high inflation. In terms of income redistribution, progressive taxation. Thus, both types of taxation exhibit advantages and shortcomings and trade-offs are required in the organisation of the tax in every jurisdiction.

The review of recent developments of individual income taxation in the EU Member States has revealed an overall stability with regard to the main tax parameters, such as the level of top marginal tax rates and the number of tax brackets. In general, EU countries are characterised by high top PIT tax rates, and the majority of them adhere to a multi-bracket system. Three countries, which had previously adopted a flat tax, returned to a multi-bracket schedule. In the period 2020-2024, many Member States carried out important changes in response to the negative socio-economic effects of inflation that involved the increase of existing tax preferences or the introduction of temporary new tax allowances and credits. Some countries also adjusted the income range of tax brackets in order to prevent fiscal drag and the ensuing increase in the tax burden on taxpayers.

With regard to the revenue from PIT, in the period under consideration, it remained relatively stable on average despite the base narrowing measures introduced in many countries. Several Member States recorded a decline in budgetary receipts, while others had an increase. Calculations of the Pearson correlation coefficient between the top PIT rate and fiscal revenue from this tax indicate the existence of a moderate relationship between the two variables.

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