

TAXATION AND THE FISCAL POLICIES UNDER THE IMPACT OF THE COVID-19 PANDEMIC IN THE EUROPEAN UNION

Gica Gherghina Culiță¹

Abstract

Challenges of the COVID-19 pandemic drastically impacted the public budget of the European Union. Public expenditures rose due to the necessary equipment for the critical state of the health care systems. From the usual masks and complex machines, like the ventilated respiratory assistants, to the vaccines, all implied financial resources were above the planned budget.

At the same time, Covid-19 has resulted in unprecedented disruption to the mechanic industry of most countries, regardless of their size or stage of development. In particular, the main sectors of economy were blocked and that meant a reduction of public revenue. This forced the countries to find new ways to balance the public budgets.

The global economy is still facing slow growth, high global uncertainty caused by the Russian-Ukrainian war, rising prices of energy and high level of inflation. This paper presents the situation from the past two years, as well as perspectives based on the Taxation Trends in the EU.

Keywords: taxation, COVID -19, fiscal policies, public expenditures, public revenues

JEL Classification: E60, E62, E63

1. Taxation levels in EU and world at the begining of COVID - 19

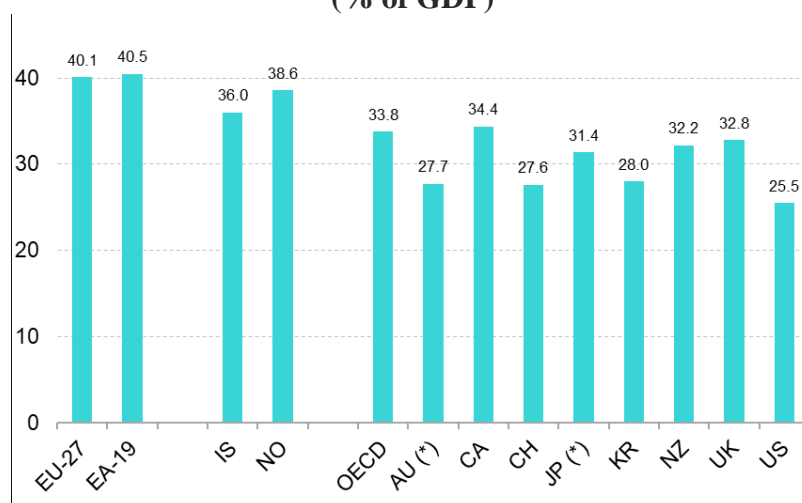
In 2020, the year of the start of the COVID-19 pandemic, tax revenues as a percentage of GDP increased slightly in the European Union to 40.1% of GDP. While tax revenues decreased in nominal terms in 2020, GDP decreased more, which increased the tax-to-GDP ratio.

In 2020, the share of taxes in GDP in the EU was high compared to other advanced economies (Chart 1), 6.4 percentage points above the OECD average (33.8%) and almost 15 percentage points above that of the United States.

The pandemic has had a different impact on other advanced economies. In nominal terms, countries such as Canada and the UK have seen declines in income, offset by larger declines in GDP. In the United States, revenues remained almost constant, while in other countries, such as New Zealand, South Korea or Switzerland, tax revenues increased. In all these cases, the share of taxes in GDP increased - from 0.7 percentage points in South Korea and New Zealand to a modest 0.1 percentage points in the United Kingdom.

Chart no. 1

Tax revenues (including social contributions) in the EU and selected countries, 2020
(% of GDP)



(*) OECD data for Australia and Japan in 2019.

Source: European Commission, DG Taxation and Customs Union, based on Eurostat and OECD data (extracted May 2022)

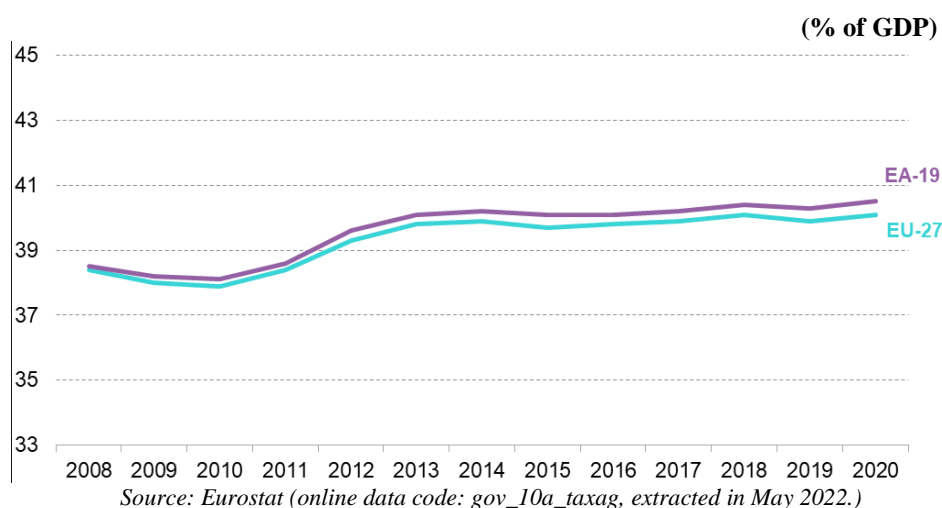
¹ Phd lecturer, Constantin Brâncoveanu University, Pitesti, ggculita@yahoo.com

An analysis of recent and long-term developments in tax revenues in the EU and its 27 Member States and a comparison of the situation in the EU with other advanced economies shows that taxation in European countries is on average higher than in other countries, both at EU-27 and EA-19 level. The data used for the comparison comes mainly from Eurostat, supplemented by data from the Organisation for Economic Co-operation and Development (OECD), mainly for non-EU countries.

Tax-to-GDP ratio increased in the EU in 2020, despite the COVID-19 pandemic. Actual statutory taxes and social contributions in the 27 Member States (EU-27) accounted for 40.1% of gross domestic product (GDP) in 2020. While the tax burden increased in 2020 in nominal terms, tax revenues decreased by 3.9%. This is the first decline in tax revenue since the 2009 financial crisis. As GDP has fallen more than tax revenue, 4.4% in nominal terms, the tax-to-GDP ratio increased in 2020 by 0.2 percentage points (pp) and is 2.2 pp higher than in 2010 (37.9%, see graph 1). The euro area has seen similar developments as it has increased its tax burden by 0.2 pp to 40.5% in 2020.

Chart no. 2

Tax revenue (including real social contributions), EU-27 AND EURO AREA, 2008-2020



In 2020, the economic shock caused by the COVID-19 pandemic led to a drop in tax revenues in nominal terms in most Member States. Only in three Member States were revenues in 2020 higher than in 2019 (Bulgaria, Denmark and Lithuania). However, due to the general decline in GDP, most countries (16) increased their tax-to-GDP ratio. The largest increases were observed in Spain (2 pp), Latvia (0.9 pp) and Portugal (0.8 pp), while Ireland (1.9 pp) and Luxembourg (1 pp) recorded the largest decreases. In the case of Spain, tax revenue fell (4.5% in nominal terms compared to 2019) much less than GDP, which fell by 9.8%. Ireland, on the other hand, had a similar fall in revenue, but GDP rose by more than 4%.

In 2020, Denmark, France and Belgium had the highest tax-to-GDP ratios in the EU, while Ireland (3) and Romania were at the lower end of the distribution. Ireland also saw the largest fall in 2020, by 1.9 percentage points to 20.1%, more than 20 percentage points below the EU weighted average.

In the latest forecast (spring 2022), the share of taxes in GDP is expected to have increased in 2021, but to fall in subsequent years to 39.5% in 2023.

Labour taxes were more resilient than other tax bases in 2020, changing the tax structure in the EU. Labour taxes were 21.5% in 2020, the highest point in the time series and 0.8 pp higher than in 2019. The share of labour taxes in total taxation was 53.5% in 2020, also higher than in the last decade. Consumption taxes stood at 10.8% of GDP in 2020, 0.3 pp lower than in 2019. Revenue from capital taxes also fell slightly, by 0.2 pp, to 7.9% of GDP.

Revenue from environmental taxes accounted for 2.2% of GDP in 2020, down from 2.4% in 2019. The main cause of this decrease was lower revenues from energy taxes, especially from fuel consumption used for transport. The various mobility restrictions imposed in 2020 due to the pandemic could have been behind this change as energy consumption decreased in the EU in 2020.

Good and comparable data are fundamental to support discussions and policy making in all areas, including tax policy. In the report "Tax trends", which accompanies the Annual Tax Report (2022 edition), we find a wealth of information on key tax indicators and, more specifically, on tax revenue by type of tax for all EU Member States and the EU as a whole, as well as for Iceland and Norway. In 2020, the last year of the 12-year period analysed (2008-2020), the effects of the start of the COVID-19 pandemic in 2020 are presented, which makes this edition particularly interesting. In addition, the paper presents the latest tax reforms in each country.

The annual report on taxation in 2022 presents the current state of taxation in the European Union. The report aims to describe in a clear and accessible way the latest reforms and the main indicators used by the Commission to assess progress in tax policies in EU Member States and at EU level.

The report provides information on the main EU tax priorities for:

- boost innovation and productivity, thereby supporting an EU economy that is ready for the digital and global challenges ahead;
- contribute to social equity and prosperity, ensuring that everyone pays their fair share and that EU tax systems support an economy that works for people and responds to their needs;
- make tax administrations more effective and efficient and ensure good cooperation between tax administrations, thereby contributing to the stability and simplicity of EU tax systems.

In addition, given the priorities of the digital and green transition and several important tax developments at EU and international level, the report focuses on three topics: green taxation and its contribution to tackling climate change and supporting ambitious environmental goals; the digital transition and its effect on tax systems, in terms of tax rules, tax revenue collection and tax administration; and corporate taxation in the 21st century.

2. Impact of COVID-19 measures

The COVID-19 pandemic has presented countries with a unique set of challenges in recent history. The contagiousness of the virus has necessitated measures to protect the population, including mobility restrictions and even the temporary closure of a wide range of businesses (cinemas, bars, restaurants, etc.). Entire economic sectors have been suspended. These measures have had a significant economic impact, with possible medium and long-term consequences for the economic and social fabric.

Countries have taken very different initiatives to minimise the impact of these restrictions on businesses and citizens: maintaining a certain level of income for people who have been unable to work; mobilising additional resources for public services and strengthening areas under greater pressure, such as health services (hiring additional staff, purchasing additional protective equipment, medical equipment and infrastructure, etc.); and providing direct and indirect support to businesses, including subsidies and tax deferrals and credits.

As a result, EU public spending has increased significantly. Discretionary spending amounted to €420 billion (3.1% of GDP). Eurostat estimates an increase of €600 billion in total public spending in 2020, which represents an annual increase of 6.6 percentage points of GDP. Three areas seem to have absorbed most of the additional spending: social protection, economic affairs and health.

Table 1

Difference between public expenditure by function in 2019-2020

	Billion EUR	% growth	pp of GDP
Total	597.9	9.2	6.6
Social protection	238.0	8.8	2.7
Economic affairs	205.7	33.4	1.7
Health	95.0	9.7	1.0
General public services	18.6	2.3	0.4
Education	14.4	2.2	0.3
Defence	8.8	5.2	0.1
Public order and safety	9.0	3.9	0.1
Environmental protection	4.2	3.8	0.1
Housing and community amenities	1.4	1.7	0.0
Recreation, culture and religion	2.9	1.8	0.0

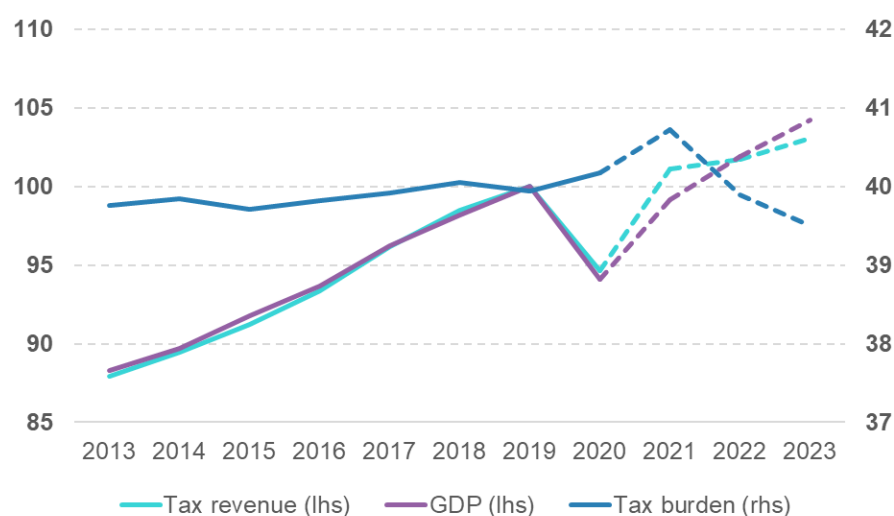
Source: Eurostat (online data code: gov 10a exp)

This additional spending would have helped mitigate the decline in GDP at the expense of higher deficits and debt. The additional spending could also have had an impact on the level of tax revenues and could explain why the decline in tax revenues was less pronounced than the decline in GDP. For example, leave programmes provided an income stream for people who were unable to work due to pandemic restrictions. This to some extent supported social contributions and labour tax revenues. In addition, a large part of this revenue would have gone to consumption, thus supporting additional economic activity and supporting value added tax (VAT) and other indirect tax revenues. This economic support has helped to keep viable businesses and jobs alive, minimising the impact of the pandemic on tax revenues and contributing to the long-term sustainability of public finances.

The overall impact on tax revenues and their relationship to GDP is rather country-specific. It depends on the type of measures; the extent and duration of support; the economic structure of each country, the sectors that were affected and the sectors and businesses that received support (or even benefited from the pandemic); and the type of jobs that were lost and for how long (e.g. high-income versus low-income workers). It is therefore difficult to establish a single general explanation for all Member States.

Chart no. 3

Tax burden, tax revenue and GDP in the EU-27 (2013-2020), forecast (2021-2023)
(index 2019=100, left side, % of GDP, right side)



Source: European Commission, DG Taxation and Customs Union, calculations based on data from DG ECFIN, AMECO, (extracted in May 2022). Note: Dotted lines indicate forecasts. Tax revenue and Tax burden excluding imputed social contributions. Tax revenue and GDP in real terms.

3. Tax revenues in 2022 and forecasts

As mentioned above, in 2020 tax revenues in the EU fell less than GDP, leading to an increase in the tax-to-GDP ratio. According to the latest available full economic forecast from the European Commission, in 2021 tax revenues and GDP were above the 2019 level in nominal terms, in real terms only tax revenues were above the 2019 level, with GDP still below the 2019 level. Tax revenues grew more than GDP in 2021, increasing the tax burden to 40.7%.

GDP is projected to grow faster than tax revenues from 2022 onwards. This will result in the tax-to-GDP ratio falling by 0.2 percentage points in 2022, and by 2023 it will stand at 39.5%, 0.6 percentage points lower than in 2020.

The evolution of the war in Ukraine, the energy crisis, the current high inflation in the EU and the evolution of the pandemic create a very volatile scenario that could have a significant impact on forecasts.

Table 2 shows the projected evolution of the tax-to-GDP ratio for Member States, EU-27 and the euro area according to the latest available estimates. At Member State level, by 2023, the tax-to-GDP ratio is expected to decrease significantly in some countries, such as Denmark (4.4 pp) and Latvia (2.1 pp). However, the tax burden is expected to be higher by 2023 in Bulgaria (2.5 pp) and Malta (2.2 pp).

Table 2

**TAX REVENUE (INCLUDING REAL SOCIAL CONTRIBUTIONS) 2018-2020
(ACTUAL) AND 2021-2023 (FORECAST)
(% of GDP)**

	2018	2019	2020	Forecast			Trend	
				2021	2022	2023	Diff 2020 – 2023	
EU-27	40.1	39.9	40.1	40.7	39.9	39.5	↓	-0.6
EA-19	40.4	40.3	40.5	41.2	40.5	40.1	↓	-0.4
Belgium	44.8	43.5	43.6	43.1	42.8	42.9	↓	-0.7
Bulgaria	29.7	30.3	30.6	32.4	32.5	33.1	↑	2.5
Czechia	36.0	35.9	36.0	35.0	33.9	33.6	↓	-2.4
Denmark	44.4	46.8	46.8	47.2	43.6	42.4	↓	-4.4
Germany	39.9	40.1	40.0	41.3	40.1	39.7	→	-0.3
Estonia	33.0	33.5	34.0	34.4 (*)	33.3	32.8	↓	-1.2
Ireland	22.4	22.0	20.1	21.2	20.7	20.0	→	-0.1
Greece	40.0	39.5	38.9	39.0	39.5	37.1	↓	-1.8
Spain	34.7	34.8	36.8	38.5	37.3	36.3	↓	-0.5
France	46.3	45.3	45.6	45.3	45.3	45.7	→	0.1
Croatia	37.6	37.6	37.0	36.1	35.7	35.7	↓	-1.3
Italy	41.6	42.2	42.7	43.4	43.0	42.5	→	-0.2
Cyprus	33.3	34.4	34.6	36.8	35.5	35.2	↑	0.6
Latvia	31.0	30.6	31.5	30.7	29.8	28.9	↓	-2.6
Lithuania	30.0	30.3	30.8	32.8	32.0	31.6	↑	0.8
Luxembourg	39.3	39.5	38.5	38.1 (*)	37.6	37.4	↓	-1.1
Hungary	36.9	36.4	36.3	33.7	35.0	34.8	↓	-1.5
Malta	30.2	29.8	29.7	31.0	32.0	31.9	↑	2.2
Netherlands	38.8	39.3	39.7	39.6	39.1	38.7	↓	-1.0
Austria	42.3	42.6	42.1	43.3	42.5	42.7	↑	0.6
Poland	35.1	35.1	35.7	36.9	34.6	33.7	↓	-2.0
Portugal	34.7	34.5	35.3	35.8 (*)	34.9	34.8	↓	-0.5
Romania	26.0	26.1	26.3	26.5	27.1	27.0	↑	0.7
Slovenia	37.5	37.3	37.6	37.7	36.8	36.4	↓	-1.2
Slovakia	34.0	34.4	35.0	35.6 (*)	34.9	34.4	↓	-0.6
Finland	42.4	42.3	41.9	42.8 (*)	42.0	41.6	→	-0.3
Sweden	43.8	42.8	42.9	43.2 (*)	42.2	41.7	↓	-1.2

Source: European Commission, DG Taxation and Customs Union, based on Eurostat and DG Economic and Financial Affairs, AMECO. NB: Tax revenue data in this table, extracted in May 2022 (*) These values are actual values, not forecasts.

Revenue structure by level of government

In 2020, the share of income required from social security funds increased. The COVID-19 pandemic had an impact on the tax revenue structure in 2020, which in turn influenced the share of revenue required by the different levels of government.

Social security contributions increased in 2020, both as a percentage of GDP and as a share of total income. This has a direct impact on the share of revenue required from social security funds, which increased in the EU by 0.9 percentage points to 36.9% of total revenue, representing 14.8% of GDP.

In 2020, the share of aggregate tax revenue (including actual social contributions) required by central or federal government was 44.6% in the EU, 1.1 percentage points lower than in 2019 and 2.6 percentage points lower than a decade ago. Another 17.9% went to local or state governments. Around 0.6% of revenue goes to the EU institutions, consisting of receipts from the common agricultural policy and trade with third countries.

There are considerable differences between EU Member States in terms of tax structure depending on the level of government. For example, some have a federal government or may grant local regions a certain degree of fiscal autonomy (Belgium, Germany, Spain, Austria). In Malta, the social security system is not reported separately from the central government, while Denmark finances most of its social security through general taxation, implying large intra-governmental transfers to social security funds. Ireland started reporting data on social security funds in 2021.

The share of sub-central revenues (defined as revenues at local level plus, where they exist, at Land or other regional level) ranges from around 1% (Malta) to almost a third of total revenues (Belgium and Germany). The amount of tax revenue recorded in general government is a very imperfect indicator of fiscal autonomy, as sub-sectors of general government may have (legal) rights to receive current transfers within general government or other revenues from other sub-sectors.

Revenue structure by type of tax

Traditionally, taxes are classified as direct or indirect. A direct tax is levied on income and wealth that is sustainable and directly from a specific person (natural or legal) by means of a tax notice (e.g. personal income tax (PIT), corporation tax (CIT) or wealth tax).

An indirect tax - such as VAT, an import duty or an excise duty - is a tax levied on a material or legal event of an incidental or temporary nature and on a person (natural or legal), who may often be an intermediary and not the person responsible for that event (hence the indirect nature of the tax).

Employers and employees pay social security contributions to a social insurance system that is set up to cover pensions, healthcare and other social provisions.

The pandemic reduced the share of indirect taxes and increased the share of social security contributions.

Revenues from direct taxes, indirect taxes and social security contributions each accounted for about one third of total EU-27 revenues in 2020. Due to the pandemic, indirect tax revenues fell by 0.3 percentage points of GDP to 13.4%. Over the same period, social contributions increased by 0.4 pp of GDP to 13.5% of GDP and direct taxes increased by 0.1 pp to 13.3% of GDP. Thus, the share of social contributions (33.5%) was slightly higher than the share of direct or indirect taxes. According to the latest economic forecasts, indirect taxes will be the fastest growing type of taxes during the pandemic recovery.

The changes at EU level can be explained by looking at general trends in Member States. The share of social security contributions has increased in almost all countries and indirect taxes have decreased across the board. Direct tax revenues showed a more mixed pattern, while all three categories suffered reductions in nominal terms. In relative terms, the increase in social security contributions can be explained by more resilient labour markets, probably as a result of government interventions in the form of leave schemes or other support during the pandemic.

The structure of taxation varies significantly from country to country. Denmark has the highest share of direct taxes in total tax revenue (65.9%), followed by Ireland and Malta. In general, the share of social contributions in total tax revenue is correspondingly low in these countries. In Denmark, most social expenditure is financed from general taxes, which explains the extremely low share of social contributions and the high share of direct taxes in total tax revenue. In contrast, the Czech and Slovak tax systems are characterised by high shares of social contributions to finance their social protection systems and relatively low shares of direct tax revenues. In four countries (Bulgaria, Croatia, Hungary and Sweden), indirect taxes account for more than 50% of their revenues.

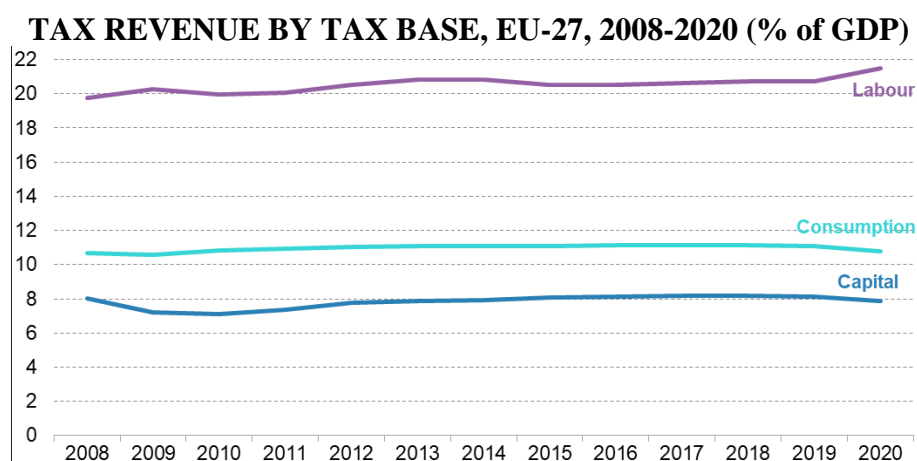
Distribution of tax burden by type of tax base

Labour tax revenues increased as a percentage of GDP in 2020, while consumption and capital taxes decreased.

In 2020, income by tax base in nominal terms fell in three categories (consumption, labour and capital) due to the COVID-19 pandemic. However, when measured relative to GDP, revenue from labour taxation increased by 0.8 pp to 21.5% of GDP.

Labour taxes include employers' and employees' social security contributions. These are components that have largely underpinned the overall growth in labour tax revenues. At the same time, revenues from consumption and capital taxes fell by 0.3 pp and 0.2 pp respectively, as shown in Chart 4.

Chart no. 4



Source: European Commission, DG Taxation and Customs Union, Taxation data, based on Eurostat data.

In 2020, the evolution of tax revenues by tax base significantly affected the tax structure in the EU, which had been stable between 2014 and 2019. Graph 4 shows the distribution of tax revenues and their evolution since 2008. As explained above, the combined increase in labor tax revenues with decreases in capital and consumption taxes has led to a significant increase in the share of labor tax revenues), indirect taxes account for more than 50% of revenues.

The structure of taxation differs significantly between Member States, but the pandemic seems to have had a similar impact on most Member States. The share of labour tax revenue increased in all Member States except Hungary, where it decreased by 0.8 pp, and saw minor decreases in Finland and Poland (both 0.1 pp). In Malta (4.7 pp), Greece and Spain (both 3.4 pp), the increases in the share of labour tax revenue were remarkable. The overall increase in the labour tax share depends to a large extent on the increases in social contributions mentioned in the previous section. Some countries have seen significant decreases in the share of revenue from consumption taxes, e.g. Cyprus (3 pp), Ireland and Slovenia (2.8 pp in both cases). At the same time, Malta (3.7 pp) and Denmark (2.5 pp) have seen a decrease in the share of revenue from capital taxes.

Taxation of consumption

In 2020, EU-27 revenues from consumption taxes fell by 0.3 pp to 10.8% of GDP, a 7.1% drop in nominal terms. In GDP terms, this was the lowest level of consumption taxes since 2010. An important factor in this decrease was the fall in final consumption due to the pandemic, of 3.6% in nominal terms. The various VAT rate cuts implemented by some countries in 2020 may also have played a role. In fact, VAT revenue, as the main component of consumption taxes, fell by 0.2 pp to 6.9% of GDP in 2020.

EU implicit rate of consumption tax decreased in 2020

The implicit consumption tax rate (ITR) is the ratio of consumption tax revenue to the estimated tax base. In 2020, the EU-27 consumption RIT decreased for the first time since 2009. It decreased by 0.2 pp to 17.1%. The euro area followed a similar trend, down 0.3 pp to 16.5%. Part of this fall could be linked to temporary decreases in VAT rates implemented by Member States such as Germany and Ireland. In both countries, the reduction in RIT at consumption was the largest, by 1.6 pp and 0.9 pp respectively. Despite the EU-wide decrease in 2020, RIT at consumption increased in most countries, notably in Malta by 1.1 pp and in Latvia by 0.9 pp.

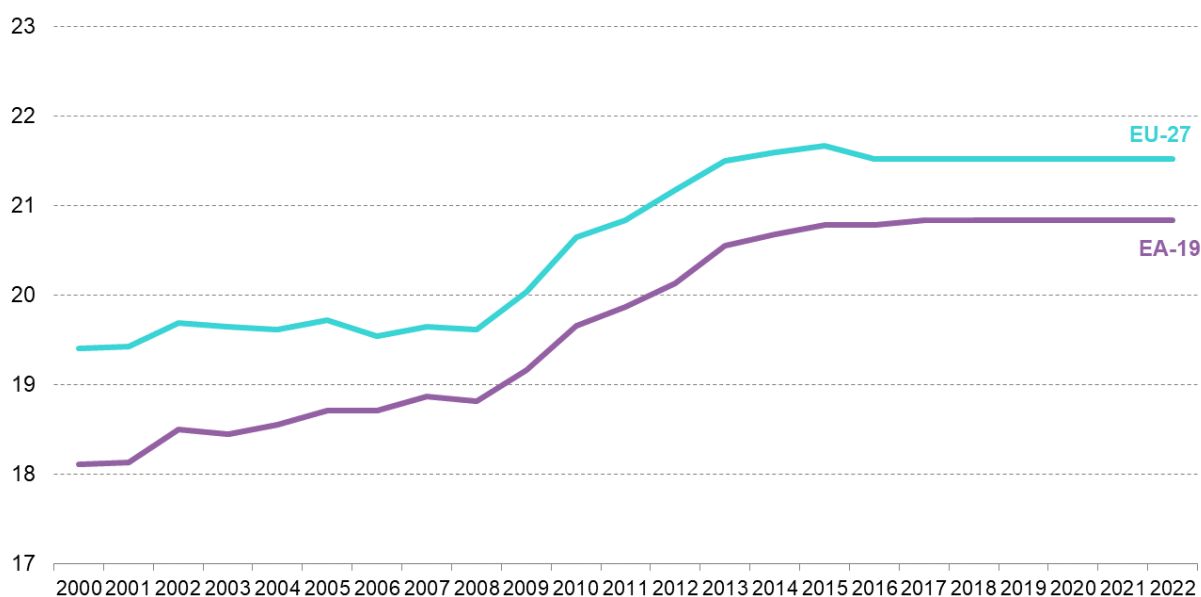
Value added tax is the main contributor to the implicit rate of consumption tax in all Member States.

VAT is usually between two thirds and three quarters of the RIT for consumption. In Sweden, VAT accounts for more than 75% of RTI, which is the highest proportion in the EU, compared to around 55% in Greece and Italy.

However, the VAT-free components are also significant. On average, energy taxes in the EU-27 account for about 16.1% of RIT on consumption and are mainly composed of excise duties on mineral oils. These taxes are a significant component of RIT on consumption for Greece and Italy (over 20%), but contribute less to this indicator in Austria, Malta and Hungary. Tobacco and alcohol taxes account for 7.1% of RIT on average at EU level, and the remaining 12.1% is other residual excise duties.

Chart no. 5

EVOLUTION OF THE AVERAGE STANDARD RATE OF VAT, EU-27, 2000-2022 (%)



Source: European Commission, DG Taxation and Customs Union, Taxes in Europe database.

Standard VAT rate unchanged at the beginning of 2022

After a period of increases (2009-2013), the average standard VAT rate in the EU-27 stabilised and then remained unchanged between 2017 and 2022 at 21.5% (Chart 5). The lowest standard rates are in Luxembourg (17%) and Malta (18%). On the other hand, the highest VAT rate is in Hungary (27%), followed by Denmark, Croatia and Sweden (all at 25%).

In 2022, and in connection with the impact of the war in Ukraine on the EU economy, some countries could reduce VAT rates or place certain products at reduced rates, for example energy products. Governments will have to balance between reducing the tax burden on businesses and citizens, collecting tax revenues to cope with deficits caused by pandemics and current inflationary pressures. In conclusion, more measures are expected in the public finances of the European States.

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