Tax competitiveness in the EU: A comparison between 'new' and 'old' member states

Edited by
Dr. Aleksander Aristovnik
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TAX COMPETITIVENESS IN THE EU: A COMPARISON BETWEEN ‘NEW’ AND ‘OLD’ MEMBER STATES

Edited by Aleksander Aristovnik, Dejan Ravšelj and Nina Tomaževič

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INTRODUCTORY REMARKS

The current state of globalization still implies a considerable degree of differentiation at both the country and regional levels. Even though financial globalization has resulted in the unification of monetary policy in the EU, the tax systems of countries are still among the few remaining pillars of national policies. Consequently, a major part of the particularities of national or spatial economies still stems from differences in tax systems. As particularities of national economic policies in the context of globalization are often viewed in light of the tax competitiveness of countries, this naturally induces the interest of policymakers in this area. Since the current tax systems are not designed to deal with contemporary challenges such as increased globalization, it is important to consider democratic and liberal ideas to address tax competitiveness issues in the EU. Accordingly, the main aim of the ELF publication is to present the cases examining tax competitiveness issues in the EU, explore differences between the "new" and "old" member states, and identify good practices and scalable liberal solutions. The ELF publication, presenting the key challenges and opportunities related to tax competitiveness in the EU and its implications for the liberal society, is structured in the form of eight chapters presenting selected case studies on ongoing issues related to tax competitiveness in the EU.

The first chapter presents fiscal policies and economic growth in the EU. It emphasizes some solutions that may be beneficial in terms of supporting economic growth. These refer especially to limiting the share of public expenditure in GDP and shifting the tax burden from direct to indirect taxation, which may consequently increase economic growth, which is less dependent on external demand. The second chapter is about the strategic role of tax in the new European order by discussing the relationship between encouraging competitiveness and discouraging harmful tax competition. It highlights that there is indeed scope for tax competition in the area of personal income and corporate taxation, with some differences. Accordingly, it suggests that all EU stakeholders must work together in order to prevent tax competition from being used to aggressively minimize tax obligations and reduce tax revenues. The third chapter presents green tax reform from the perspective of experiences in old EU member countries and guidance for the new ones. It reveals large differences between the EU countries in their share of revenues from green taxes in GDP and their share of green taxes in total tax revenues, whereby the share of revenues from green taxes is shrinking in the old member states and increasing in the new ones. The fourth chapter is about analysing and evaluating

a major tax reform in Poland implemented recently and providing guidance for Polish policymakers regarding its effective implementation while identifying challenges and opportunities for tax policy. It emphasizes that Poland has been severely affected by the current global crisis caused by the COVID-19 pandemic and the war in Ukraine and that policymakers in Poland have reacted proactively and decided, among others, to overhaul the tax legislation.

The fifth chapter presents tax competitiveness as well as the challenges and opportunities for tax policy in Slovenia compared with the EU/OECD situation. It highlights that the recent globalization and digitalization trends expose the obvious shortcomings of the existing tax systems in the EU, including Slovenia, since the current taxation rules no longer fit the modern economic context, whereby the most emphasized challenges refer to outdated tax systems, complex tax rules as well as the taxation and development mismatch. The sixth chapter presents and describes the existing state of tax policy, tax competitiveness, and challenges and opportunities for tax policy in Croatia. It emphasizes that it is thus necessary to reduce the tax burden on entrepreneurs in order to strengthen the economy and competitiveness and to introduce a more socially just and functional tax collection system, which would help reduce the excessive and persistent budget deficit in Croatia. The seventh chapter is about presenting the guidelines for rethinking tax competitiveness in Bulgaria. It details the reasons explaining why the traditional approach to tax competition in Bulgaria has failed to attract foreign direct investments, support growth and mobilize revenues while emphasizing that a lower corporate income tax burden is in itself not enough to address all of these challenges. The eighth chapter presents the opportunities and challenges for tax policy in North Macedonia, which is one of the EU candidate countries. It highlights that the tax system has been reformed in North Macedonia for several reasons, such as following the recommendations of the EU, attracting indirect and direct investments and trade, building a mechanism for legal and natural persons to invest and spend in the country and developing the national capital market.

The Editors

Chapter 1

Fiscal policies and economic growth in the European Union

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1 Introduction

In both the theoretical and empirical economic literature, an expansionary fiscal policy (increase in public expenditure and consumption, and/or reduction of taxation rates) can have the opposite consequences. It can add to economic growth (Keynesian effect) in the case of crowding-in if the public consumption and investment increases are beneficial for higher private investment because global demand is the main factor driving economic activity. Alternatively, it can decrease economic growth (non-Keynesian or Ricardian effect) if economic agents are encouraged to save more instead of consuming due to higher interest rates (crowing-out effect) or in anticipation of elevated taxes in the future to ensure fiscal sustainability (Ricardian equivalence), whereas a successful fiscal consolidation could reduce government deficits and debt accumulation. Therefore, the goal of this chapter is to shed light on the potential link between fiscal (public expenditure) or taxation (direct and indirect taxes) policies and economic growth or competitiveness.

The framework of the European Union is another particularly area interesting to study. Indeed, fiscal policy in the EU is affected by two contradictory tendencies. First, with the harmonization of monetary policies in the European Economic and

Monetary Union context, fiscal policies are the only economic policies which remain independent for national governments. They are the last autonomous instruments available for them in order to tune to various national tastes and preferences (country-specific demand of positive externalities, according to the population's age structure, to the arbitrage between budgetary expenditure), and to stabilize asymmetric demand or supply shocks. The member countries of the European Union will probably not surrender their tax autonomy to the European Commission since it is one of the last remaining pillars of their sovereignty. Nevertheless, even if national tax systems do remain independent, fiscal competition is today reducing the autonomy and room for manoeuvre of national governments, whereas a fiscal harmonization has started to take place in the EU with respect to both direct and taxes. Hence, by comparing the situation of the 'New' and 'Old' EU member states, this chapter questions the direction that this potential fiscal harmonization should take in order for it to more strongly support economic growth and competitiveness.

> "Fiscal policies are autonomous instruments of individual governments."

When they joined the European Union in 2004, the New member countries had a lower direct tax burden. Therefore, their accession to the EU meant entering a space of increased tax competition. Indeed, these New states were then striving for economic growth and a rise in GDP per capita through lower taxation with a view to catching up to the living standards of the Old states. Since the tax-rate elasticity of the corporate and capital tax bases is quite high, corporate income taxes fell strongly in the EU in the early 2000s, mainly among the Old members [Podviezko et al. (2019), pp. 3–4]. This tax competition reached a peak between 2004 and 2007 and has beneficial effects according to the public choice theory (Brennan, Buchanan). Indeed, if the public sector is erratic and over-developed, it is beneficial to reduce the share of public government expenditure in GDP. However, against the background of the financial crisis, the European Commission mostly encouraged the development

of tax harmonization in order to consolidate the budgets of European countries and to secure sufficient fiscal resources in the context of that crisis. Indeed, according to theories of endogenous growth public expenditure in some sectors has important positive externalities which should be encouraged to sustain economic growth. Public consumption is particularly necessary in the case of a crisis (the financial crisis in 2007, the COVID crisis in 2020); reducing the size of the public sector should only concern unproductive public expenditure, not the public investment source of economic growth. In this setting, the European Commission (2021, pp. 19–24) mentions that the tax burden remained high in 2021 in the European Union when compared with other developed countries. Still, the tax burden varies widely, with Denmark (46.1%) and France (45.5%) possessing the top tax-revenue-to-GDP ratios, and Ireland (22.1%) the lowest. Regarding the structure of government revenue, Denmark has the largest share of direct taxes in total revenue (66.5%), Czechia and Slovakia's tax systems are characterized by high shares of social security contributions funding their welfare systems, whereas Hungary has the biggest share of indirect taxes (52.7%). What do these differences mean for economic growth?

In order to study this question, the rest of the chapter is organized as follows. Section 2 presents stylized facts regarding the potential link between fiscal policy and economic growth or competitiveness in Europe. Sections 3 and 4 analyse data for taxation trends in three 'Old' and three 'New' EU member countries. Section 5 concludes the chapter.

2 Stylized facts regarding fiscal policy and economic growth or competitiveness in Europe

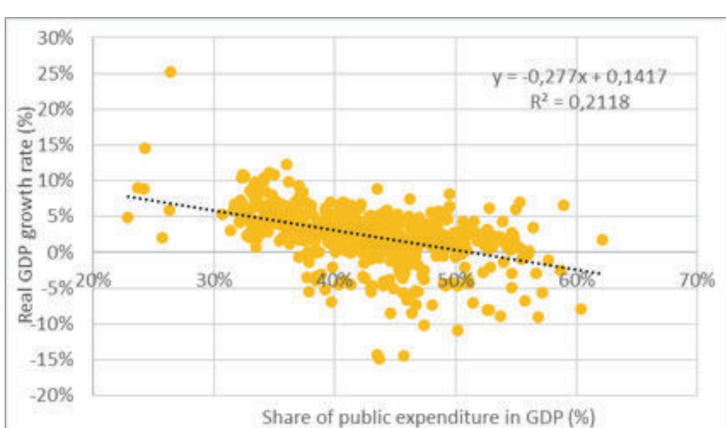
This section considers stylized facts and correlations between fiscal and taxation policies and economic growth or competitiveness in Europe. We use macro-economic data from the AMECO database for the 27 European Union countries between 2000 and 2021.

2.1 Public expenditure and economic growth

Our data show no obvious relationship between the absolute variation (in billions of euros) in public expenditure and indicators of economic growth. However, a negative correlation is established between the share of public expenditure in GDP, or the variation of this share, and indicators of economic growth (real GDP, GDP per head, exports). Indeed, economic growth and exports appear to be higher in countries where the share of public expenditure in GDP is low (mainly Ireland, but also Estonia), and mostly in countries where this share is decreasing (Figure 1). In Ireland, the share of public expenditure in GDP is particularly small; besides, it plummeted from 43.9% in 2011 to 24.3% in 2021, namely, the lowest

level in the European Union. Against this background, the real GDP growth rate is especially high in Ireland. In the European Union, public expenditure lies between 40% and 55% of GDP in 2021; yet, this share is notably high in France and also in Sweden, Austria, Belgium or Italy, which could harm their competitiveness.

Figure 1: Share of public expenditure in GDP (%) and economic growth



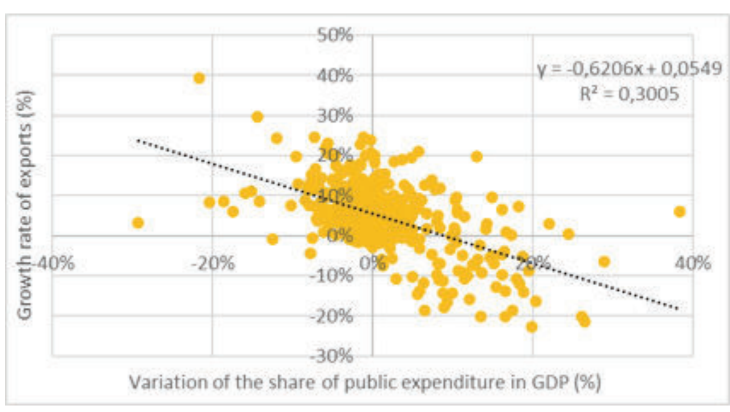
Note: Total government expenditure excluding interest, in % of GDP; Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage.

Source: AMECO Database for 27 European Union countries, between 2001 and 2021.

In order to explain this negative correlation, as mentioned by Borys et al. (2014) if the public expenditure to GDP ratio is low, an increase in public expenditure only implies a limited decrease in private consumption. Indeed, the increase in public expenditure is considered to be more permanent and households have confidence in the sustainability of public finances. Therefore, the spending multiplier and economic growth are both higher. On the contrary, if the public expenditure to GDP ratio is high, households can consider that the increase in public expenditure is temporary, expect a higher future tax burden, and reduce their consumption. The higher public expenditure can then result in weaker global demand. In the same way, Ianc and Turcu (2020) use a Panel VAR approach between 2001-Q1 and 2017-Q1 for 19 European countries. They estimate that rising government spending increases GDP in both the EU and Eurozone candidates (Keynesian multipliers), but slightly decreases it in the eurozone's historical members (non-Keynesian multipliers). Indeed, if public expenditure increases in the old member states fiscal consolidation might be needed later in order to ensure public debt sustainability; moreover, this might depress private investment and output. Therefore, components of aggregate demand can be crowded out by a fiscal expansion. EMU countries are also characterized by small and positive (non-Keynesian) short-run tax multipliers, even if tax multipliers are less sensitive to EU membership than spending multipliers. On the contrary, New EU member states generally have negative (and thus Keynesian) long-run tax multipliers. Their public debt levels are indeed usually lower, in turn meaning the sustainability of public debt is questioned less, which presumably allows the fiscal stimulus to be more efficient.

The negative correlation of economic growth with variation in the share of public expenditure in GDP is even more obvious. Namely, when economic growth is high, private economic activity is important, whereas in the case of a crisis and when economic activity goes down, public consumption must compensate for the decrease in private consumption (see Figure 2). For example, the share of public expenditure in GDP rose strongly in 2020 by 26.13% in Spain, by 26.50% in Greece or by 29.90% in Malta so as to compensate for the large recession brought about by the COVID crisis (respective decreases in real GDP of 10.82%, 8.99% and 8.53%). On the contrary, public consumption can decrease against a backdrop of sustained economic growth.

Figure 2: Variation in the share of public expenditure in GDP and economic growth

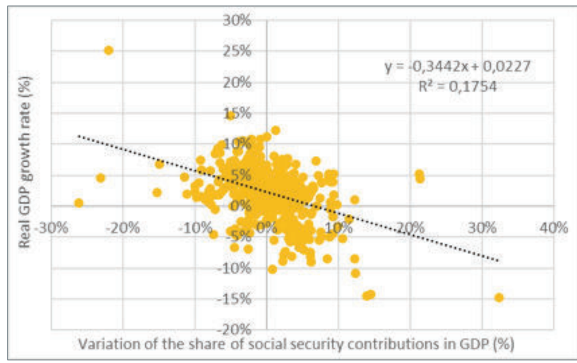


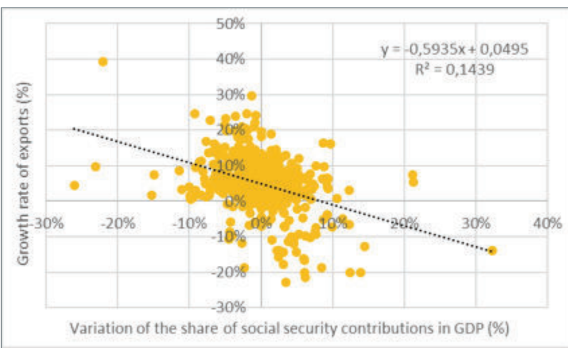
Note: Variation in total government expenditure excluding interest in % of GDP, variation in percentage; Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage.
Source: AMECO Database for 27 European Union countries, between 2001 and 2021.

2.2 Structure of fiscal resources and economic growth

Obviously, economic growth, private consumption or private investment imply more fiscal revenues, and are positively correlated with both billions of euros of direct and indirect taxes. Yet, what makes the structure of these fiscal resources important? As independent variables, the shares of direct or indirect taxes in GDP, or the variation in these shares, are not really correlated with the real GDP growth rate, the growth of private consumption (for indirect taxes) or private investment (for direct taxes) or with the growth of exports. However, economic growth seems higher in countries where the share of social security contributions in GDP is decreasing. Indeed, for example, this share fell very strongly by 22.03% in Ireland in 2015. Parallel to this, real GDP rose by 25.20%, real exports by 39.27% and real gross capital formation by 50.33%. In comparison, the share of social security contributions in GDP increased strongly in Lithuania (32.32%) in 2009. At the same time, real GDP then dropped by 14.80%, real exports by 13.90% and real gross capital formation by 54.35%.

Figure 3: Share of social security contributions in GDP and economic growth





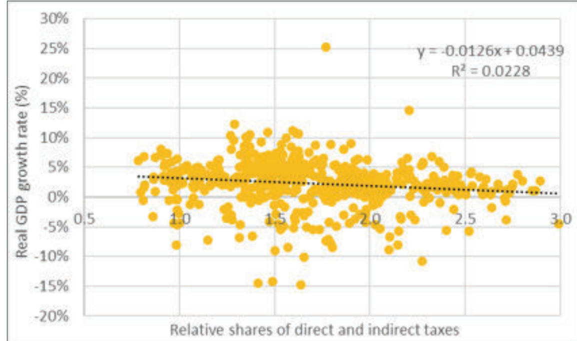
Note: Variation in the share of social security contributions in % of GDP, variation in percentage; Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage.

Source: AMECO Database for 27 European Union countries, between 2001 and 2021.

Further, the share of direct taxes is consistently lower in new EU member countries, particularly in Croatia, but also in Slovenia, Estonia and Ireland. On the contrary, this share is much higher in the old EU countries such as Germany, but in France as well. Is there a correlation between this structure of fiscal resources and economic growth?

Economic growth (real GDP or exports) is very slightly correlated with a bigger higher share of indirect taxes in GDP. Indeed, economic growth is slightly higher in New EU countries and in Ireland, at least when economic activity is high. On the contrary, economic growth is slightly weaker when indirect taxes are more important in the case of an economic crisis (for example 2008–2009). Hence, as we will see in sections 3 and 4, the correlation between the structure of fiscal resources and growth also depends on the economic situation (growth or recession), which explains the weak correlation and significance of the R2 for the whole period (see Figure 4).

Figure 4: Relative shares of direct and indirect taxes and economic growth



Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage.

Source: AMECO Database for 27 European Union countries, between 2001 and 2021.

It is interesting to that the correlations are also slightly negative following an increase in this relative share of direct when compared with indirect taxes in GDP and indicators of economic growth. In the same way, the correlations are also slightly negative if we consider the relative shares of direct and indirect taxes (or their variations) in billions of euros or in percentage of total government revenues as an independent variable, or if we consider the growth rate of GDP per head as the dependent variable. This may be explained by the fact that labour income taxation is distortionary; increasing labour taxes induces households to reduce labour in favour of leisure. Moreover, the permanent income decreases, implying a large negative wealth effect that reduces permanent consumption and aggregate demand. Both effects are negative for economic growth.

Therefore, Bernardi (2012) shows that the European Commission's recommendation, to shift the tax burden from direct to indirect taxes, could be growth-friendly and helpful in the long run in terms of efficiency. Still, he underlines that such a shift might also be deflationary (in the short term at least) and thus inappropriate in the background of a recession. With econometric analysis, Helcmanovska and Anndrejovska (2021) study the impact of selected indicators on corporate tax revenues in 28 EU member states for the period 2004–2019. They show that statutory or average effective tax rates do not have a decisive influence on corporate tax revenues. Despite the tax competition between member states and the global decrease in corporate taxation rates for 40 years, the latter remain higher in the old member states, without being the main determinant of fiscal revenues. The authors find that in the new EU member countries the unemployment rate has the most statistically significant negative effect; the decline in the economically active workforce reduces tax revenues. In comparison, in the old EU member countries, GDP has the greatest effect; increasing output and inflation has a positive effect on corporate revenues.

Kilponen et al. (2019) assess the effects of a

temporary fiscal tightening when the Zero Lower Bound on monetary policy holds for 2 years by applying 15 structural dynamic macroeconomic models within the European System of Central Banks. They show that in EU countries a reduction in (unproductive) government consumption has a significant negative effect on real GDP. On the revenue side, they find a strong negative multiplier for direct taxes (on labour and capital income), yet a negligible or even positive one for indirect taxes (on consumption). The authors hence show that in Estonia or in Italy the short-run multiplier associated with a permanent increase in consumption taxes can become positive. Indeed, because of habit formation, consumption only decreases gradually, whereas the positive response in labour supply of lightening the weight on labour taxation is quicker. Therefore, in a constrained budgetary framework, long-run tax multipliers are typically positive if higher indirect taxation is used to reduce households' labour income tax in the long term. Reducing labour costs can namely increase employment and economic activity in the long term, while also implying strong competitiveness gains. The authors thus find that the multipliers associated wit a permanent increase in consumption tax, when households' labour income tax adjusts, is 0.27 (respectively -0.02, -0.05, -0.17) in the first year in Estonia (respectively Slovenia, France, Germany) and even 1.73 (respectively 0.59, 1.31, 1.41) in the long run [Kilponen et al. (2019), pp. 21–22]. Thus, this study confirms the usefulness of shifting the tax burden from direct to indirect taxation.

"A reduction in government consumption has a negat-ive effect on real GDP in the EU."

2.3 Structure of fiscal resources and net exports

Our data additionally show a strong positive correlation between the relative weight of direct in comparison with indirect taxes and the share of net exports in GDP. A higher relative share of direct taxes seems to favour competitiveness, the current account surplus and net exports. Indeed, a bigger relative share of direct taxes (Germany) or an increase in this share are correlated with a

bigger share of net exports in GDP. On the contrary, a bigger relative share of indirect taxes (mainly Croatia, but also France) and an increase in this share are correlated with a higher current account deficit, a weaker and even a negative share of net exports in GDP. In Estonia or Slovenia, the bigger relative share of indirect taxes was also for a long period correlated with a higher current account deficit (see section 4).

Figure 5: Relative shares of direct and indirect taxes and share of net exports in GDP

Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Share of net exports (exports less imports) in percentage of GDP in constant prices.

Source: AMECO Database for 27 European Union countries, between 2001 and 2021.

3 Data showing the taxation trends in three 'old' member states

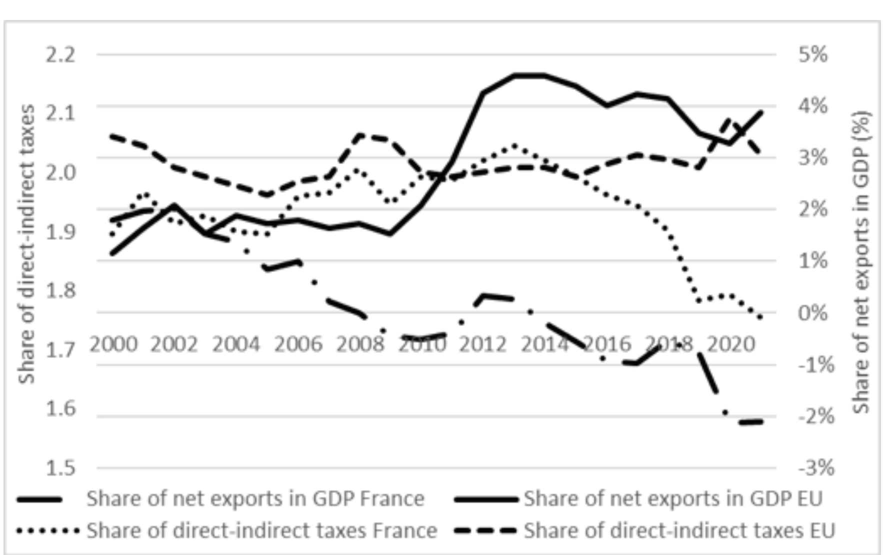
We now analyse taxation trends in three 'Old' EU member states: France, Germany and Ireland (section 3) and three 'New' ones: Slovenia, Estonia and Croatia (section 4) in order to highlight the conformity of empirical observations in these countries with the theoretical stylized facts we have just presented for the whole European Union.

3.1 France

France is the country with the greatest weight of public expenditure: 58.9% of GDP in 2021. This means it is necessary to assess the efficiency of this public expenditure, reduce the less productive expenditure and identify priority areas to ensure that its public debt is sustainable. Between 2012 and 2019, average annual total factor productivity growth stood at 0.4% in France, against 0.6% in the euro area; therefore, safeguarding investment in R&D expenditure should be a priority [European Commission (2022c, p. 4)]. Besides, France only ranks 35th on the International Tax Competitiveness Index 2021 of the Tax Foundation, namely, at the bottom of the classification. In 2019, the implicit tax rate on corporate income was the highest in all of the European Union: 33.2%, and even 50.2% in the new version of this indicator that excludes dividends [European Commission (2021, pp. 41–47)]. The top statutory corporate income tax rate fell strongly from 44.4% in 2017 to 28.4% in 2021, yet remained much higher than the EU average. Further, the tax burden on labour is among the highest in OECD countries, except for workers who earn low wages [European Commission (2022c, p. 60)]. France is the country where the net income left after compulsory deductions from employer costs is the lowest for the average worker. In particular, the weight of social security contributions (16.7% of GDP in 2021) is much higher than the EU average (14.2%). The pension system is expansive and remains complex (over 40 different regimes) [European Commission (2022c, p. 5)]. Another weakness of the French taxation system is the presence of multiple distortionary property taxes with separate levies on estates, bank assets, financial transactions and a wealth tax on real estate. Moreover, in 2021 the standard VAT rate was 20%, with restricted rates of 5.5% or 10%. However, Kalyva et al. (2016) underline that the widespread application of reduced rates and exemptions for VAT is adding to the tax system's complexity and reducing its efficiency. Hence, increasing VAT revenues, particularly by broadening the tax base on consumption, could be important for easing the tax burden on labour. Nevertheless, the share of indirect taxes reached 16.7% of GDP in 2021 in France, which is already above the EU average.

With this background, section 2 underlines the positive correlation between the relative weight of direct taxes and the share of net exports in GDP. The share of direct taxes fell quite considerably below the EU average in France after 2015 (see Figure 6), even if it remained higher than the in New EU member states; and this accentuated share of indirect taxation was correlated with a higher current account deficit. Indeed, the share of net exports in GDP has continuously dropped in France well below the EU average parallel to the shrinking of the share of direct taxes. Net exports represented 2% of GDP in 2002, but became negative in 2014, reaching -2.10% in 2021, whereas this share was 1.53% in 2003 and even 4.59% of GDP in 2013 on the average in the EU.

Figure 6: Relative shares of direct and indirect taxes and share of net exports in GDP



Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Share of net exports (exports less imports) in percentage of GDP in constant prices.

Source: AMECO Database for France and the European Union, between 2000 and 2021.

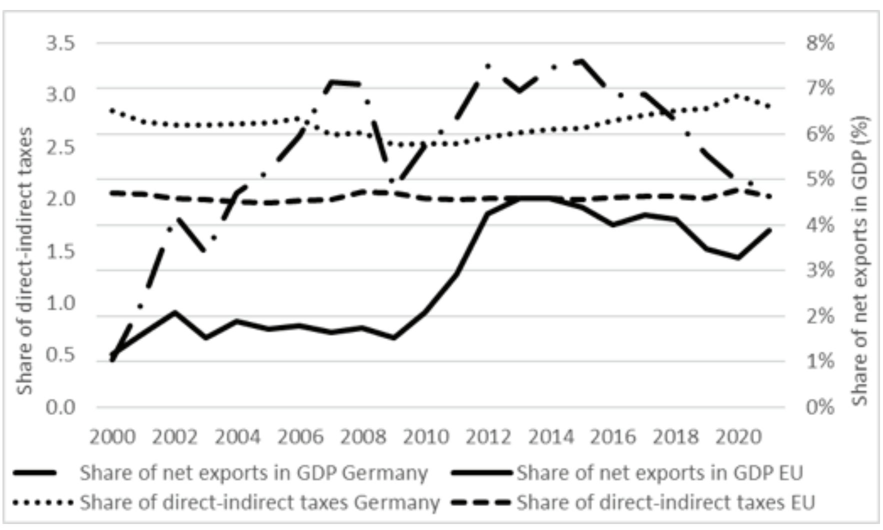
3.2 Germany

Germany ranks 16th on the International Tax Competitiveness Index 2021 of the Tax Foundation. First, direct taxes hold relatively considerable weight in Germany. In particular, social security contributions represented 17.6% (against 14.2% in the EU) of GDP in 2021, a large weight that is a legacy of the Bismarkian tradition of mandatory social insurance. The top statutory corporate income tax rate was 29.9% in 2021, one of the highest across the European Union. Besides, the individual income tax system is overly complex in Germany. The tax burden on labour is excessively high; the tax wedge is one of the highest in the EU, which disincentives increased hours worked by low and middle-income earners and by second earners [European Commission (2022d, pp. 11, 54)]. In 2021, the government decided to partly abolish the solidarity surcharge of 5.5% on individual income for most taxpayers; still, applying the same reform in the area of business taxation could improve the country's competitiveness. In contrast,

revenues from consumption taxes and environmental taxes are low in Germany. The standard VAT rate has been 19% since 2007 for a relatively broad base of goods and services, with restricted rates of 7%, while the share of indirect taxes (10.4% of GDP in 2021) is below the EU average.

Against this backdrop, section 2 underlines the positive correlation between the relative share of direct taxes, which is high and well above the EU average in Germany (see Figure 7), and the share of net exports in GDP. Indeed, the bigger share of direct taxation in Germany was correlated with a higher current account surplus. Net exports represented 1% of GDP in 2000 and they increased until they reached 7.7% of GDP in 2015. The numerous labour market reforms since the mid-1990s culminated in the Hartz reforms to gain competitiveness. Therefore, real wage increases below the level of productivity gains were supporting the cost competitiveness of exports, but they also contributed to curb the growth in domestic demand. Still, the current account surplus was also (even mainly) due to factors of the non-price competitiveness of German products.

Figure 7: Relative shares of direct and indirect taxes and share of net exports in GDP



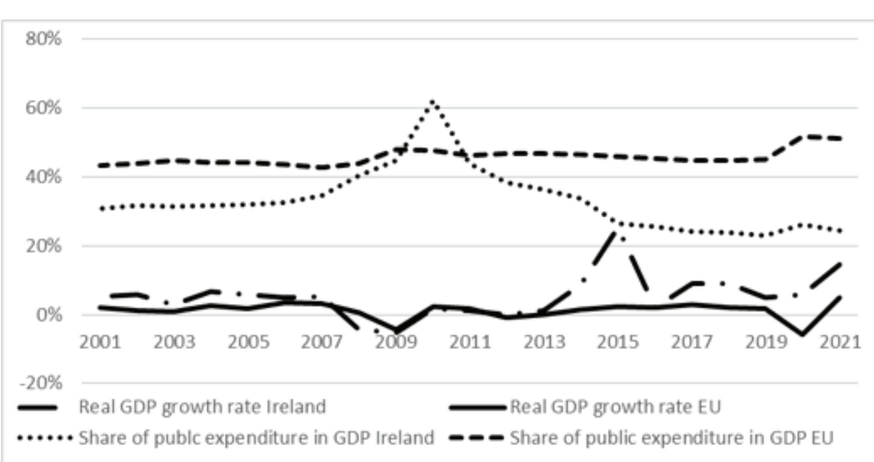
Note: Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Share of net exports (exports less imports) in percentage of GDP in constant prices.

Source: AMECO Database for Germany and the European Union, between 2000 and 2021.

3.3 Ireland

The share of public expenditure is considerably below the EU average in Ireland: 24.3% of GDP in 2021; after a huge rise around 2010, the share dropped strongly (see Figure 8). Parallel to this, the real GDP growth rate was higher than the EU average until 2007, being particularly higher since 2012. Further, in 2015 the share of public expenditure in GDP decreased by 21.66% in Ireland, and real GDP then increased by 25.20%, which is in harmony with the correlations pointed out in section 2.

Figure 8: Share of public expenditure in GDP and real GDP growth rate



Note: Total government expenditure excluding interest, in % of GDP; Growth rate of Gross Domestic Product in constant prices, variation in percentage.

Source: AMECO Database for Ireland and the European Union, between 2001 and 2021.

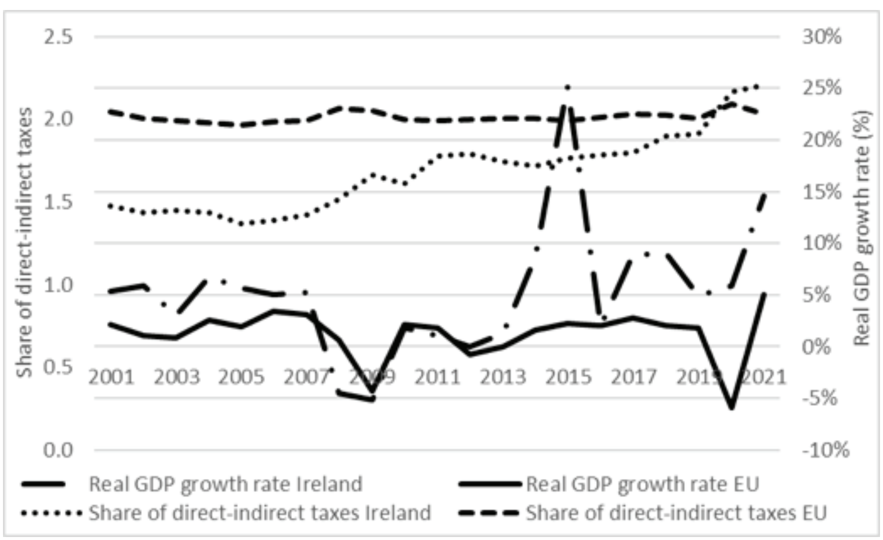
In addition, Ireland ranks 19th on the International Tax Competitiveness Index 2021 of the Tax Foundation. In 2019, its implicit tax rate on corporate income was the lowest in all of the EU (9.4%) [European Commission (2021, p. 41)]. Indeed, the top statutory corporate income tax rate was just 12.5% in 2021 (the same level since 2003), one of the lowest rates in the world. This background means Ireland's tax base is relatively narrow and remains excessively reliant on corporate taxes. As many enterprises are attracted by the fiscal conditions, corporate taxes comprise a very large share of Irish revenues, whereas the social security contributions are very weak (3.8% of GDP against 14.2% on average in the EU). Moreover, Ireland's labour

tax burden is relatively small at various wage levels. Nevertheless, Ireland's personal tax rate on dividend income of 51% is the highest among OECD countries. This high dividend tax rate could arguably be used to offset revenue losses from the low corporate tax rate. Yet, the current Irish system relies on taxing business profits twice since the taxation of corporate income has not been integrated. More definitively, in 2021, the weight of direct taxes remains lower in Ireland (10.1% of GDP) than the EU average. The share of indirect taxes in GDP (6.3%) is also much smaller in Ireland than the EU average (13.3%). More precisely, the VAT rate has been 23% since 2012, with restricted rates of 9% or 13.5%. It is one of the highest in the OECD and applies to a relatively narrow tax base. In fact, it covers less than half of the potential tax base because too many goods and services are exempted from taxation; problems of tax evasion are also underlined.

As mentioned in section 2, the smaller relative share of direct taxes (like in Ireland) is mainly correlated with higher economic growth. Indeed, since 2001 the real GDP growth rate has most often been higher in Ireland than the EU average. It was slightly higher between 2001 and 2007, in a period of sustained global economic growth, and is particularly higher after 2012 (see Figure 9). For example, in 2015 real GDP grew by 2.29% and real exports rose by 6.58% on average in the EU, whereas real GDP grew more strongly by 25.20% and real exports also increased more strongly by 39.27% in Ireland. On the contrary, the real GDP growth rate was slightly lower in Ireland between 2008 and 2011 in a period of financial (subprime) crisis. For example, in 2008, real GDP fell by 4.49% and real exports by 3.80% in Ireland, whereas real GDP rose by 0.64% and real exports by 1.33% on average in the EU.

Section 2 also spotlights the positive correlation between the relative weight of direct taxes and the share of net exports in GDP. The share of indirect taxes has traditionally been higher than the EU average in Ireland. Yet, the constant increase in the relative share of direct taxes until it even exceeded the EU average after 2020 was correlated with a constant increase in the share of net exports in GDP. Therefore, net exports represented 10.51% of GDP in 2001, which was already much higher than the EU average. Afterwards, the Irish current account balance still improved, with net exports accounting for up to 33.09% of GDP in 2018 when they represented just 4.13% of GDP on average in the EU (see Figure 9). As mentioned, this can be explained by the structure of Irish fiscal resources excessively and increasingly relying on corporate income taxes with a particularly low corporate taxation rate, boosting the competitiveness of firms on the country's territory.

Figure 9: Relative shares of direct and indirect taxes in GDP and economic growth



Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage; Share of net exports (exports less imports) in percentage of GDP in constant prices.

Source: AMECO Database for Ireland and the European Union, between 2001 and 2021.

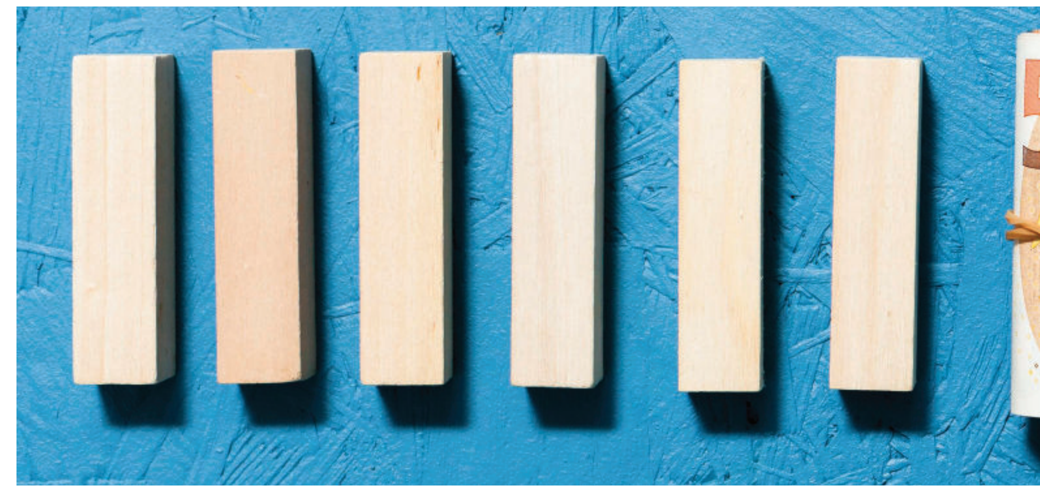
4 Data showing the taxation trends in three 'New' member states

4.1 Slovenia

The ratio of Slovenian public expenditure to GDP reveals no obvious link between this ratio and economic growth. Indeed, the general government expenditure ratio excluding interest in GDP reached 57.7% of GDP in 2013 to then become on the highest level in the EU. Besides, public investment remains strongly dependent on disbursements of EU funds and is mostly driven by infrastructure projects co-funded by the EU. However, the link between public expenditure and economic growth remains weak. Krizanic et al. (2021) conduct panel data analysis for the 2009–2016 period and underline the limited influence of Research and Development expenditure and of the investment in human capital to generate positive externalities and to promote economic growth in Slovenia. They show that a 1%-real increase in government subsidies to the economy over three subsequent years increases real investment in research and development by 0.45%, and after a 2-year period yields a 0.27% increase in employment of persons with a higher education. Yet, the latter has only a positive impact of 0.14% on the growth of exports after another 3-year term. If we now turn to fiscal resources, what are the characteristics of Slovenian government revenues?

Slovenia ranks 25th on the International Tax Competitiveness Index 2021 of the Tax Foundation. The share of direct (individual and corporate) taxes in GDP or in global government revenue is much lower in Slovenia than the EU average (see Figure 10). Accordingly, in 2021 direct taxes represented 18.52% of total revenues of the Slovenian government (28.34% in the EU) and 7.8% of GDP (12.8% in the EU). In Slovenia, the top statutory corporate tax rate was only 17% between 2013 and 2016. Although it rose to 19% in 2017, it is still below the OECD average (23.54%) in 2021, which is attractive for firms and beneficial for economic growth. On the contrary, social security contributions comprise a bigger share in Slovenia; in 2021, they accounted for 39.82% of total government revenues (31.53% in the EU), and 17% of GDP (14.2% in the EU). However, whereas the relative share of direct compared to indirect taxes was much lower in Slovenia in 2000, it increased until it caught up to the EU average in 2021 (see Figure 10).

In this context, the OECD considers that the Slovenian government should make its tax-mix more growth friendly by shifting the burden from labour to property and indirect taxes. In fact, the tax system is excessively reliant on labour taxes [OECD (2020), p. 32]. This means the high labour taxation should be lowered in Slovenia; in particular, social security contribution rates are high, mainly for employees, reducing work incentives. Slovenia is the country where the fraction of each extra euro in labour costs that is kept by the government through personal income taxes and social security contributions is the highest in Europe. This discourages hiring, labour force participation, and investment



in skills. Nevertheless, the share of social security contributions is not expected to decrease following the introduction of an additional contribution for the funding of long-term care in 2025 [European Commission (2017), p. 17)]. The ageing of the population (severe compared with the rest of the EU) is also expected to weigh heavily on public finances and on these contributions for the coming years. Still, Slovenia introduced three tax laws in 2017 aimed at boosting the creation of high value-added jobs. A fifth medium tax bracket for personal income taxation was introduced, and taxation was reduced on performance bonuses ('13th salary'). The reform hence mainly impacted workers on the highest wages, whose net earnings were on average increased by 4.3% [European Commission (2017, p. 26)]. Further, a reform introduced on 11 March 2022 reduced the fiscal weight for all taxpayers. The tax rate for the highest income bracket (above €72,000 per year) was cut from 50% to 45% (lowering the labour costs of high-skilled workers). The tax rate for income from interest, dividends and profits was cut from 27.5% to 25%, while the property rental tax rate was cut from 27.5% to 15%. However, this lightening of the cost of labour has yet to be fully compensated by other revenue increases, which may be seen as a danger for the budgetary deficit and the public debt.

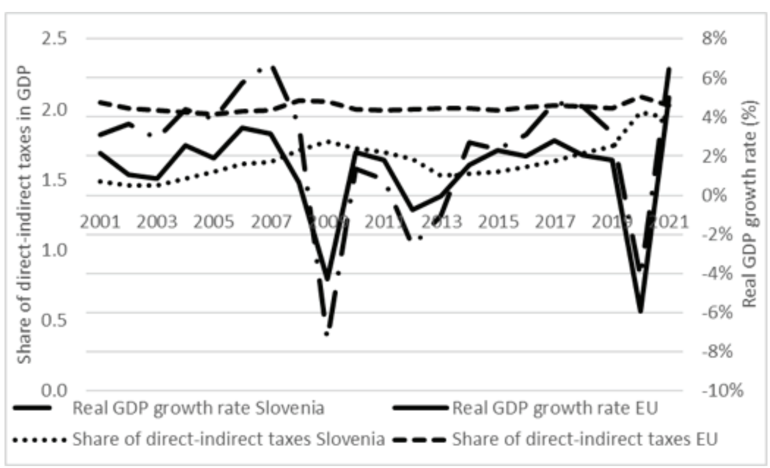
Regarding indirect taxation, the VAT rate in Slovenia is 22% and applies to a relatively broad consumption basis. Yet, a reduced rate of 9.5% is valid for a wide range of goods and services, leading to important forgone VAT revenues. Indeed, the standard VAT rate could be applied to some of these goods and services that are disproportionately consumed by higher-income households (books, cultural services, hotels and restaurant meals). According to the European Commission, another potential source of revenue is higher taxes on immovable property [European Commission (2022a), p. 10, p. 57] given that their revenues are well

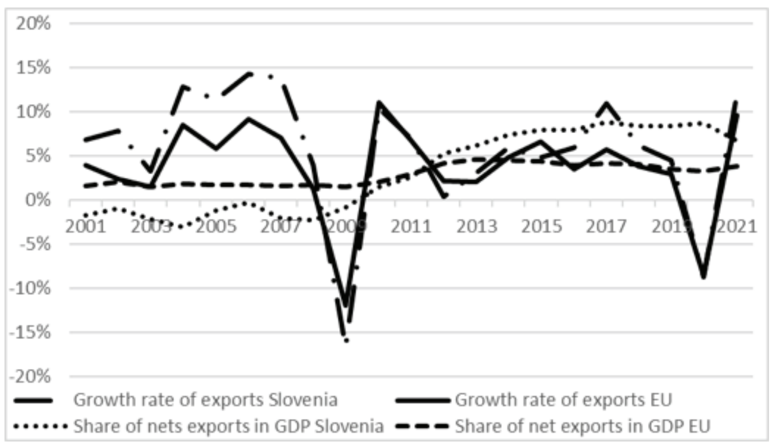
below the EU average. Greater use of recurrent property taxes on inheritance and gift taxes could boost economic growth, especially in view of the personal income tax reductions.

What are the consequences of this relative structure of fiscal resources for competitiveness and economic growth in Slovenia? As mentioned in section 2, a smaller relative share of direct taxes (like in Slovenia) is generally correlated with higher economic growth. Indeed, the real GDP growth rate was most often higher in Slovenia than the EU average during the period. It was slightly higher between 2001 and 2008, in a period of sustained global economic growth, and is also higher after 2014 (see Figure 10). For example, in 2007 real GDP grew by 3.13% and real exports increased by 7.11% on average in the EU, whereas real GDP grew more strongly (6.81%) and real exports increased more strongly (13.84%) in Slovenia. In comparison, the real GDP growth rate was weaker in Slovenia between 2009 and 2013 in a period of financial crisis. In 2009, real GDP fell by 7.39% and real exports by 16.60% in Slovenia, whereas on average real GDP 'only' decreased by 4.30% and real exports by 11.96% in the EU.

Further, section 2 also stresses the positive correlation between the relative share of direct taxes and the share of net exports in GDP. In Slovenia, the increase in the relative share of direct taxes between 2001 and 2021 was indeed correlated with improvement of external competitiveness and of the current account balance, and with a bigger share of net exports in GDP. The share of net exports in GDP was continuously increasing in Slovenia until it exceeded the EU average. Net exports represented -3.09% of GDP and were negative in 2000. However, the Slovenian current account balance became positive in 2010, while net exports accounted for 8.76% of GDP in 2020, when they represented just 3.27% of GDP on average in the EU (see Figure 10).

Figure 10: Relative shares of direct and indirect taxes in GDP and economic growth





Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage; Share of net exports (exports less imports) in percentage of GDP in constant prices.

Source: AMECO Database for Slovenia and the European Union, between 2001 and 2021.

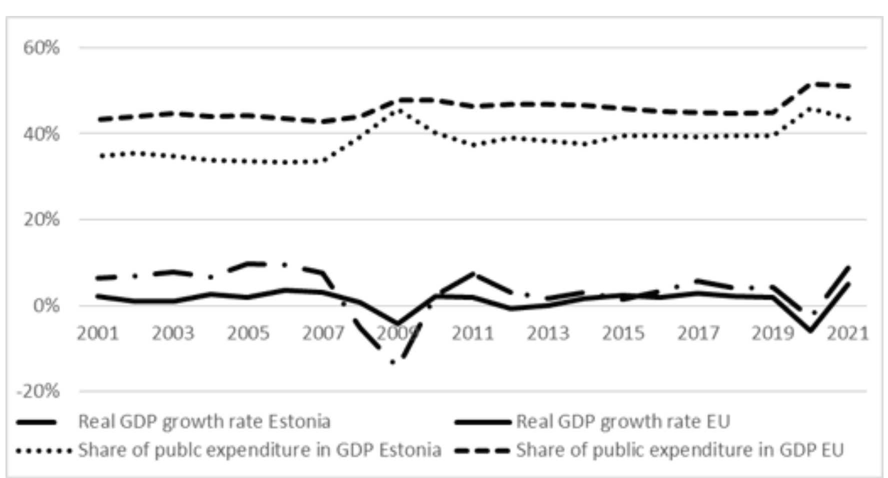
Which specific problems does Slovenia face with regard to its competitiveness? The European Commission (2017, p. 2) mentions that in Slovenia barriers to doing business are generally linked to public administration inefficiencies and the complex and lengthy administrative procedures, especially in the fields of construction and spatial planning. There are many big and integrated state-owned enterprises in Slovenia, in particular in network sectors. The intervention of the State is greater than in the rest of the EU, and during the last few years state-owned enterprises have performed worse than their privately-owned peers in terms of productivity and profitability, hampering their growth. Nevertheless, the performance of these enterprises has recently started to improve, facilitated by a new corporate governance system with more prudent and professional management policies that started in 2015.

Foreign direct investment (FDI) in Slovenia has grown markedly since 2015, partly supported by the privatization programme initiated in 2013 and by corporate restructuring. Still, the OECD is critical of the harmful combination of high barriers to trade and investment in the service and network sectors and widespread public ownership, which has led to one of the lowest stocks of FDI in OECD countries. This lack of foreign investment hampers international transfers of new production and management technologies to Slovenia [OECD (2020), p. 29]. Such transfers would make markets more competitive, benefiting from productivity growth and thus economic expansion as well as consumers through lower prices and greater choice. Nevertheless, Slovenia began to gain market shares after 2013, in particular in exports of manufactured goods [European Commission (2017, pp. 5–6)]. Whereas services were traditionally a positive contributor to the trade balance, the new trade surplus was due to the growing surplus in exports of goods. Slovenia's price competitiveness improved because of productivity gains and continued wage moderation, decreasing real effective exchange rates. While the current account balance was for a time in surplus in 2010, it peaked at 8.81% of GDP in constant prices in 2017 (see Figure 10). Slovenia's export market shares rose by 20.2% between 2016 and 2020 and productivity growth was strong in manufacturing. However, Slovenia's labour productivity remains low and broadly stable at between 80%–85% of the EU average. According to the European Commission, this means that increasing public and private investment in skills, physical capital and digital technologies can still boost competitiveness [European Commission (2022a), p. 4].

4.2 Estonia

First, the share of public expenditure in GDP in Estonia (43.5% in 2021) is below the EU average. In line with the results in section 2, it is correlated with the GDP growth rate which has generally been higher than the EU average since 2000 (see Figure 11).

Figure 11: Share of public expenditure in GDP and real GDP growth rate



Note: Total government expenditure excluding interest, in % of GDP; Real GDP growth rate: Growth rate of the Gross Domestic Product in constant prices, variation in percentage.

Source: AMECO Database for Estonia and the European Union, between 2001 and 2021.

Some econometrics studies estimated fiscal multipliers in the New EU member states. For example, Borys et al. (2014) identify fiscal policy shocks in these countries for the period 1995–2011. They find that an expenditure-based fiscal consolidation is mostly beneficial for investment and increased export growth even if the effect is not statistically different from zero in most cases. Indeed, expenditure-based fiscal consolidations reduce wages and can thus enhance the competitiveness and profitability of national enterprises. The authors also find that tax reductions benefit GDP growth since, contrary to the spending multiplier, the tax multiplier (about 0.68) is significantly different from zero. In the same way, using a panel vector error correction model Combes et al. (2016) study fiscal multipliers in 11 Central and Eastern European Countries for the period 1999-Q1 to 2013-Q3. Considering the hypothesis of the existence a common long-term path between these countries, they show that the spending multiplier is positive, but low on average: 0.10 (respectively 0.19, 0.13) in Estonia (respectively Slovenia, Croatia) for the impact multiplier, and 0.29 (respectively 0.29, 0.07) for the cumulative long-term multiplier. In addition, the authors show that among influential factors, as the public debt and level of income increase, spending multipliers are expected to decrease. Therefore, this result is in conformity with

the usefulness of limiting the weight of public expenditure and of the public debt in GDP that we have underlined, in order for keeping a significant fiscal multiplier and maintaining the efficiency of fiscal policy in sustaining economic growth.

Moreover, Estonia is usually considered to be one of the most tax-competitive countries – even ranking first on the Tax Foundation's International Tax Competitiveness Index for 2021. Estonia has a 20% top statutory corporate income tax rate that only applies to distributed profits; companies can thus reinvest their profits tax-free. Estonia is the sole country where earning profit in itself does not trigger an income tax liability; profits are only taxed when are distributed to shareholders. Besides, no tax is due if this distributed profit originates from dividends received from a firm in another country. Estonia has a territorial tax system that exempts from domestic taxation all foreign profits earned by national firms, with few restrictions; it is considered as a tax haven due to its low-tax opportunities for non-resident businesses. Estonia supports free entrepreneurship and minimal bureaucracy; it has a very developed digital infrastructure, extended to foreign residents with the help of the e-Residency programme. Therefore, in 2019 the implicit tax rate on corporate income in Estonia (9.6%) was one of the lowest in the entire European Union [European Commission (2021, pp. 41–47)].

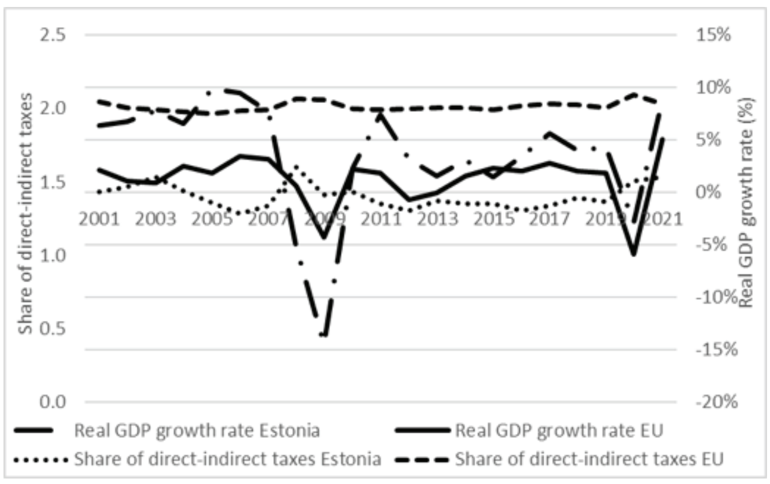
Estonia additionally has a proportional 20% tax that applies to all items of income derived by a resident taxpayer, except personal dividend income. There is no tax on securities owned by individuals, capital gains are only taxed when owners sell securities and earn profit. The share of social security contributions in GDP (12.2% in 2021) is also below the EU average. Against this background, the European Commission (2022,b) considers that Estonia should strengthen its social protection by extending the coverage of unemployment benefits, in particular to those with short work spells and in non-standard forms of work. Further, property tax applies only to the value of land rather than the value of real property or capital, with the outcome that Estonia does not impose taxes on the transfer of real property (real estate, land improvements, machinery) from one person or firm to another. This means that very little revenue is generated from recurrent taxes on immovable property. Regarding indirect taxes, the VAT rate in Estonia is 20% for most goods and services, even if there is also a reduced VAT rate of 9% for some goods: books for example. Together, all of these specific features mean the share of direct taxes is much smaller in Estonia than in the rest of the European Union (see Figure 12). What are the consequences of this relative structure of fiscal resources for competitiveness and economic growth in Estonia?

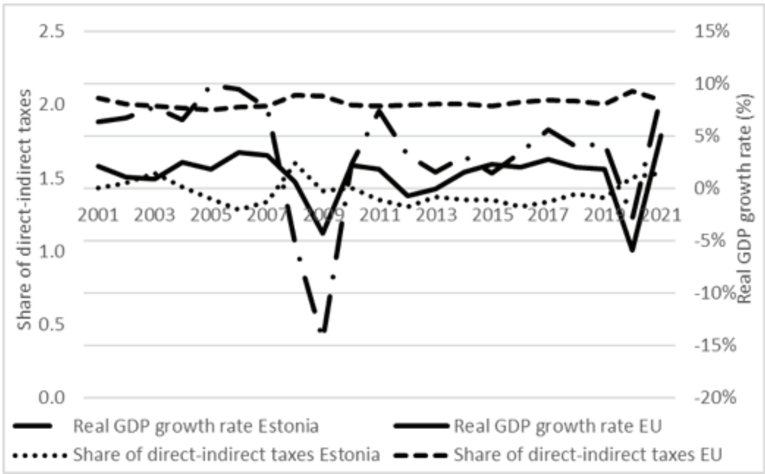
As noted in section 2, a smaller relative share of direct taxes (like in Estonia) is generally correlated with higher economic growth. Indeed, the real GDP growth rate was quite always higher in Estonia than the EU average during the period (see Figure 12). For instance, in 2003 real GDP grew by 0.86% and real exports by 1.55% on average in the EU, whereas real GDP grew more strongly (7.75%) and real exports more strongly (9.68%) in Estonia. The real GDP growth rate was only weaker in Estonia than the EU average in 2008 and 2009 (financial crisis) and

in 2015. In 2009, real GDP fell strongly by 14.50% and real exports by 20.17% in Estonia, whereas real GDP 'only' decreased by 4.30% and real exports by 11.96% on average in the EU. Klyviene and Jakaitiene (2022) analyse the implications of fiscal shocks in the Baltic countries (Latvia, Lithuania, Estonia) for the period 1995–2018 using a structural VAR estimation method. They find that the impact on the growth of direct taxes, government consumption and public investment is strong and persistent. The overall fiscal adjustment based on indirect taxes is assessed to have a more limited negative impact on growth than if based on direct taxes since increases in corporate income taxation could inhibit investment. At the same time, the weaker negative effects of indirect taxes in the Baltic states could be justified by the relatively inelastic consumption patterns seen in the region. Accordingly, these results are consistent with the usefulness of transferring the weight from direct to indirect taxation for economic growth.

Further, section 2 also underlined the positive correlation between the relative weight of direct taxes and the share of net exports in GDP. Indeed, in Estonia the bigger relative share of indirect taxes was correlated with a smaller current account surplus (or even a deficit), and with a smaller share of net exports in GDP. Thus, except between 2009 and 2011, the share of net exports in GDP was lower in Estonia, between -7.11% in 2007 and 7.45% in 2011, whereas on average it was more stable in the EU at between 1.53% in 2003 and 4.59% of GDP in 2013 (see Figure 12). In Estonia, the external balance was affected by one-off, large-scale imports of intellectual property in the ITC sector, leading to the current account turning slightly negative in 2020 and 2021 [Ministry of Finance Estonia (2021), p. 4].

Figure 12: Relative shares of direct and indirect taxes in GDP and economic growth





Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage; Share of net exports (exports less imports) in percentage of GDP in constant prices.

Source: AMECO Database for Estonia and the European Union, between 2001 and 2021.

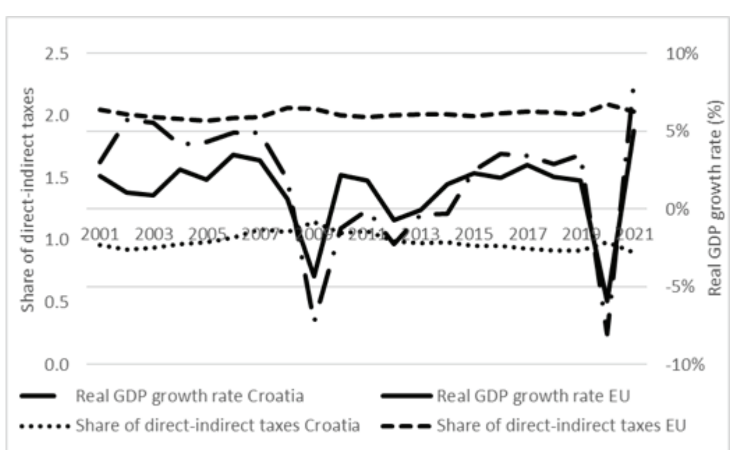
4.3 Croatia

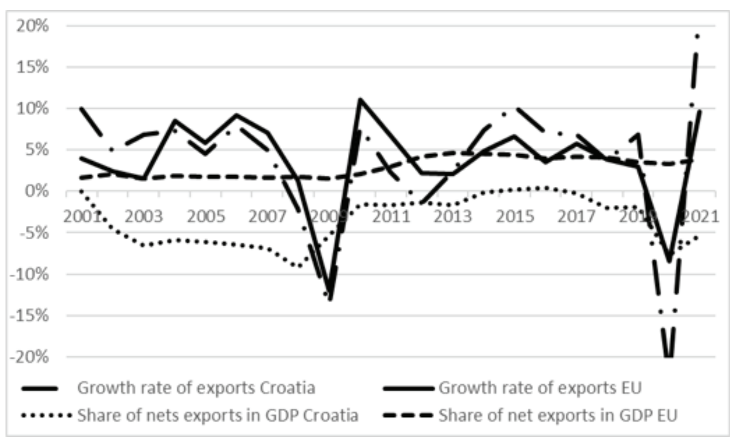
We can also quickly mention the situation in Croatia, an EU member country since July 2013 but which has yet to adopt the euro. In Croatia, the share of direct taxes is approximatively less than half the EU average (see Figure 13). Direct taxes represent just 5.6% of GDP and social security contributions only 11.8% of GDP in 2021, whereas these percentages are, respectively, 12.8% and 14.2% on average in the EU. For example, the top statutory corporate income tax rate in Croatia is moderate and below the EU average: 18% in 2021. On the contrary, indirect taxes (19.3% of GDP) have greater than the EU average (13.3% of GDP). As noted in section 2, this larger relative share of indirect taxes is mainly correlated with higher economic growth. The real GDP growth rate was indeed slightly higher in Croatia than the EU average between 2001 and 2008, against a backdrop of sustained economic growth, and since 2015 (see Figure 13). For example, in 2001 real GDP grew by 2.13% and real exports by 3.95% on average in the EU, whereas real GDP grew more strongly (3.04%) and real exports more strongly (9.96%) in Croatia. On the contrary, the real GDP growth rate was weaker in Croatia than the EU average between 2009 and 2014 as well as in

2020, i.e., in periods of financial crisis or recession. For example, in 2009 (2020) real GDP fell strongly by 7.28% (8.08%) and real exports by 13.79% (22.73%) in Croatia, while real GDP 'only' decreased by 4.30% (5.93%) and real exports by 11.96% (8.49%) on average in the EU.

Besides, section 2 emphasized the positive correlation between the relative weight of direct taxes and the share of net exports in GDP. In Croatia, the bigger relative share of indirect taxes was correlated with a deficit on the current account and a share of net exports in GDP below the EU average: between -9.26% in 2008 and 0.48% of GDP in 2016 (see Figure 13).

Figure 13: Relative shares of direct and indirect taxes in GDP and economic growth





Note: (Direct taxes on income and wealth and social security contributions, in % of GDP) / (Indirect taxes on imports and production, in % of GDP); Growth rate of Gross Domestic Product in constant prices, variation in percentage; Growth rate of exports in constant prices, variation in percentage; Share of net exports (exports –imports) in percentage of GDP in constant prices.

Source: AMECO Database for Croatia and the European Union, between 2001 and 2021.

5 Conclusion and policy recommendations

We use empirical data from 2000 to 2021 to shed light on correlations between fiscal policies and indicators of economic growth for the member countries of the European Union. We can then underline three main results and associated policy recommendations.

- A weaker share of public expenditure in GDP (as mainly in Ireland, but also in Estonia), as well as a decrease of this share, are correlated with a higher economic growth. The confidence in the sustainability of public finances is higher if the State does not weigh excessively in the economy and if the public debt to GDP ratio remains limited. Indeed, households then consider that an increase of public expenditure can be more permanent, the budgetary multiplier is higher and private consumption decreases less.

Therefore, the first policy recommendation is to limit the share of public expenditure in GDP.

- A higher relative share of indirect taxes is mainly correlated with a higher economic growth. Indeed, indirect taxation has a higher weight in Ireland or in ‘New’ European countries like mainly in Croatia, but also in Slovenia or in Estonia, where economic growth appears as more volatile (it is weaker in case of economic crisis), but is on average higher than in the rest of the European Union. More specifically, economic growth seems higher in countries where the relative share of social security contributions in GDP decreases (as in Ireland between 2012 and 2021). Indeed, increasing indirect taxes is only weakly harmful to economic growth, because of habits and inertia in private consumption, whereas increasing direct taxes and labor costs is much more harmful for employment, growth and competitiveness. Labor taxation is distortionary, discourages work and implies a large negative wealth effect for households.

Therefore, the second policy recommendation is to shift the tax burden from direct to indirect taxation, in order to increase economic growth.

- The relative share of direct taxes is positively correlated with the share of net exports in GDP. Indeed, a higher relative share of direct taxes (as in Germany) seems correlated with a better external competitiveness, a higher current account surplus, and net exports have then a higher share in GDP. In Slovenia, the increasing share of direct taxes was correlated with a new and increasing current account surplus. On the contrary, a higher relative share of indirect taxes (as in Croatia or Estonia, but also in France) and an increase of this share are correlated with a higher current account deficit, with a weaker and even a negative share of net exports in GDP. So, increasing the relative share of direct taxes can improve the current account balance, but the danger is to make a country more dependent on external demand.

Therefore, shifting the tax burden from direct to indirect taxation could favor an economic growth which is less dependent on external demand.

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Chapter 2

The strategic role of tax in the new European order: Between encouraging competitiveness and discouraging harmful tax competition

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1 Introduction

Globalization has set in motion a process of far-reaching change which has heavily affected the rules on the Internal Market's functioning and the member states' traditional sovereignty. Indeed, the progressive loss of individual state sovereign power is countered by the growth of the decision-making powers in tax matters by multinationals and international organizations. The fragmentation of the tax system into a plurality of different tax systems, an outcome of political pluralism, has led to taxation having a new and broader function, no longer confined to national borders and designed to meet the needs of each member state. In this way, the countries have

moved from a monolithic state system, to which a single tax system corresponds, to a pluralistic system characterized by the coexistence of several tax systems belonging to different forms of territorial community. In this globalized scenario, the tax burden is becoming crucial for the competition since it directly or indirectly affects the price-formation criteria. Indeed, the choice regarding the structure of the national tax systems and the impact of the tax levy on economic activities are decisive factors in preferring to localize business initiatives in particular market jurisdictions more than in others. Therefore, many countries have redesigned their fiscal policies for them to become more competitive. In this context, a logic of competition between states is introduced, measured on the basis of fiscal attractiveness, i.e., the ability to define an overall level of taxation that attracts foreign companies so as to decide to settle their business activities in the state's territory. This has led to a real 'tax market' in which the offer of a reduced tax levy is the bargaining chip in the localization of a business in a nation's territory. In this sense, as stated by Wilson & Wildasin (2004), tax competition is a "non-cooperative tax, setting by independent governments, under which each government's policy choices influence the allocation of a mobile tax base among regions, represented by these governments".

"The tax has become an instrument for encouraging competitiveness and for discouraging harmful tax competition in the EU."

It follows that, alongside its traditional function, tax has even become an instrument for encouraging the competitiveness of a country and, at the same time, for discouraging harmful tax competition within the new European tax order in which States set 'limits on themselves' in the exercise of their tax sovereignties and recognize the importance of a policy based on mutual tax coordination. Tax coordination refers to a cooperative tax setting where countries or a group of them build on domestic tax systems to make them compatible with the Union's aims as formulated in the TEU. Put formally by Edwards and Keen, some degree of tax coordination is desirable if the welfare gains from eliminating "the inefficiency of non-cooperative behavior" exceed "Leviathan's

tendency to waste". Particularly in Europe, the importance of the stronger co-ordination of tax policies among different member states has been clarified in order to avoid introducing rules whose main effect would consitute the national erosion of the tax bases. One of the most crucial political factors explaining the need for co-ordination is tax competition. The Internal Market is inspired by the idea of «free movement» (and the corresponding right of freedom of movement) that could have a double face, positive and negative, depending on the perspective from which it is viewed.

In a positive sense, flexibility to move business, personnel and assets across borders is important for reacting to commercial changes and to allow companies to create and to take more opportunities.

The reverse negative side of the freedom of movement is its abuse and unfair tax competition. This occurs when companies, especially multinational enterprises, exploit the differences in member states' corporate tax systems to minimize their tax burden by transferring their tax residence and/or by shifting their high value assets (profits) to lower tax-rate countries. These practices seriously distort the market because they erode the tax base of the State of origin and shift future profits to be subject to tax in the low-tax jurisdiction of the destination. The awareness of being in front of a 'global taxpayer' requires a substantial degree of policy coordination and, among others, a strong mandate to harmonize taxes, even if the TEU does not explicitly stipulate taxing rights on the European level. The bleeding of tax caused by the erosion of national tax bases has added to the awareness that (harmful or aggressive) tax competition among States not only distorts EU integration, but above all affects the striking of the right balance in taxation by generating situations of 'state fiscal crisis'. This paper draws attention to the significance of the ongoing transformation of the national tax systems as an outcome of the changes generated by other tax systems due to tax competition processes, according to a logic of international normative osmosis. In this respect, it describes the evolution of personal income tax rates in the EU by showing how the tax competition is taking the form of special tax regimes targeted to foreigners, often those with high income or high wealth. Thus, the study provides a snapshot of some preferential tax regimes introduced by member states, including Italy in the last few years. In addition, this study reviews general trends in corporate taxation, also extending the fiscal competition analysis to other factors that attract investment over and beyond the race to the bottom.

The collection of the data was carried out using several other scientific studies and public policy documents as a source.

2 Tax competition among EU member states: A positive or negative phenomenon? An (uneasy) matter of classification

Tax competition among States is a relatively recent phenomenon, having emerged in the second half of the 20th century and then consolidated in the 21st century as a key component of national fiscal sovereignties. The liberalization of international capital flows and advances made in transportation and communication technology have generally increased the mobility of corporations and individuals. According to the economic literature, tax competition does not lead automatically to distortion of the Internal Market and can be regarded as a tool for lifting the competitiveness of the European economy confronted with the challenges of globalization. Indeed, from a competitive standpoint, a state can decide to adopt a tax policy inspired by a reduction in the tax burden on capital and multinational companies compared to the level normally applied by most countries around the world (i.e. the states that contain mature market economies and can therefore be considered as a benchmark in international taxation) so as to attract mobile economic activities to their countries, as well as to retain them by creating a favourable tax climate able to compete with what is on offer abroad. Tax has accordingly become an important factor in location decisions. This, in turn, has encouraged national, regional and local authorities to compete in attracting firms to their areas through various 'tax breaks' sometimes in near-breach of EU competition rules. Tax competition can be realized in many different ways, ranging from generic to specific measures. Kiekenbeld clarifies that the scope of the first category includes generic measures designed to achieve an overall improvement in the position of a jurisdiction's competitiveness. An example of such generic measures is a wide-ranging programme of tax reforms leading to a reduced tax rate. Specific measures are in contrast designed to increase the competitiveness of specific sectors of a jurisdiction's economy. Some examples of particular tax measures are exemptions, either temporary or permanent, tax reductions for foreigner taxpayers, special tax-free zones, expatriate-dedicated regimes etc. Several of these measures have appeared over time in the legislation of different EU member states. It is difficult to classify the tax competition among the EU member states as an exclusively positive or exclusively negative phenomenon. Moreover, although tax competition through the introduction of favourable tax measures is likely to be positive from a domestic perspective, it could lead to the erosion of tax revenues and the inefficient allocation of factors of production on the European level. In general terms, tax competition among states, both within the EU and outside of it, has the desirable consequence of leading to a reduction in tax-driven distortions to the market mechanism and thus to a more efficient allocation of factors of production within the Single Market (namely, non-

harmful tax competition). On the contrary, consequences may be considered to be undesirable if they lead to a worse international allocation of mobile factors of production, which in some authors' view draws the borderline with harmful competition. Only in the recent past was the notion of 'harmful tax competition' among the states clarified by indicating the use of the tax lever in a distorting dimension with respect to normal market logic. In particular, the 'harmfulness' of tax competition is due to a selective and not a generalized tax exemption aimed only at certain types of economic activities so as to favour the establishing (even if only formal) of some multinational enterprises and not to promote the growth of the internal production system. In the current digitalized post-COVID-19 scenario where member states are facing budgetary constraints, there is the risk that the tax competition simply serves to shift rather than create economic activity and to influence the allocation of profits within the Single Market.

Over the years, the development of criteria for identifying harmful tax competition has been the subject of various policy documents from the both EU and the OECD. Mindful of the positive effects of fair competition, which can indeed be beneficial, in 1997 the Council of Economics and Finance Ministers (ECOFIN) adopted the Code of Conduct for Business Taxation, an instrument not legally specifically designed to detect only measures which unduly affect the location of business activity in the European Community/Union by merely being targeted at non-residents and by providing them with a more favourable tax treatment than that which is generally available in the member state concerned. Under the Code, the EU member states have committed themselves to rolling

back existing tax measures that constitute harmful tax competition and to refrain from introducing any such measures in the future. Considering that the criteria of the Code of Conduct do not cover non-preferential regimes, which may still be considered to be harmful, the European Commission has already suggested to reform them to allow a better assessment of the harmfulness of all cases of very low taxation. In two Communications, both released on 15 July 2020 to the European Parliament and the Council, the EU Commission aimed to elaborate the main features of European future tax policy by 25 actions. The past decade has witnessed the relevance of international tax cooperation. The need to ensure the effective countering of tax evasion and to boost greater transparency has stimulated interdependence among the States, leading to the transition from a principle of non-cooperation to the opposite one of cooperation. In recent times, some concrete and effective results have been achieved in the fight against tax evasion and tax avoidance. As the EU Commission outlined, specific examples include the anti-tax avoidance Directive, the Commission's recommendation on the implementation of measures against tax treaty abuse, and transparency rules for tax rulings and the introduction of country-by-country reporting between tax authorities. The automatic exchange of information and joint actions have become common in the EU between member states, as shown by evaluations of the framework for administrative cooperation in the EU. However, revenue loss in the EU due to corporate tax avoidance remains very high according to several estimates. Moreover, the COVID-19 pandemic and the digital economy entail important challenges for the

EU to deal with urgently. Based on these premises, the European Commission in its Communication on Tax Good Governance in the EU and beyond (2020) proposed to broaden the scope of the Code of Conduct beyond the specific tax measures and regimes introduced by jurisdictions so as to cover further types of regimes and general aspects of the national corporate tax systems which have the same effects as those specific regimes, such as, for example, exemptions of foreign income.

3 The new frontline of tax competition: Personal Income Tax

Economic globalization and integration led have to an increase in the mobility of taxpayers by aggravating tax competition even in the area of personal income and wealth taxation. Although in matters of harmful tax practices the focus has traditionally been on corporate income taxation only, it is worthwhile pointing out that harmful tax competition may generally become a concern whenever the tax base is mobile. Consequently, this 'mobility' also impacts personal income taxes and certain wealth-related taxes. A coordinated action against the new forms of personal income tax competition might thus entail extending the mandate of the Code of Conduct group to personal income taxation in order to allow a more symmetric treatment of issues associated with personal and corporate tax competition on the EU level. Indeed, the European Commission and the European Parliament (2021) have suggested reforming the Code of Conduct criteria to allow a better assessment of the harmfulness of all cases of very low taxation, considering that many preferential tax arrangements adopted by the EU member states meet the criteria for harmful tax practices (according to the EU Code of Conduct itself and the OECD Report on harmful tax competition). In the last three decades, EU countries have sought to reconcile the need to increase their tax attractiveness, in order to raise extra revenues and attract investments, with the need to avoid eroding their domestic tax base so as to safeguard their national resources. To this end, many member states have responded to the increasing mobility by lowering their tax rates or adopting preferential tax regimes for highly mobile tax bases. Especially among high-skilled top-income earners, low levels of taxation can lead to migration and the international reallocation of personal wealth. Hence, lowering effective personal income and wealth-related taxes is an additional tool to attract tax bases from other countries. In this case, tax competition may cause distortions in labour, savings, and investment decisions, and restricts governments' scope for redistribution.

Looking at the evolution of income and wealth tax rates and revenues since the 1990s, the European Union experienced a period of declining top statutory personal income tax rates, especially from 1995 until the global financial crisis in 2007/2008 (Figure 1).

Figure 1: Development of median and average top statutory personal income tax rates for EU-15 and EU-28 countries

Source: EU Tax Observatory, 2021.

During the course of this long period, the average top statutory rate in EU countries fell from nearly 48% to less than 40%. The 2004 enlargement of the EU and the introduction of tax systems with relatively low rates contributed to the continued fall in the European average top personal income tax rate. Still, a downward trend in tax rates was already visible in EU-15 countries since the mid-1990s and thus the reason for this reduction in tax rates is not to be strictly related to new and more fiscally competitive countries entering the European Union. On one hand, EU-15 data show that the median tax rates roughly followed the trend of the average (rates fell between 1995 and the end of the 2000s before again rising and stabilizing in the 2010s). On the other hand, EU-28 data for the past decade show that the average is significantly lower than the median. Some studies reveal that this difference is due to the existence of very low top marginal tax rates in a number of EU countries, among others in Bulgaria (10%), Czechia (23%), Estonia (20%), Hungary (15%), Romania (10%) and Slovakia (25%), which lower the average.

Yet, since the 2008 crisis the average top tax rate has remained almost constant, and European countries have therefore needed to turn to other ways of attracting taxpayers and economic activity

3.1 A special tax regime to attract personal income taxpayers

Statutory tax rates are not the sole instruments governments use to attract income- and wealth-rich individuals.

Some specific preferential regimes only targeting newly incoming residents have been implemented with the dual aim of reinforcing the economic appeal of the country concerned and increasing the tax base and revenues by bringing in foreign high-income taxpayers.

Over time, these schemes are becoming increasingly popular, yet even increasingly aggressive. There is some debate concerning whether these special tax regimes fall within the scope of 'harmful tax competition' and whether they violate the principle of equality and ability-to-pay. Some doubts regarding their constitutional legitimacy may hence be raised. Yet, this is not the most appropriate context for discussing this subject. Indeed, here it is quite interesting to reflect on data: in 1994, only five such schemes (UK and Irish remittance basis schemes; Dutch, Belgian and Danish regimes) were in existence; by 2020, there were 28 (see Figure 2). More than 200,000 taxpayers are currently benefitting from these schemes.

Figure 2: Number of specific personal income tax schemes granted to new residents in the European Union since 1994

Source: EU Tax Observatory, 2021.

A change of tax residence is an element common to all these schemes which, in turn, can vary by the requirements and process of election and by the taxpayers who are being targeted.

The features of these various tax schemes are briefly described in the following sections through analysis of certain national preferential regimes within the EU.

3.1.1 The Italian tax regime for New Resident high-net-worth individuals

Some of these special schemes, like that introduced in Italy by the Finance Law in 2017, target the most affluent taxpayers by offering tax exemptions on various foreign income sources or on worldwide income. In particular, Italy's tax regime is targeted at newly Italian resident high-net-worth individuals. It requires a lump-sum payment of EUR 100,000 per annum in lieu of income tax at normal rates (and wealth tax) for individuals. The new rules apply to individuals who move their residence to Italy from FY 2018 onwards. They exclude non-Italian income and gains from the normal charge to tax, while tax will be due at the usual rates (up to 43% plus local income taxes) on Italian-sourced income and gains. Individuals opting for the regime will also be exempt from the requirements for the tax reporting of foreign income and assets. There is also an exemption from the annual wealth taxes on foreign real estate and financial assets (IVIE & IVAFE) and from inheritance on non-Italian assets. According to the Circular N. 17/E (2017) with which the Italian Revenue Agency provides administrative guidance for interpreting and applying the special tax regime, this is not limited to a particular class of taxpayers: it extends to all returning Italians or foreigners who become residents after having been Italian non-residents for at least 9 of the last 10 preceding years. Tax residence is determined under Italian tax law in accordance with one of three alternative criteria that must be met for more than 183 days during a given tax year:

- entry on the register of the Italian resident population;
- a place of habitual abode (that is, a regular place of living where the taxpayer intends to stay indefinitely, rather than temporarily or for a specific, limited-time purpose); and
- a domicile (that is, the main place of an individual's personal, professional and economic interests).

Once one of these criteria is met, tax residence is retroactive to the first day of the tax year during which any of these criteria have been satisfied. It is reasonable to expect that Italian nationals who were once Italian residents but transferred their residency to a foreign country will receive special scrutiny, and the disclosure of information about their non-Italian tax residence and possible continuing contacts with Italy in the past may expose them to potential audits regarding their non-Italian resident tax years – in addition to making them ineligible for the tax regime. Those who transferred their residence to tax havens will have to overcome the presumption that their tax residency was in Italy unless they demonstrate that they actually moved to and lived in the other jurisdiction. The regime does not limit the activities a taxpayer can engage in while resident in Italy. A taxpayer who opts for the special tax regime is free to work, invest, or operate a business in Italy and can earn Italian wages, investment, or business income on which they will be taxed according to Italy's regular income tax system at the usual graduated tax rates.

3.1.2 Pension tax schemes

Another category of preferential tax arrangement relates to pension schemes: foreign retirees benefit from lower taxation on their foreign-sourced pension income.

An example of this type of scheme is the total exemption from income tax for retirement pensions granted in 2009 by Portugal to retirees newly settled in the country. The regime applies to all individuals who have been granted Non-Habitual Residence (NHR) status in Portugal. To be applicable, they must be non-tax-residents for at least 5 years prior to the qualification and live in Portugal for a minimum of 183 days per year or own a residential property. Hence, buying or renting a house is enough to become a resident and obtain preferential tax treatment. This special feature makes the scheme more extensive than other European tax regimes. Until recently, the Non-Habitual Residence (NHR) regime also allowed for most foreign pension income to be received in Portugal free of tax, although a flat 10% tax rate was introduced in the 2020 Portuguese Budget. This new tax applies after 1 April 2020, albeit existing NHR holders remain eligible for exemptions for the remainder of their 10-year NHR period. However, this 10% tax rate is still a highly attractive option for NHR applicants because it will be lower than the rates that would apply in their home countries and is also significantly lower than Portugal's standard tax rate of between 14.5% and 48%. There is also no inheritance tax, gift tax or wealth tax in Portugal for those with NHR status. Due to the easy accessibility and former zero-taxed income, some EU countries have raised concerns while Finland terminated its DTA with Portugal at the start of 2019 to retain its rights to tax Finnish pension payments.

Pension schemes were first implemented in Portugal in 2009 and in Malta in

2011, followed by Cyprus in 2015, Italy in 2019 and Greece in 2020 (whose regime is closely modelled on the Italian one). The increasing dynamic in establishing these schemes is intensifying the tax competition.

3.1.3 Tax regimes target selected professionals

Other schemes target highly skilled workers by partially exempting or more favourably taxing the domestic income earned in the new tax domicile and are subject to an earnings requirement that must be met by the beneficiary.

Finland's foreign expert tax regime provides a flat tax rate of 32% (prior to 1 January 2020, a flat-rate tax of 35% was applied) on Finnish-sourced salary income for those foreign employees whose work requires special knowledge and who would be otherwise taxed at the normal tax rates applicable to resident individuals. Other conditions are that the cash salary is at least EUR 5,800 in each month during the period of validity of the regime. The regime cannot be applied if the person was resident in Finland within the last five calendar years prior to commencing working in Finland or is a Finnish national.

The following preferential schemes work similarly in other old and new EU member states by targeting specific professions like researchers and scientists – but may also be applicable to artists or professional athletes. For instance, since June 1991 Denmark has offered a 7-year reduced flat-tax rate of 32.84% on domestic salary (compared to a rate of up to 55%), bonuses, company car, free phone and healthcare insurance to certain groups. To be eligible, taxpayers must work, but not necessarily live, in Denmark, have been non-residents for at least 10 years, and either be classified as a researcher or a key employee by having a monthly income of over DKK 70,400 (after the deduction of social security contributions).

In Austria, foreign researchers or scientists who relocate from abroad might be entitled to favourable tax treatment if their relocation is in Austria´s public interest. Two tax privileges exist:

- by retaining the previous foreign tax burden (but at least 15%) on foreign income (section 103 (1) of the Austrian Income Tax Act); and
- by granting a tax allowance of 30% (the 'Zuzugsfreibetrag') of the income from scientific activities taxed at the rate ('immigration allowance') pursuant to section 103 (1a) of the Austrian Income Tax Act.

The first tax advantage also applies to artists and athletes who move to Austria.

In the opinion of the tax authority, one of the basic prerequisites for granting the allowance is that the centre of the researcher's or scientist's life interest is relocated to Austria. The Federal Fiscal Court (BFG 18.07.2017, RV/7100774/2017) confirmed this view, stating that merely establishing a domestic residence is not sufficient for the granting of the tax allowance (case still pending before the Administrative Court under No. 2017/13/0018).

Cyprus offers tax incentives to high-net-worth individuals willing to relocate

to it. The concept of "Non-domiciled", often known as "Non-dom", was first introduced in Cyprus in 2015 by the Special Defence Contribution (SDC) Law. In essence, any non-Cypriot qualifying for a tax residency will automatically be granted the Non-Dom status. The concept is attractive for companies as well as individuals that are location-independent, investors, international high-earning employees, remote freelancers and artists, as well as high-net-worth individuals. Cyprus' Non-dom regime contains a 5-year 20% income tax exemption from all employment engaged in in Cyprus for all workers with an annual salary below EUR 100,000. Individuals with a higher income are eligible for a 10-year 50% exemption from taxation on their income. On top of that, income from dividends, interest, and rental income is tax-free. Non-domiciled tax residents are also exempted from paying social security contributions.

As of 1 January 2020, a favourable Italian tax regime has been in effect to attract 'inbound workers', including sportsmen and sports agents, who earn the majority of their income from activities carried out in Italy. The income from employment, self-employment and the like ("Eligible Income") of inbound workers who become Italian tax residents will be partly exempted from Italian income tax, namely 70% (for inbound workers, other than professional sportspersons) or 50% (for professional sportspersons) of the Eligible Income will be exempted from income taxes ("Tax Incentives"). The 70% exemption will also apply to business profits generated by inbound workers who start a business in Italy after the fiscal year 2020. The new regime:

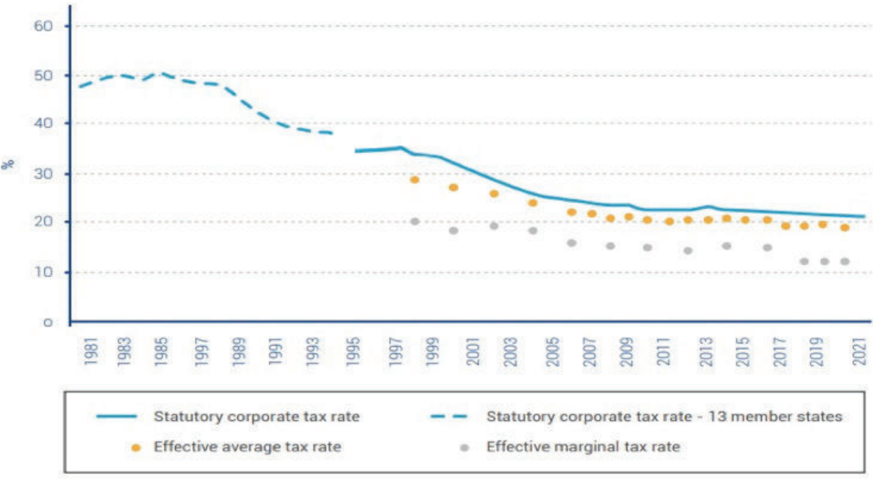
- broadens the category of inbound workers who are eligible for the Tax Incentives;
- increases the ordinary income tax exemption from 50% to 70%;
- provides for a specific income tax exemption (50%) with regard to professional sportspersons; and
- introduces a higher income tax exemption (90%) and an extension of the tax incentives if certain requirements are met.

4 Corporate Tax competition

As is well known, the EU Treaty makes no explicit provision for legislative competences in the area of direct taxation. Legislation on the taxation of companies has usually been based on Article 115 of the Treaty on the Functioning of the European Union (TFEU), which authorizes the Union to adopt directives on the approximation of laws, regulations or administrative provisions of the member states which directly affect the Internal Market; these require unanimity and the consultation procedure. In principle, tensions caused by the spillover effects of individual member states' tax policies on other member states can only be addressed within the official EU framework if they distort competition within the common market. Direct taxation is hence one of the

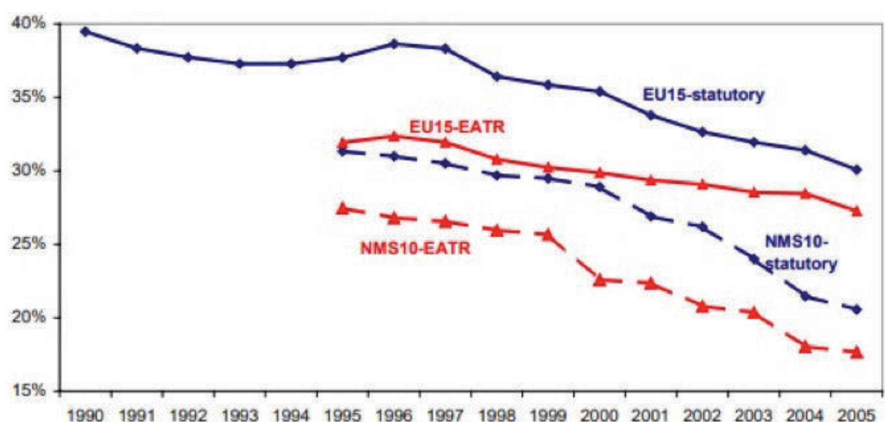
main expressions of the fiscal sovereignty of a State as well as one of the most efficient tools for pursuing socio-economic and financial policies, with the consequence that member states remain reluctant to transfer this power to a higher, supranational level. This means that member states have wide leeway to shape their corporate tax rates structure in a unilateral and competitive way by lowering, inter alia, the corporate tax rate. In general, States lower their statutory tax rates to attract potential investors on one hand, and compensate for the expected or actual losses occurred from the lowering of tax rates by other jurisdictions on the other hand. Although the corporate tax reduction generally creates a positive response in public opinion, it may be considered as a harmful tax competition practice from the point when an excessive decline alters the physical allocation of resources within the Single Market. In the last decades, capital has become more mobile and businesses operating internationally were incentivized to relocate their assets, risks and functions with a view to obtain lower tax rates. There is much concern about the fiscal competition in public discussions in Europe. The idea that European countries are forced to reduce their corporate tax rate to attract foreign investment (small countries) or to limit the capital drain (large countries) is widespread. Focusing the discussion onto the relevant dimension of corporate tax rate is clearly important in view of Figure 3. From the 1990s on, effective average corporate tax rates reveal a clear downward pattern (see Figure 4). Indeed, the analysis shows that the average statutory tax rate in the European Union has declined significantly over the last several decades, from approximately 35% in 1995 to nearly 21% in 2021.

Figure 3: Development of corporate tax rates, 1981–2021



Source: EU Tax Observatory, 2021; European Commission, 2021; Spengel et al., 2020.

Figure 4: Corporate tax rates in the EU-25, 1990–2005



Source: Devereux, Griffith and Klemm; Eurostat; KPMG; OECD; national sources (statutory rates), Overesch (EATR).

The stylized facts regarding the tax competition in the EU are well documented by Devereux et al. (2002), Kogstrup (2004) or Devereux and Sorensen (2005), who while investigating data on corporate income tax revenue with respect to the GDP of several advanced economies, respectively for the 1960–1999 and the 1982–2004 periods, concluded that:

(i) statutory tax rates have fallen;

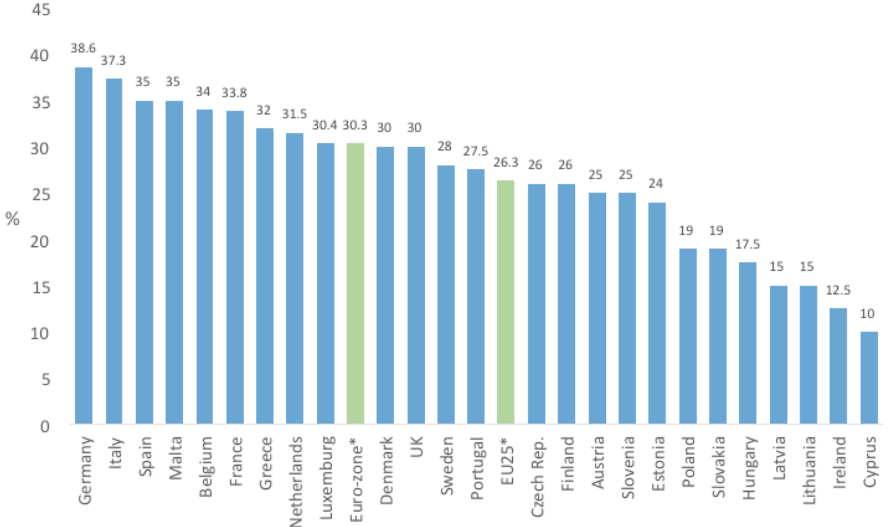
(ii) tax bases have been broadened;

(iii) effective tax rates have fallen; and

(iv) tax revenues have remained stable as a share of GDP.

As shown in Figure 5, the average effective top statutory tax rate on corporate income in the EU-25 in 2005 is 26.3%. The highest effective top statutory tax rates on corporate income are recorded in Germany (38.6%), Italy (37.3%), Spain and Malta (both 35.0%), and the lowest in Cyprus (10.0%), Ireland (12.5%), Latvia and Lithuania (both 15.0%). EU-15 statutory rates declined by 9 percentage points on average between 1996 and 2005. Meanwhile, the statutory rates of new member states fell by 11 percentage points. Hence, the tax discrepancy between the two groups has been slightly widening and nothing like a convergence can be detected at first glance.

Figure 5: Effective top statutory tax rate on corporate income in 2005



Source: Eurostat News release 134/2005, 21 October 2005.

As evidenced by Devereux et al. (2002), the sharp fall in EU-15 statutory rates has been partly offset by base broadening. Still, effective average tax rates have also been declining in the EU-15, especially in the new member states. It is tempting to conclude that this factual evidence is the result of enhanced corporate tax competition, the Single Market having increased capital mobility across EU countries, and corporate taxation being a major determinant of firm location.

In the 2008–2020 period, the rates of corporate income tax continued to be gradually decreased for the purpose of minimizing the effects of the crisis. The same trend can also be seen with regard to 2021 and 2022 (see Figure 6), with the consequence that all the warnings about the risk of triggering a race to the bottom are turning out to be realistic. In particular, the average top rate of taxes on corporate income in the EU-27 was 21.4% at the start of 2021, having dropped 1.5 pp since 2011 (see Figure 7).

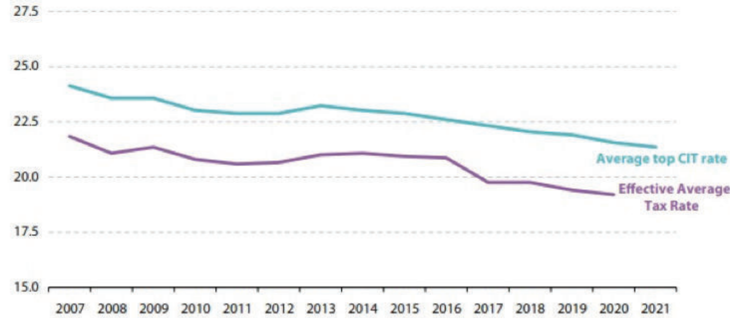
Figure 6: Corporate income tax rate in Europe, 2021–2022

IS 20.0% #15
NO 22.0% #11
FI 20.0% #15
EE 20.0% #15
LV 20.0% #15
SE 20.6% #14
GB 19.0% #21
DK 22.0% #11
IE 12.5% #26
NL 25.0% #5
PL 19.0% #21
DE 29.9% #2
BE 25.0% #5
LU 24.9% #9
FR 28.4% #3
PT 31.5% #1
ES 25.0% #5
IT 27.8% #4
GR 24.0% #10
TR 20.0% #15
LT 15.0% #25
CZ 19.0% #21
SK 21.0% #13
AT 25.0% #5
HU 9.0% #27
CH 19.7% #20
SI 19.0% #21
HR
MT
CY

Combined Statutory Corporate Income Tax Rates
Lower
Higher

Source: Tax Foundation, 2022; OECD Tax Database: Table II.1. Statutory corporate income tax rate.

Figure 7: Top corporate income tax rate and effective average tax rate, EU-27, 2007–2021



Source: European Commission, Taxation Trends in the European Union, 2021.

It must be noted that since 2013 the G20 and the OECD have identified the risk of this 'race to the bottom' as an issue of concern while proposing a comprehensive action plan to tackle the base-erosion and profit-shifting issues. In 2021, in an effort to address this general trend in corporate taxation 137 member jurisdictions of the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) agreed to a deal to set a floor on the benefit that countries can obtain from lowering their tax rates below 15%. As United States Treasury Secretary Janet Yellen stated, "a global minimum corporate tax rate can help ensure everyone pays their fair share and will prevent companies from fleeing to countries with lower corporate tax rates".

Having a common, consistent effective tax rate test as the foundation of the global minimum tax rules ensures a level playing field and establishes a floor for the tax competition.

These facts and trends explain why the European policy debate on tax competition has concentrated only on one dimension, namely corporate taxation. However, a more balanced approach also accepts considering the impact of other factors on location choices (namely, a bi-dimensional analysis).

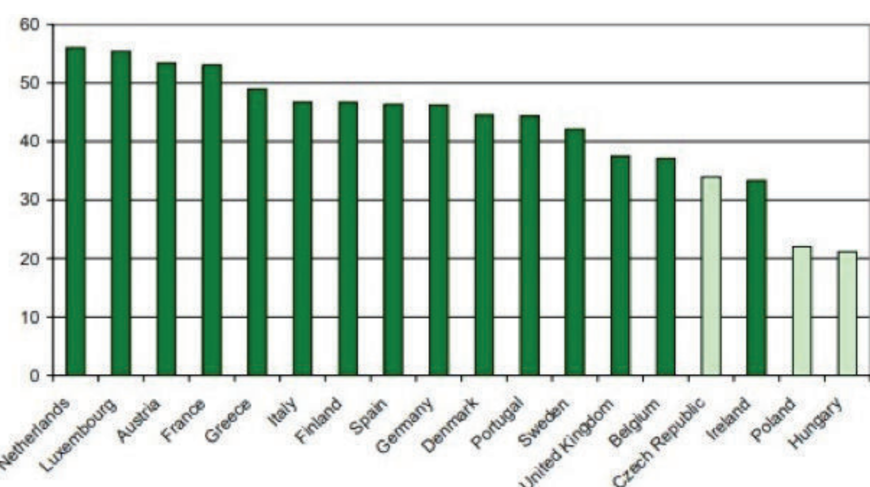
There is no doubt that corporate taxes can affect a country's international attractiveness in the eyes of foreign investors and that firms will prefer to operate in the mildest fiscal environment, all things being equal. Yet, the fact that there are still such huge differences in the corporate tax rate across countries means that they are not on an equal footing with respect to other factors that attract investment. This has been all too evident following the EU's enlargement in 2004. Figure 5 reveals some differences across the old and new EU member states within the general downward trend in the corporate tax rate.

It evidences a strong divide between EU-15 members on one hand and the new member states on the other, with the latter displaying lower statutory rates. There are three exceptions to this general rule. One is Ireland which, after being asked by the European Commission to stop discriminating businesses in terms of tax rates, made its statutory rates converge to a single 12.5% in the early 2000s. The other two exceptions are Austria and Finland, two relatively 'small' countries which are interestingly close geographically to the new member states, and hence especially exposed to tax competition.

By widening the scope of the analysis to include other 'dimensions' handled by the national governments, the criteria by which an investor selects a country are multiple. For instance, the potential for inward foreign direct investment (FDI) calculated by UNCTAD is based on GDP per capita and GDP growth as well as public infrastructures, R&D expenditures, human capital and economic openness. Ernst & Young (2004) list 18 criteria, confirming that the corporate tax rate is one of the factors that explains the attractiveness of countries (e.g., domestic market, transport logistic infrastructure and telecommunication network, flexibility of employment regulations, local labour skills level, R&D quality and capacity etc).

Some interesting scientific studies have recently demonstrated that focusing solely on the tax side of the competition for the location of multinationals may be unduly restrictive. According to the simple and popular model of fiscal competition introduced by Zodrow and Mieszkowski (1986), firms' use of 'public inputs' such as infrastructures, enforcement of property rights, labour education, and public R&D have a positive impact on marginal capital productivity. Hence, the allocation of capital among countries at the equilibrium will depend on their tax rates and on the amounts of their spending on public inputs. Indeed, European countries seem to offer quite a different quality or quantities of public infrastructure (see Figure 8).

Figure 8: Public capital, % of GDP in 2002



Source: Kamps, 2004.

This graph shows the stock of public capital as a share of GDP for the EU-15 countries as well as Poland, Czech Republic and Hungary. The positive correlation between the rankings of countries according to the two criteria is striking. The new member states come at the bottom of the European league together with Ireland. Thus, the 'race to the bottom' documented in Figure 4 may not lead to the same lower bound tax rate for every European country. It can therefore be stated that Graph 4 offers a limited and perhaps biased picture of the global attractiveness of these different EU countries for investors by considering a one-dimensional analysis of location choices.

There is little doubt that high-tax member states are facing strong pressure to cut their level of corporate taxation. Still, this does not mean that corporate tax rates will converge towards zero or the same positive lower bound whatever

the country. Taxes can be used to raise the quantity and quality of public infrastructure, education and more generally public services, which in turn can raise private capital productivity. It may hence be rational for investors to stay in a relatively high-tax country if they find compensation in terms of the quantity or quality of public use.

Although the empirical literature devoted to the double-competition on tax rates and on the provision of public factors is thus far quite limited, some studies have confirmed the importance of the public input. For instance, Gabe and Bell (2004) study the impact of public expenditures and property tax rates on corporate location choices in Maine (USA) from 1993 to 1995. They find that a 10%-rise in education spending leads to a 6%-increase in firm settlings. Their study hence confirms that firms look at the provision of public factors while considering location. According to them, a strategy of low taxation and low provision of public factors appears less rewarding than the opposite strategy of high taxation accompanied with a high level of provision of public goods.

5 Innovation as a key factor in increasing competitiveness

Competitiveness has seen a "declining trend in fundamental aspects of productivity" reclaiming in the digitization era a "transformation toward new economic systems" that will combine "productivity, people and planet targets" (Schwab & Zahidi, 2020) as essential factors for improving competitiveness in the future (Gavurova et al., 2020). In our interconnected world, productivity is linked with the process of the diffusion of innovation and technologies, with infrastructure (inclusive ITC infrastructure), equipment, and new technologies as essential elements. Innovation, seen as linking new ideas to the market or "a process of universal essence that has to be viewed from a systemic perspective" (Manuylenko et al., 2015) is another important factor for increasing competitiveness (Priede & Pereira, 2013).

Innovative activity and capabilities are vital for economic growth and development. Enterprises are the principal agents of innovation. However, enterprises do not innovate and learn in isolation, but in their interactions with competitors, suppliers and clients, with public research institutions, universities and other knowledge-creating bodies. The nature of these interactions, in turn, is shaped by the surrounding institutional framework. In other words, the ability of companies to innovate is intrinsically linked to the environment in which they operate. The complex web within which innovation occurs is commonly referred to as the "national innovation system" or NIS (Nelson 1993; Lundvall 1992b): it is a useful framework for assessing the role of policies in facilitating innovation. Its strength can be influenced by government intervention. This means that sustainable economic development requires countries to do more than simply 'open up' and passively wait for new technologies to flow

in. It demands active, continuous technological effort by enterprises, along with government policies that help firms attract technologies, use them effectively and innovate. Technology requires efforts to absorb and adapt; it has strong 'tacit' elements that cannot be embodied in equipment or codified in instructions or blueprints. Tacit knowledge can only be transferred effectively if the recipient develops capabilities to learn and incorporate the knowledge. It must seek new information, experiment with the technology, find new ways of organizing production and train its employees to acquire new skills.

Comparisons of EU member states reveal a persistent knowledge divide between the 'innovation rich' and 'innovation poor' economies. Overall, important national and regional disparities exist in providing an enabling enterprise and innovative environment in Europe, with Northern and North-western Europe performing more strongly than the lagging southern Europe and Central and Eastern Europe. Addressing this competitiveness divide will require differentiated strategies that take national and regional characteristics into account. While a concerted and united effort is desired from all EU member states to improve Europe's knowledge-driven economy, it is clear from the large regional disparities that the paths leading to this goal, and priorities for improvement, will vary across countries. For instance, innovation strategies for countries higher up the knowledge ladder will differ from strategies appropriate for countries lower down. Yet, for all European economies, investments in knowledge-generating assets will translate into important drivers for future productivity growth – those drivers being a common focus on education, information and communication technologies, the digital agenda, and reforms to improve the overall enterprise environment across the region. Implementing this reform and investment agenda will call for the combined support of government, business and civil society. Namely, key policy objectives include providing an institutional setting that encourages and rewards innovation and strengthens innovative capabilities in domestic enterprises and technology institutions. Competition policy can play an important role in complementing the institutional framework for ensuring that a country's NIS is conducive to innovation.

6 Concluding remarks

The analysis shows the evolution of tax competition within the European Union, especially following its enlargement. The review of the empirical literature and the most relevant trends on tax-induced mobility in the EU-27 suggests that there is indeed scope for tax competition in the area of personal income and corporate taxation, with some differences. While corporate tax rates have continued to fall, the decline of top statutory personal income tax rates has ceased since the financial crisis of 2008. However, many tax incentives have recently been introduced into the personal income tax systems of both old and

new member states, showing that the new face of tax competition is based on a race to have an increasing number of tax preferential schemes for foreign high-income/wealth individuals. Flamant et al. (2021) assume that at least 200,000 individuals in the EU and the UK are currently benefitting from preferential personal income tax arrangements for foreigners. In the context of taxpayers' increasing mobility, concerns about the potential role of such incentives have grown since they effectively amount to revenue losses on other countries and undermine the progressivity of domestic income tax systems.

On the side of corporate tax, the competition has been strongly based on corporate tax rate reductions, particularly around the time of the EU's Eastern enlargement. Still, a bi-dimensional analysis, supported by some theoretical studies and empirical results, reveals the presence since the outset of certain differences in this trend between the new and old member states, in turn suggesting that, on top of general rate cuts, other factors – in the form of public inputs for companies – may play a crucial role in allocation choices.

Indeed, inter alia, FDI, knowledge, innovation and human capital contribute to competitiveness.

Going against the trend of tax competition among the member s that has been underway for a long time, in the last few years greater attention has been paid to the risks of harmful tax competition among the different state sovereignties. Direct tax harmonization in the EU has traditionally been slow in pace and limited in scope. For decades, the member states have guarded their precious tax sovereignty, displaying a strong reluctance to agree upon common solutions in this sensitive field. Some proposals spent years on the EU policy agenda before any progress was made. Yet, this dynamic appears to have changed dramatically in the last few years: the taxing power of the member states has lost its original character of absoluteness so as to take account of the new world taxation order, characterized by the self-limitation of a state's fiscal sovereignty. The obligations and demands arising from participation in the European Union and the world market economy regime are forcing states to define policies and tax systems that are coherent with the political guidelines and the legal constraints found not only on the European but also the international level (consider, for instance, the G20-OECD initiatives for a Global Minimum Tax). This is the era that social science scholars refer to as the "risk society": meaning that some problems exist which require a solution that cannot be obtained through the unilateral intervention of a single country's tax legislator. Harmful tax competition is a typical risk-society problem that calls for mutual cooperation among states for it to be mitigated or eliminated. In other words, such a solution will usually entail a multilateral endeavour rather than an isolated effort.

All European stakeholders must work together and commit to «certain rules of the game» so as to prevent tax competition being used to aggressively minimize tax obligations and reduce countries' tax revenues.

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Chapter 3

Green tax reform – experiences in the old member countries and guidance for the new ones

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1 Introduction

The basic starting point for green taxes is payment by the polluter in the amount of the damage caused by its emissions. The task of the state is to ensure that the costs of pollution are internalized to the greatest extent possible through the introduction of green taxes, which means that the price of the product must reflect all of its production costs. As a result of environmental damage, there is a gap between the private and the social costs of production in the amount of the negative impact on the environment (externality). The reason for the emergence of externalities lies in the fact that the price does not reflect all of the resources used to make a product. The environment does not directly have a price, although the quality of the environment is a public good

The idea of green taxes was first presented by the British economist Pigou in 1920. Following their introduction, producers are motivated to reduce

their level of production to a socially desirable level of production and consumers are motivated to change their consumption patterns. The extent to which the buyer or the producer (polluter) will bear the tax depends on the elasticity of the supply and demand curves for a particular good. In the case of inelastic demand, most of the tax is paid by the consumer while, in the case of elastic demand, the producer pays most of the tax (Turner, 1994).

The EU plays a leading role in the world in the area of introducing green taxes and green tax reform (GTR). The GTR's main goal is for the state to start taxing 'bad' things (pollution, use of natural resources) instead of 'good' things like work, income and capital (Bousqet, 2000). The goal of all countries that have implemented a comprehensive GTR was to simultaneously reduce social contributions (fiscal neutrality) while increasing green taxes, thereby making their own economy more competitive. The aim is to improve the situation in both an environmental and economic sense (Ekins, 2009; Glomm et al., 2008; Siegmeier et al., 2015; De Miguel et al., 2015; Freire-Gonzales, 2018). In relation to the GTR, we have also started using the term "double dividend".

"The EU plays a leading role in the world in introducing green taxes and green tax reform."

In the following, we first define different types of green taxes. In the third section, we present the fiscal importance of green taxes in the new and old EU member states. What then follows is analysis of the results of the GTR in the old EU member states along with a description of certain dilemmas related to its introduction. In the final section, based on the experience of the old EU member states we formulate proposals for implementing a GTR in the new ones.

2 Definition of green taxes

In the definition and classification of green taxes, the motive for introducing them is key. The chief motive for introducing green taxes is not fiscal in nature, but mainly lies in the tendency to reduce environmental

externalities (European Commission, 2009). The EC distinguishes three main types of green taxes:

a) We have energy taxes on transport (gasoline, oil) and for fixed-location purposes (fuel oil, natural gas, coal, electricity). Environmental taxes on energy include excise duties for example. Value-added tax is not an (environmental) energy tax since it is a tax on consumption.

b) Transport tax or tax on motor vehicles are charges related to the ownership and use of motor vehicles, the use of roads and for various transport services (e.g., taxes on air transport). The term "transportation taxes" is somewhat misleading because taxes on gasoline and diesel are included in energy taxes, meaning that perhaps a more appropriate label is taxes on motor vehicles.

c) Taxes on pollution and resource use include two groups of taxes. The first group is represented by taxes on various air and water emissions, solid waste disposal, and noise. The exception is CO2 emissions as they are already included in energy taxes. The second group includes taxes on the extraction and use of natural resources (e.g., oil, gas, water).

The OECD and the European Environment Agency classify over 380 different forms of taxes and 250 duties as green taxes. The largest share of green taxes in OECD countries refers to the first two groups: energy taxes and motor vehicle taxes. In most countries, from a budgetary point of view, energy taxes have the greatest weight given that as taxes on natural resources and pollution and taxes on motor vehicles represent a much smaller tax source. Energy tax in the EU-27 on average generates tax revenues of 1.5%–1.75% of GDP and tax on motor vehicles in the amount of 0.5% of GDP. Taxes on natural resources and pollution on the EU-27 level generate on average tax revenues of 0.1%–0.2% of GDP, and account for the smallest source of tax inflows in all EU-27 countries.

3 The fiscal significance of green taxes in new and old EU member states

The EU is a global leader in the field of green taxes. Table 1 below shows data on the share of revenues from green taxes for the period between 1995 and 2020 in the new and old EU member states.

Table 1: Revenues from green taxes in new and old EU member states, 1995–2020 (in % GDP)

	1995	2000	2005	2010	2015	2020
EU-27	**2.58**	**2.58**	**2.58**	**2.58**	**2.58**	**2.58**
Old member state						
Belgium	2.41	2.41	2.41	2.41	2.41	2.41
Denmark	4.31	4.31	4.31	4.31	4.31	4.31
Germany	2.13	2.13	2.13	2.13	2.13	2.13
Ireland	2.96	2.96	2.96	2.96	2.96	2.96
Greece	3.15	3.15	3.15	3.15	3.15	3.15
Spain	2.12	2.12	2.12	2.12	2.12	2.12
France	2.51	2.51	2.51	2.51	2.51	2.51
Italy	3.45	3.45	3.45	3.45	3.45	3.45
Luxembourg	2.93	2.93	2.93	2.93	2.93	2.93
Netherlands	3.23	3.23	3.23	3.23	3.23	3.23
Austria	2.16	2.16	2.16	2.16	2.16	2.16
Portugal	3.35	3.35	3.35	3.35	3.35	3.35
Finland	2.86	2.86	2.86	2.86	2.86	2.86
Sweden	2.59	2.59	2.59	2.59	2.59	2.59
Iceland	2.32	2.32	2.32	2.32	2.32	2.32
Norway	3.57	3.57	3.57	3.57	3.57	3.57
Average	**2.88**	**2.88**	**2.88**	**2.88**	**2.88**	**2.88**
New member states						
Bulgaria	1.2	2.78	2.96	2.75	2.95	3.03
Czechia	2.62	2.25	2.46	2.27	2.05	1.93
Estonia	0.86	1.69	2.25	2.93	2.73	2.45
Croatia	2.31	2.79	3.31	3.01	3.33	3.28

	1995	2000	2005	2010	2015	2020
Cyprus	2.62	2.47	3.32	2.75	3.04	2.48
Latvia	0.98	2.24	2.51	2.96	3.5	3.1
Lithuania	1.87	2.45	2.3	1.83	1.85	1.93
Hungary	2.55	2.94	2.72	2.64	2.47	2.18
Malta	3.08	3.52	3.06	2.8	2.7	2.27
Poland	1.78	2.14	2.68	2.71	2.65	2.55
Romania	1.75	3.4	2.01	2.11	2.47	1.92
Slovenia	4.11	2.89	3.16	3.61	3.88	2.95
Slovakia	2.44	2.28	2.4	2.07	2.5	2.38
Average	**2.17**	**2.60**	**2.70**	**2.65**	**2.78**	**2.50**

Source: Eurostat, 2022.

We can conclude three things from the table above. First, there are considerable differences between individual countries in the share of green tax revenues. In most EU member states, tax revenues from green taxes amount to between 2% and 3% of GDP. Seven countries have a share below 2% (Romania, Lithuania, Czechia, Germany, Ireland, Spain, Luxemburg) while in six countries the share exceeds 3% of GDP (Croatia, Bulgaria, Denmark, Greece, Italy, Netherlands) in 2020. Second, despite the growing trend of environmental awareness in the EU the share of revenues from green taxes has been falling since 1999 (from 2.6% in 1999 to 2.2% in 2020). In 19 countries, green tax revenue decreased between 1995 and 2020, and in only 9 did it increase. Third, the share of green taxes in GDP is falling in the old member states (from 2.9% to 2.3%) and increasing in the new ones (from 2.2% to 2.5%). In the old member states, the share was higher than in the new member states until 2003. Yet, after 2003, surprisingly, the share of green taxes in GDP in the new EU member states begins to exceed the share in the old ones.

There are various reasons for the declining share of green taxes in the EU. First, countries are increasingly using other instruments in addition to taxes as part of their environmental policy. Second, rising oil prices mean there is growing political pressure to at least partly mitigate this rise by reducing excise duties on motor fuels. Third, despite the ever-rising number of green taxes, the share of tax inflows from the latter is decreasing mainly due to greater energy efficiency and, consequently, lower energy consumption. In the new EU member states, the latter effect is probably somewhat weaker due to the older technological structure in place. This could explain the above differences between the old and new member states.

Table 2 below shows the share of green taxes in total tax revenues in the old and new EU member states in 2020. Large differences are apparent in the table between individual countries in the share of green taxes in total tax revenues. Bulgaria (9.9%) and Latvia (9.8%) have the biggest share of tax revenues in total tax revenues. Germany (4.2%), Luxembourg (3.6%) and Spain (4.7%) have the smallest share of green tax revenues in the total. The table below surprisingly shows that the new EU member states on average have a much higher share (7.48% in 2020) of green taxes in their total tax revenues than the old EU members (5.91% in 2020). At the same time, the share is steadily shrinking in the old member states and growing in the new ones.

Table 2: Share of green taxes in total tax revenues and social contributions (in %) and country rankings in the EU in 2020

	1995	2010	2020	Ranking 2020
Old member state				
Belgium	5.58	5.61	5.82	19
Denmark	9.27	8.92	6.76	14
Germany	5.45	5.77	4.27	27
Ireland	9.22	8.81	6.04	17
Greece	11.11	8.26	9.69	3
Spain	6.78	5.25	4.74	26
France	5.95	4.47	4.78	24
Italy	8.94	6.73	7.11	12
Luxembourg	8	6.32	3.62	28
Netherlands	8.68	9.83	7.97	5
Austria	5.18	5.68	5	23
Portugal	11.47	8	6.76	14
Finland	6.42	6.57	6.52	15
Sweden	5.66	6.21	4.73	25
Iceland	/	7.02	5.56	20
Norway	8.79	6.32	5.25	22
Average	**7.77**	**6.86**	**5.91**	**/**

	1995	2010	2020	Ranking 2020
New member state				
Bulgaria	5.96	10.81	9.89	1
Czechia	7.63	6.89	5.35	21
Estonia	2.45	8.82	7.2	9
Croatia	5.66	8.41	8.85	4
Cyprus	10.52	8.67	7.15	10
Latvia	3.23	10.47	9.82	2
Lithuania	6.78	6.46	6.26	16
Hungary	6.33	7.17	6.01	18
Malta	11.71	9.04	7.66	7
Poland	4.87	8.66	7.12	11
Romania	6.32	8	7.3	8
Slovenia	10.5	9.49	7.84	6
Slovakia	6.19	7.43	6.81	13
Average	**6.78**	**8.49**	**7.48**	**/**

Source: Eurostat, 2022.

Care should be taken while interpreting the data in the above table. First, tax revenues expressed as a share of GDP can increase either due to higher tax rates or due to a drop in GDP (the 2009 and 2020 crises), which means the indicator is somewhat misleading. Second, the mentioned indicators are not an indicator of environmental friendliness since a country can have low tax revenues due to low tax rates or due to extremely high tax rates that significantly change the behaviour of its subjects. Third, many countries offer exemptions from green taxes for social, economic and environmental reasons. Fourth, in many countries the VAT rate rose in 2007 and hence the relative importance of this tax among all taxes has increased. Finally, for green taxes, the tax base is the quantity of products and hence these taxes do not grow in line with inflation as occurs with taxes where the tax base is value (e.g., VAT).

The decrease in the share of collected revenues from green taxes in the old EU member states indicates that the political project of the green tax reform from the 1990s has been completed and congested. A comparison between 1995

and 2020 shows that the share of green taxes in GDP has been continuously decreasing since the end of the GTR in some old EU member states. As a result, many environmentalists in these countries are now calling for a new GTR. At the same time, the relatively high tax rates in the new member states limit the room for manoeuvring. We now consider the results of the GTRs implemented in some old EU member states.

4 GTR results in certain old EU member states

Although all countries have introduced green taxes to some extent, only a few can be said to have implemented a comprehensive green tax reform. A comprehensive GTR means that the state reduces the size of other taxes and/or contributions according to the size of the newly introduced green taxes, which means that the total tax burden remains unchanged (Ludewig et al., 2010; OECD, 2007). Green tax reform means that instead of 'good' things such as work, income and capital, the state begins to tax 'bad' things like pollution and the use of natural resources (Bousqet, 2000).

The goal of the GTR is to improve the situation in environmental and economic terms (Ekins, 2009; Glomm et al., 2008; Siegmeier et al., 2015; De Miguel et al., 2015; Freire-Gonzales, 2018) and we have thus also started to use the term "double dividend" with the green tax reform. The reform was understandably carried out first by those countries characterized by relatively high taxation of labour (Sweden, Denmark, Finland, Germany, Netherlands, UK) as they sought the benefits of a "double dividend". In most of these countries, the new green taxes were introduced on the assumption of fiscal neutrality, which means that other taxes/social contributions were to be reduced accordingly. In this case, we expect that the GTR will improve the state of the environment (environmental dividend) and also enable lower labour costs, greater competitiveness of the economy and in turn lead to higher growth and employment (economic dividend).

As may be seen in Table 3 below, the above-mentioned countries (except for the UK) have achieved their restructuring goals. In all countries, after the start of the reform labour taxation decreased, while at the same time the share of green taxes increased. Only in the UK was the share of income tax in GDP constant throughout the entire period, while the share of green taxes in GDP even declined.

Table 3: Share of income tax and green taxes (% GDP) in certain old EU member states with a green tax reform

Country	GTR start	Tax	1990	1995	2000	2005
Sweden	1990	Income tax	35.8	31	32.2	31.2
		Green tax	2.4	2.8	2.8	2.9
Netherlands	1996	Income tax	25.8	22.1	20.3	17.7
		Green tax	3.1	3.5	3.9	4
Germany	1999	Income tax	20.9	24.9	24.3	22.3
		Green tax	2	2.4	2.4	2.5
Finland	2000	Income tax	24.8	26.1	23.7	23.3
		Green tax	2.2	2.9	3.1	3
Denmark	1994	Income tax	24.1	28	26.6	24.8
		Green tax	3.6	4.4	5.2	5.8
UK	1996	Income tax	14.3	14	14.3	14.4
		Green tax	2.7	2.9	3.1	2.5

Source: Speck, Jilkova, 2009.

The economic dividend was the focus of most countries that have implemented a GTR. Table 4 below shows the positive economic effects of the GTR on GDP in individual old EU member states.

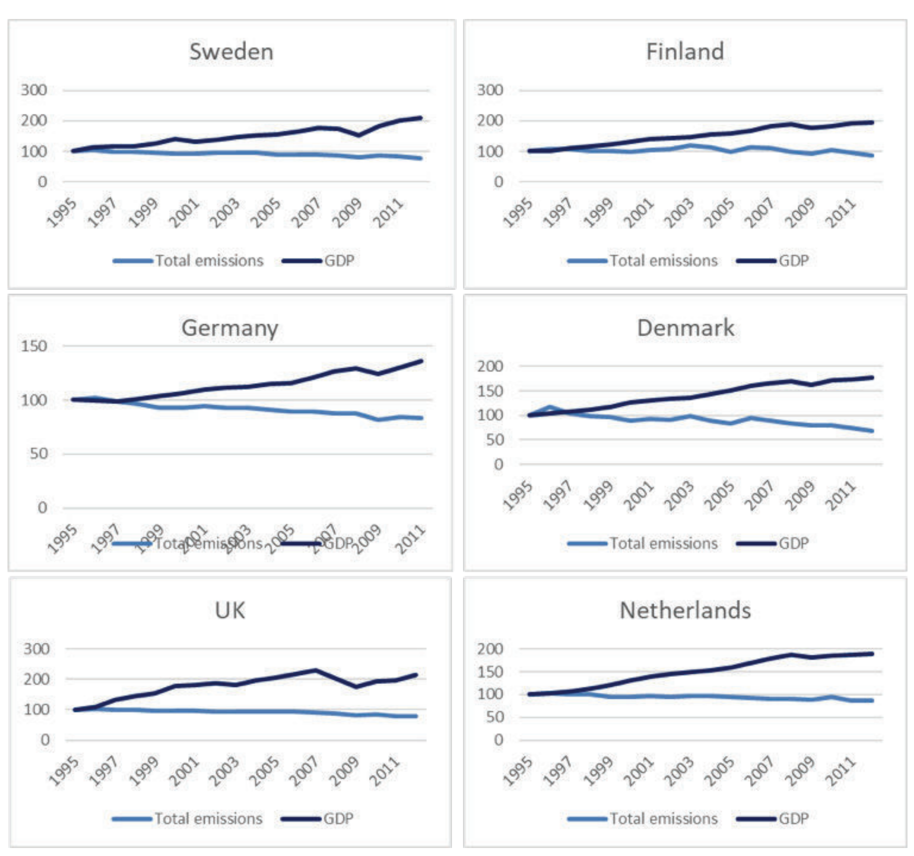
Table 4: Economic effects of the GTR

Country	Economic effect (GDP)
Denmark	Overall positive impact on growth
Finland	GTR leads to positive GDP growth (0.5% on average) in 2012
Germany	GDP would be 0.45% higher in 2003, 0.3% and 0.13% higher in 2010
Netherlands	A small positive impact on GDP of up to 0.2 %
Sweden	GTR leads to a 0.5% increase in GDP in the long run
UK	GDP would only be 0.06% higher by 2010

Source: Sokolovska, 2020.

Although the GTR seems to have led to a rise in GDP, this increase in GDP might be appropriated by increased energy use. Thus, what is more important is the interaction between the economic dividend and the environmental one. It is important to see whether emissions decreased with an increase in economic growth, whether growth has been decoupled from energy use and thereby emissions (Sokolovska, 2020). Decoupling occurs when the correlation between emissions and GDP growth is no longer positive. All countries have achieved decoupling and their emissions have been falling, as evident from the diverging trend lines in the two data series (Sokolovska, 2020). Denmark is the country making the biggest progress as its emissions have nearly halved in the 20-year period observed (see Figure 1).

Figure 1: GDP and emissions in certain old EU member states with a green tax reform (Index 1995=100)



Source: Sokolovska, 2020.

The experience of the old EU member states (e.g., Germany, Netherlands, Sweden) shows that the effects of the GTR were positive in most countries. Despite these positive experiences, some dilemmas often appear in the professional literature, especially regarding regressivity and the potential loss of competitiveness following the introduction of green taxes.

5 Particular dilemmas related to the green tax reform

When introducing a green tax reform, it is necessary to be aware of certain limitations. Analyses show that while C02 taxation has had beneficial environmental effects, green taxes have generally been regressive, placing the greatest burden on those on the lower incomes. The effects of income redistribution are important in every introduction of a green tax (Verde et al., 2009; Kešeljević, Koman, 2014).

Cost increases caused by higher green taxes can lead to a drop in competitiveness, the reallocation of production factors and the loss of market shares. All countries that implemented a GTR neutralized the negative effects through the targeted use of revenues collected through green taxes (eco-subsidies) or via the reduction of income tax/social contributions with the aim of increasing competitiveness, GDP and employment (Hoerner, Bosquet, 2001; Kešeljević. Koman, 2014).

Green taxes are often introduced together with other measures (e.g., regulation, subsidies). The existence of high subsidies for fossil fuels holds negative consequences for the double dividend, which largely depends on the changed habits of economic subjects (OECD, 2017).

Sokolovska (2020) emphasizes the importance of the consistency of changes in the field of green policy and the problem of the limited potential of green taxes. Due to their regressiveness, a significant rise in green taxes is not to be expected, meaning their gradual increase with the simultaneous, transparent and purposeful use of collected tax revenues makes much more sense. At the same time, green taxes represent a relatively small share in the state's revenue structure and so to compensate for the loss of income tax their drastic increase would be needed. There is limited future potential of the GTR because it envisages the replacement of a wide base tax with a narrow base tax. Yet, since the tax rate is typically below 10% in EU countries this leaves some room for further increases and continued environmental tax reforms.

The introduction of green taxes causes distortions in the labour market. In the case of green taxes being introduced, due to the higher prices real income is correspondingly lower and the supply of labour is also affected. The latter may affect the smaller amount of taxes collected from work. In countries where

income taxes are relatively high (e.g., Sweden), the mentioned effect can be significant despite a relatively small change in the labour supply in the market. In countries with a considerable share of the grey economy, it is extremely difficult to predict the effect of increased (green) taxes on the labour supply.

The extent to which the buyer or the producer (polluter) will bear the tax depends largely on the elasticity of the supply and demand curves for a particular good. In the case of inelastic demand, most of the tax is paid by the consumer, while in the case of elastic demand, the producer pays most of the tax (Turner, 1994). From the point of view of sectoral competitiveness, it is necessary to take into account that the negative impact will be stronger in cases where (Kosonen, Nicodème, 2009): (1) there is a relatively small possibility of passing higher taxes into prices due to the high elasticity of demand and the strong competition; (2) there is no possibility of substitution in terms of cleaner and more environmentally friendly technology; (3) there is a high energy intensity in the sector; and (4) when we introduce green taxes in as few countries as possible.

Based on analysis of 139 simulation models, Bosquet (2000) concluded that the effects of a GTR vary in the short and long term. In the short term, the expected effects of a GTR are a significant reduction in CO2 emissions, lower labour costs, and a small increase in employment and economic activity. The effects of a GTR are less visible in the long run (Bousqet, 2000; Gimenez, Rodriguez, 2010), which means consistency is important. Some authors therefore believe that there is no double dividend effect (Kosonen, Nicodème, 2009).

6 Proposals for the implementation of a green tax reform in new EU member states

The experience of the old EU member states (Sweden, UK, Denmark, Finland, Netherlands, Germany) offers a good basis for creating proposals for public policymakers in the new EU member states who want to implement a GTR. Their experience reveals that the following aspects must be considered while designing a green tax reform.

Public and private double dividend. Sokolovska (2020) warns that the green transition requires substantial financial resources and that modern managerial approaches increasingly stress the socially responsible behaviour of companies. Due to the latter, it is necessary to upgrade the existing public finance understanding of the double dividend (only through green taxes) through a greater role of the private sector. The private aspect of the double dividend emphasizes the financial attractiveness of green private investment and is based on the voluntary inclusion of subjects (unlike forced green taxes).

The question of regressivity. Effectively addressing the regressivity involved

is crucial for gaining wider public support for implementation of the GTR. Countries generally use two measures, the exemption of certain groups from the taxation (ex-ante) (e.g., lower tax rates) or transfers to affected groups (ex-post). The problem with the former measure is that it reduces the effectiveness of environmental protection measures. The second measure, which changes existing behavioural patterns, makes more sense. In most countries, the regressivity was almost completely eliminated by both measures (West, Williams, 2004; Kosonen, Nicodème, 2009).

Recycling. Many believe that green taxes are more effective than other environmental instruments due to recycling. Other environmental instruments do not allow the collection of revenues and their intended use and thus their effectiveness is correspondingly lower and the social costs are higher. On the industry level, green taxes may increase costs, but if labour costs are relieved, labour-intensive industries in particular may benefit (Harrison, Kristrom, 1997; Vermeend, Vaart, 1998). In this case, there is a redistribution of the tax burden from companies and sectors according to their energy and labour intensity.

Complementarity of measures. Green taxes can be made more effective if they are introduced along with other instruments (eco-subsidies, labels, certificates of origin, regulation). Subjects are often unaware of what they are buying from the point of view of environmental impact and thus various labels that warn consumers about environmentally harmful consumption and production can help much more. Green taxes are less suitable for controlling how and where

a certain product is used and so in these cases regulation makes more sense. Still, the latter increases the complexity of implementation, which means GTR measures must be coordinated with other policies such as housing and industry.

Gradualness and predictability. The experience of countries shows that predictability and gradualness in the introduction of green taxes increase the likelihood of theme being adopted. The latter gives more time to the proponents of the changes to convince all those affected of the need for the proposed changes. The experiences of Finland, Germany and Denmark are instructive because this way of managing change gives enough time for adjustments and also shows the government's clear intention regarding the future direction. The latter prevents the annual debate on the necessity of tax changes and simultaneously neutralizes political pressure to lower rates due to the higher prices of petroleum products.

Optimal level of the green tax. Kosonen and Nicodème (2009) point out that the amount of the green tax often does not reflect the entire externality and hence the change in consumption habits and production methods will not be as desired. The level of green taxes must be such that it alters the consumption patterns of consumers in the direction of more socially responsible behaviour, and that through their signal, producers become more inclined to improve the existing technology (von Weizsacker et al., 1997; Turner, 1994).

Wide public support. Public information must be clear and targeted. The public must have accurate and convincing information about the causes and

consequences of pollution, as well as the possibilities of effective action. The initiators of the GTR must adequately inform the public, above all, of possible negative impacts on the income situation of the weakest as well as the competitiveness of the economy. Public support will be greater if an effective system of measures to neutralize harmful effects is created. Everything must be accompanied by an appropriate communication strategy and great transparency.

Purposeful use of funds. As a rule, people do not believe promises that the funds collected from a certain tax will be spent on environmental programmes and so the state's commitment must be explicit. It is necessary to make a plan for spending the funds and redirecting them to environmentally friendly projects, affected industry sectors and affected households. If the GTR is part of a broader green public finance reform, the latter helps to facilitate the adoption of the measures.

The issue of competitiveness. It is important to correctly assess the impact of the tax on the competitiveness of an individual sector, which depends mainly on its exposure to international competition and its energy intensity. Exemptions do not encourage restructuring towards a more energy efficient industry and undermine the polluter-pays principle. The state must pay a lot of attention to the issue of competitiveness in order to avoid subsidies and exemptions.

Political-economic reality. The experience of countries shows that the timing of the introduction of the green tax is extremely important because even the most reasonable measures will not be well accepted at certain inopportune moments. As economists, we design the optimal instrument in order to achieve a given goal, but political life also requires the making of compromises. Today, higher green taxes seem much more acceptable due to environmental awareness, public finance deficits and growing public debt. At the same time, Sweden's experience shows that the key to its success was primarily in finding consensus among all political parties on the need to implement a GTR.

Coordination and control. It is necessary to take care of the coordination of the measures, the implementation of the set tasks, and to ensure control over the implementation of the GTR measures. It is necessary to involve the professional public, civil society groups, representatives of ministries and competent offices to participate constructively in the appropriate design, high-quality implementation and effective control of the measures. All of this will give greater legitimacy to the GTR.

7 Conclusion

In the second section we stressed that the basic starting point for green taxes is payment by the polluter in the amount of the damage caused. The state's task is

to ensure that the costs of pollution are internalized through the introduction of green taxes, which encourages polluters to improve the existing technology and consumers to change their consumption patterns.

The comparative analysis revealed large differences between the EU countries in their share of revenues from green taxes in GDP and in their share of green taxes in total tax revenues. Surprisingly, the share of revenues from green taxes is shrinking in the old member states and increasing in the new ones. In the old member states, the share of green taxes in GDP was higher than in the new member states only until 2003. At the same time, surprisingly, the new EU member states on average have a much bigger share of green taxes in their total tax revenues than the old member states. The share of the latter is steadily decreasing in the old member states and increasing in the new ones.

The fall in the share of collected revenues from green taxes in the old EU member states indicates that the political GTR project has been completed to some extent. On the other hand, the relatively high tax rates of green taxes in the new member states limit the possible positive effects of any more radical green tax reform since the narrow tax base means we need a drastic increase in them to compensate for the loss of income tax. Due to the negative impact mainly on competitiveness and regressiveness, green tax reforms were not implemented in some countries or did not achieve the expected goals because they were not fully implemented.

Nevertheless, the experience in the old EU member states shows that the effects of the GTR have been positive in most countries. In all countries, following the start of the GTR labour taxation decreased, while at the same time the share of green taxes increased, meaning that the situation improved in both an environmental and economic sense. Despite the positive experiences, dilemmas regarding the regressivity, lost competitiveness, distortions in the labour market, consistency of changes, limited potential of green taxes and non-supplementation with other measures have appeared most often in the old member states.

In the article, we presented the experiences of some old EU member states in greater detail. We tried to formulate advice for policymakers in the new EU member states. The experience of the old EU member states shows that the key to success lies in a combination of public and private funds, complementary and gradual measures, transparency and strong public support, the purposeful spending of the funds collected, recycling, the effective resolution of the regressivity and loss of competitiveness, coordination of measures and control and in the sense of the political reality.

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Chapter 4

Tax reform in Poland in uncertain times: Challenges and opportunities

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1 Introduction

The COVID-19 pandemic and Russia's invasion of Ukraine have created a challenging environment for policymakers around the world, including in the European Union. Faced with unprecedented levels of uncertainty, governments have been forced to adjust their fiscal policy, largely by increasing their budget expenditure to mitigate the macroeconomic shocks. In these circumstances, tax policy has become even more important since extraordinary fiscal spending requires the reorganization of public budget revenues. By introducing new tax regulations, governments seek to reconcile their short-term needs with long-term impacts on competitiveness and economic growth. A thorough analysis of the latter is critical and should be at the forefront of effective tax planning.

The aim of this chapter is to analyse and evaluate a major tax reform in Poland implemented in 2022 and provide guidance for Polish policymakers regarding its effective implementation, while identifying challenges and opportunities for tax policy. The reform is called the Polish Deal, which

refers to the New Deal introduced by US President Franklin D. Roosevelt during the Great Depression of the 1930s. The chapter is structured as follows. The second section elaborates on taxation trends in Poland and compares them with those in the EU. In the third part, the current state of tax policy in Poland is presented, including the main assumptions of the Polish Deal reform and its scope. The fourth section depicts the challenges and opportunities for tax policy in Poland, focusing on its macroeconomic consequences. The fifth part formulates guidelines for policymakers in Poland to streamline the implementation of tax reforms. Conclusions are presented in the final section.

"Poland is one of the EU countries with relatively low general government revenue."

2 Key country data for taxation trends in Poland and the European Union

Poland is one of the EU countries with relatively low general government revenue. It appears only in the third quartile of countries in the EU with the highest ratio of revenue to gross domestic product (GDP). Poland's ratio of 39.9% is well below the average for the EU of 46% for the period 2010–2021. Only a few EU members have a lower tax-to-GDP ratio, including Bulgaria, Cyprus, Ireland, Latvia, Lithuania, Malta, Romania, Slovakia and Spain (see Table 1). Nevertheless, Poland saw an increase in the government revenue ratio during the 2020–2021 pandemic years, like that which occurred in many other EU countries. The indicator for Poland increased from 41% in 2019 to 42.3% in 2021. In the same period, the ratio for the entire European Union rose by 0.9 of a percentage point (p.p.), from 46% in 2019 to 46.9% in 2021. This growth can be explained to some extent by the fall in GDP across the EU and by active government policies to counteract the economic impact of the COVID-19 pandemic. Governments in EU countries tried to support businesses and households by expanding public expenditure by around EUR 600 billion in 2020 (an increase of around 9% over 2019), which

simultaneously impacted public budget revenues as some taxes (e.g., labour taxation) declined less than GDP (EC, 2021, 2022). The fiscalization rate is even higher in the eurozone (European Monetary Union) where it reached 47.3% in 2021 (mainly driven by countries like Belgium, Denmark, Finland and France with public revenue reaching 50% of GDP or more). In 2021, the share of revenue in GDP in Poland was 11.1 p.p. lower than in Denmark – the EU member with the highest rate. It is worth noting that the EU generally has a significantly higher revenue ratio than the average for the Organization for Economic Co-operation and Development or the United States (a discrepancy exceeding 5 p.p.) (EC, 2022). According to the latest forecast by the European Commission from spring 2022, however, the EU revenue ratio is expected to decrease in 2022 and beyond to below the 2019 value (EC, 2022).

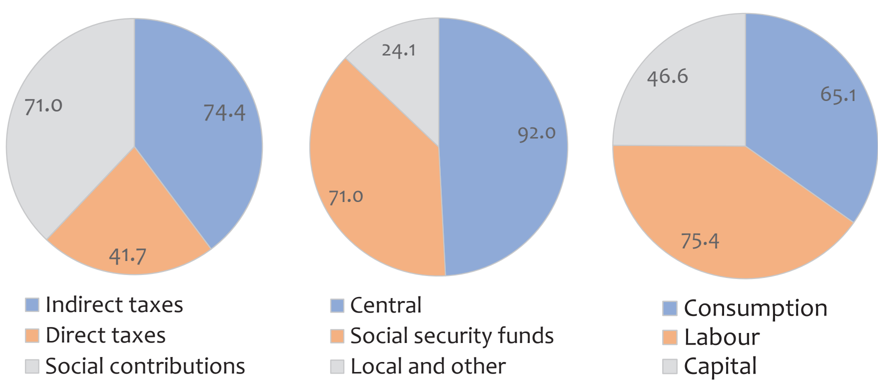
Table 1: Total general government revenue in Poland and other EU countries in the period 2010–2021

Year	EU quartile	Average 2010–2021	Change in the ratio 2021/2019 (p.p.)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
European Union	-	46.0	**0.9**	44.6	45.1	46.1	46.7	46.6	46.2	46.0	45.9	46.2	46.0	46.2	46.9
Euro area	Q1	46.3	**1.0**	44.6	45.2	46.3	46.9	46.8	46.5	46.3	46.2	46.4	46.3	46.5	47.3
Poland	**Q3**	**39.9**	**1.3**	**38.4**	**39.1**	**39.4**	**38.8**	**39.0**	**39.1**	**38.7**	**39.8**	**41.3**	**41.0**	**41.3**	**42.3**
Austria	Q1	49.1	0.8	48.4	48.3	49.0	49.7	49.7	50.1	48.5	48.5	48.9	49.2	49.0	50.0
Belgium	Q1	51.1	-0.6	49.8	51.0	52.2	53.0	52.5	51.3	50.8	51.3	51.4	49.9	50.2	49.3
Bulgaria	Q4	36.5	0.6	32.5	32.0	33.5	37.0	37.8	38.5	35.1	37.1	38.7	38.4	38.1	39.0
Croatia	Q2	44.5	0.1	42.1	41.1	42.9	42.8	43.2	44.8	45.9	45.5	45.5	46.3	47.2	46.4
Cyprus	Q3	38.7	2.7	37.1	36.5	36.4	37.4	40.6	39.7	37.7	38.4	39.1	39.7	39.3	42.4
Czechia	Q3	40.8	-0.9	39.5	40.5	40.8	41.4	40.5	41.3	40.5	40.5	41.5	41.4	41.6	40.5
Denmark	Q1	53.7	-0.4	54.0	54.4	54.5	54.6	56.4	53.2	52.4	52.3	51.3	53.8	53.8	53.4
Estonia	Q3	39.3	0.4	40.5	38.5	39.0	38.6	38.5	39.6	39.0	38.8	38.9	39.6	40.3	40.0
Finland	Q1	53.0	0.4	51.4	52.6	53.3	54.3	54.3	54.1	53.9	53.0	52.5	52.4	51.6	52.8
France	Q1	52.5	0.5	50.0	51.1	52.1	53.1	53.3	53.2	53.0	53.5	53.4	52.3	52.5	52.8
Germany	Q2	45.5	1.3	43.8	44.4	44.9	45.0	44.9	45.1	45.5	45.5	46.2	46.5	46.5	47.8
Greece	Q1	48.0	0.4	41.7	44.7	47.6	49.4	47.1	48.2	50.2	49.1	49.5	49.0	49.8	49.4
Hungary	Q2	45.0	-2.8	44.4	43.8	46.8	47.4	47.3	48.4	45.0	44.3	44.0	43.9	43.4	41.1
Ireland	Q4	28.7	-1.5	32.8	33.7	34.1	34.2	34.0	27.0	27.3	25.9	25.5	24.7	22.3	23.2
Italy	Q1	47.0	1.4	45.7	45.6	47.6	48.1	47.9	47.8	46.7	46.3	46.2	46.9	47.4	48.3
Latvia	Q4	37.7	0.0	37.2	38.0	37.4	37.3	37.3	37.2	37.5	37.9	38.5	37.6	38.8	37.6
Lithuania	Q4	34.6	2.5	35.5	33.6	33.0	32.9	34.1	34.9	34.5	33.6	34.5	35.2	35.7	37.7
Luxembourg	Q3	42.8	-2.0	41.7	42.2	42.3	42.1	41.9	41.7	41.9	42.6	45.1	45.2	43.7	43.2
Malta	Q4	37.9	0.8	37.9	38.9	38.8	38.6	38.7	37.7	37.5	37.7	37.9	36.7	36.9	37.5
Netherlands	Q2	43.6	0.1	42.8	42.7	43.1	43.9	43.8	42.9	43.8	43.8	43.8	43.9	44.1	44.0
Portugal	Q2	43.2	2.7	40.5	42.4	42.7	44.8	44.4	43.8	42.9	42.4	42.9	42.6	43.5	45.3
Romania	Q4	33.1	0.9	33.1	34.2	33.9	33.5	34.2	35.5	32.0	30.8	32.0	31.9	32.7	32.8
Slovakia	Q3	39.1	1.3	34.8	37.2	36.9	39.7	40.3	43.0	40.1	38.6	38.8	39.4	39.9	40.7
Slovenia	Q2	44.6	0.1	44.6	44.2	45.4	45.7	45.3	45.9	44.2	44.0	44.2	43.8	43.5	43.9
Spain	Q3	39.0	4.4	36.5	36.4	37.9	38.9	39.2	38.8	38.2	38.2	39.2	39.3	41.5	43.7
Sweden	Q1	49.9	-0.6	50.3	49.4	49.9	50.2	49.2	49.3	50.7	50.6	50.7	49.7	49.4	49.1

Note: General government revenue as % of GDP. The change in the ratio in percentage points. This category encompasses market output, output for own final use, payments for non-market output, taxes on production and imports, other subsidies on production, receivable property income, current taxes on income, wealth etc., net social contributions, other current transfers and capital transfers. Quartile Q1 represents the group of EU countries with the largest ratio (measured as % of GDP, based on the average for the period analysed), whereas quartile Q4 represents the group of EU countries with the lowest ratio. European Union – 27 countries (from 2020). Euro area – 19 countries (from 2015).
Source: Own compilation based on Eurostat, 2022.

The COVID-19 pandemic caused a visible change in the taxation structure in the EU. Financial support packages, lockdowns and distant working have resulted in an increase in the share of social security contributions, which changed the fairly even distribution among indirect, direct taxes and social contributions that had prevailed in earlier years (the share of indirect taxes fell by 0.8 p.p. and the share of social contributions increased by the same magnitude – EC, 2022). In Poland, however, the distribution is slightly different than for the EU as a whole. The significance of direct taxes is relatively low – they accounted for only 22.3% of total revenue (or EUR 41.7 billion) in 2020 as compared with 37.9% for social contributions (or EUR 71 billion) and 39.8% for indirect taxes (or EUR 74.4 billion). Among direct taxes, personal income tax (PIT) constitutes around two-thirds (or EUR 27.6 billion), corporate income tax and other direct taxes approximately one-third (or EUR 14.1 billion) (see Figure 1). Social contributions are in turn divided into those paid by employers (38% of all contributions paid or EUR 27 billion) and households (62% or EUR 44 billion). Among indirect taxes, the biggest revenue source is value-added tax (EUR 41.9 billion with a share of 56.3%), followed by taxes on products (EUR 19.2 billion or 25.8%), other taxes on production and imports (EUR 13.3 billion or 17.9%). Most of Poland's tax revenue is generated by the central government (49.2% or EUR 92 billion in 2020) and social security funds (37.9% or EUR 71 billion). Local governments and other institutions generated around 12.9% or EUR 24.1 billion in the first year of the pandemic. From the point of view of the economic function, the largest part of the revenue relates to labour taxation (40.3% or EUR 75.4 billion in 2020) and consumption taxation (34.8% or EUR 65.1 billion). Taxes on capital account for only 24.9% (EUR 46.6 billion) and may be divided into taxes on self-employed income (EUR 23.6 billion), corporate income (EUR 11.9 billion), stock of capital (EUR 9.7 billion) and household income (EUR 1.4 billion) (EC, 2022). Tax structures by tax type and by level of government follow the European System of National and Regional Accounts (ESA 2010) classifications. In turn, the tax structure by economic function and implicit tax rates are developed by the European Commission Directorate-General for Taxation and Customs Union (EC, 2022).

Figure 1: Distribution of tax revenue in Poland in 2020



Note Amounts in EUR billion. The left panel depicts the distribution by type of taxation. Indirect taxes include VAT, taxes and duties on imports, taxes on products and other taxes on production. Direct taxes include PIT, CIT and other income tax. Social contributions include contributions paid by employers and households. The middle panel depicts distribution by the level of government. The right panel shows the distribution by economic function.

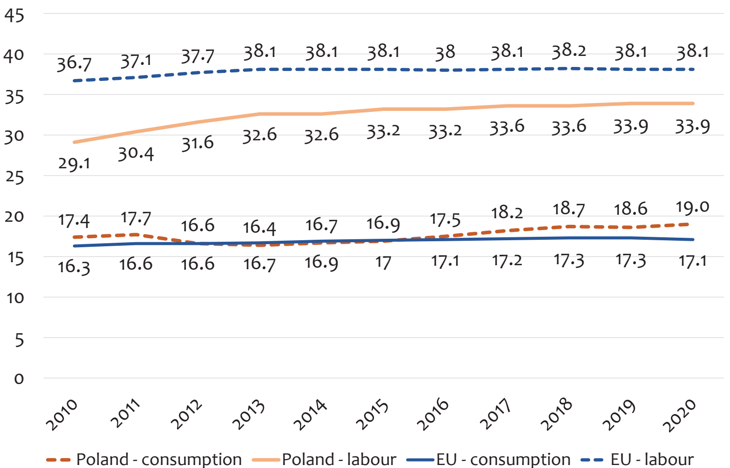
Source: Own compilation based on EC, 2022.

A country's international competitiveness largely depends on the actual tax rates applied to different types of income. The implicit tax rate (ITR) measures the actual or effective average tax burden levied on different types of income or economic activities. The ITR on consumption is estimated by dividing the consumption taxes collected by the tax base. This rate applied to consumption in Poland is visibly higher than in the entire European Union. At 17.6% on average between 2010 and 2020, it is 0.7 p.p. higher than the figure for the EU (16.9%). This discrepancy increased significantly in recent years to 1.9 p.p. in 2020 (see Figure 2). While the ITR for Poland has risen steadily since 2012 (from 16.6% in 2012 to 19% in 2020), the increase for the EU has been much smaller (from 16.6% in 2012 to 17.1% in 2020). Moreover, the ITR for the entire EU fell in 2020 for the first time in the last decade (EC, 2022). This was mainly due to a drop in standard value-added tax rates in EU countries like Germany or Ireland. Nevertheless, rates for VAT, which is the main contributor to the ITR on consumption, increased in most EU members, especially in Malta and Latvia (EC, 2022).

In turn, the ITR on labour is significantly lower in Poland than in the EU. The average rate for the period 2010–2020 amounts to 32.5% for Poland compared with 37.8% for the EU. The ITR on labour approximates an average effective tax burden on labour income and is estimated as the sum of all direct and indirect taxes and social contributions levied on employed labour income divided by

the wages of employees working in a given country (EC, 2022). While the ITR on labour for the EU increased only moderately between 2010 and 2022 (by 1.4 p.p.), the rise in the rate for Poland was significant (by 4.8 p.p.). This means that Poland is gradually losing tax competitiveness in this area (the favourable divergence for Poland dropped to 4.2% in 2020 compared with 7.6% in 2010). In 2020, the ITR on labour was 33.9% for Poland and 38.1% for the EU (see Figure 2). It is worth noting that the ITR on labour varies substantially across the EU countries, from 23.6% for Malta to 44.1% for Italy (EC, 2022).

Figure 2: Implicit tax rates in Poland and the European Union in the period 2010–2020



Note: Rates in %; European Union – 27 countries.

Source: Own compilation based on EC, 2022

The main source of taxation revenue for the general government sector in Poland is the tax on production and imports. This category consists of taxes levied by the general government with respect to the production and import of goods and services, the employment of labour, and the ownership or use of land, buildings or other assets used in production. Revenue from this tax rose, measured as a percentage of GDP, by 1.4 p.p. up to 15.2% between 2019 and 2021 (see Table 2). Even though – based on the increase in its tax-to-GDP ratio during the pandemic – Poland is the top country in the EU, it only appears in the third quartile of the EU when it comes to the level of this ratio. Its average of 13.6% for the period 2010–2021 is significantly lower than in countries like Croatia, Hungary or Sweden where the average exceeded 18%. It is worth noting that the slight increase in the tax-to-GDP ratio during the first year of the pandemic occurred despite a decline in nominal taxation revenues. This was a result, as mentioned, of the drop in GDP.

Table 2: Taxes on production and imports in Poland and other EU countries in the period 2010–2021

Country	EU quartile	Average 2010–2021	Change in the ratio 2021/2019 (p.p.)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
European Union	-	13.4	**0.1**	12.9	13.1	13.4	13.5	13.5	13.5	13.4	13.4	13.5	13.5	13.2	13.6
Euro area	Q3	12.9	**0.2**	12.4	12.6	12.9	13.0	13.1	13.0	13.0	13.0	13.0	13.0	12.8	13.2
Poland	**Q3**	**13.6**	**1.4**	**13.7**	**13.8**	**13.0**	**12.9**	**12.9**	**12.9**	**13.4**	**13.8**	**14.0**	**13.8**	**13.9**	**15.2**
Austria	Q2	14.2	0.0	14.3	14.3	14.6	14.5	14.3	14.3	14.3	14.1	13.8	13.9	13.7	13.9
Belgium	Q3	13.4	0.0	13.2	13.3	13.7	13.6	13.5	13.2	13.5	13.4	13.5	13.4	13.2	13.4
Bulgaria	Q2	14.9	0.8	13.8	13.8	14.3	15.3	14.9	15.3	15.4	15.3	14.7	15.3	15.1	16.1
Croatia	Q1	18.6	-0.4	17.4	16.9	17.9	18.3	18.3	18.8	19.0	19.2	19.6	19.7	18.7	19.3
Cyprus	Q2	14.3	-0.1	14.2	13.6	13.9	13.7	14.9	14.7	14.6	14.7	14.9	14.5	13.3	14.4
Czechia	Q3	11.9	-0.4	11.1	11.8	12.3	12.6	11.8	12.1	12.2	12.3	12.0	11.9	11.4	11.5
Denmark	Q1	16.1	-0.1	16.2	16.3	16.3	16.4	16.2	16.3	16.2	15.9	16.0	15.8	16.0	15.7
Estonia	Q3	13.9	-0.5	13.7	13.4	13.8	13.4	13.7	14.2	14.6	14.1	13.9	14.2	13.6	13.7
Finland	Q2	13.9	-0.2	12.9	13.7	14.0	14.3	14.3	14.0	14.3	13.9	14.1	14.0	13.9	13.8
France	Q1	15.9	0.0	14.7	15.1	15.3	15.5	15.7	15.8	15.9	16.2	16.4	16.7	16.9	16.7
Germany	Q4	10.8	0.4	10.9	11.0	11.0	10.9	10.7	10.8	10.7	10.6	10.6	10.6	10.3	11.0
Greece	Q1	15.8	-0.7	12.7	13.8	14.1	14.4	15.8	16.2	17.3	17.3	17.4	17.3	16.4	16.6
Hungary	Q1	18.0	-0.4	17.2	17.2	18.5	18.5	18.4	18.6	18.0	17.8	18.0	17.9	18.1	17.5
Ireland	Q4	9.0	-0.8	10.8	10.4	10.5	10.8	10.9	8.6	8.7	8.3	7.9	7.7	6.4	6.9
Italy	Q2	14.4	0.2	13.8	14.0	15.1	14.8	15.2	14.9	14.3	14.3	14.4	14.3	13.7	14.5
Latvia	Q3	13.4	-0.5	12.2	12.5	12.6	13.0	13.3	13.5	14.0	13.9	14.3	14.0	14.2	13.5
Lithuania	Q4	11.5	0.7	11.8	11.6	11.1	11.0	11.2	11.6	11.7	11.6	11.5	11.5	11.6	12.2
Luxembourg	Q3	11.6	0.3	11.7	12.0	12.2	12.2	12.7	10.7	10.8	11.1	11.4	11.3	10.9	11.6
Malta	Q3	12.1	-0.7	13.2	13.3	12.8	12.4	12.7	11.8	11.9	11.7	12.1	11.5	10.7	10.8
Netherlands	Q4	11.4	0.3	11.0	10.8	10.6	10.9	11.3	11.1	11.5	11.5	11.7	12.0	12.3	12.3
Portugal	Q2	14.4	0.3	13.2	13.8	13.8	13.7	14.2	14.6	14.7	14.9	15.1	15.0	14.6	15.3
Romania	Q3	11.7	0.1	11.9	13.1	13.2	12.7	12.7	13.3	11.3	10.3	10.4	10.6	10.4	10.7
Slovakia	Q4	11.5	0.4	10.3	11.1	10.6	11.2	11.5	11.6	11.5	11.9	11.8	12.0	12.1	12.4
Slovenia	Q2	14.1	-0.5	14.0	14.0	14.4	14.9	14.8	14.7	14.6	14.2	14.0	13.7	12.7	13.2
Spain	Q4	11.2	0.6	9.9	9.6	10.2	11.1	11.5	11.7	11.6	11.6	11.7	11.5	11.3	12.1
Sweden	Q1	21.9	-0.3	22.0	21.6	21.9	21.8	21.5	21.5	22.4	22.3	22.3	21.9	21.4	21.6

Note: Taxes on production and imports as a % of GDP. The change in the ratio in percentage points. Quartile Q1 represents the group of EU countries with the largest taxes (measured as a % of GDP, based on the average for the period analysed), whereas quartile Q4 represents the group of EU countries with the lowest ratio. European Union – 27 countries (from 2020). Euro area – 19 countries (from 2015).

Source: Own compilation based on Eurostat, 2022.

Net social contributions also constitute a key element of tax revenues of the general government in Poland. This category includes contributions made by households to social insurance schemes to fund social benefit payments. Between 2010 and 2021, the average income as a share of GDP was 13.5% (see Table 3).

However, during the pandemic years this share of social contributions in GDP fell slightly (from a pre-pandemic level of 14.2% in 2019 to 14% in 2021). Poland appears in the second quartile of countries across the EU with the highest ratio. It must be stressed that the significance of net social contributions varies enormously in the EU, with an average of just 1% for Denmark and 18.1% for France.

Table 3: Net social contributions in Poland and other EU countries in the period 2010–2021

Country	EU quartile	Average 2010–2021	Change in the ratio 2021/2019 (p.p.)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
European Union	-	14.3	0.2	14.1	14.2	14.4	14.4	14.4	14.2	14.3	14.3	14.3	14.1	14.6	14.3
Euro area	Q1	15.3	0.3	15.1	15.1	15.3	15.5	15.4	15.2	15.3	15.2	15.2	15.0	15.6	15.3
Poland	**Q2**	**13.5**	**-0.2**	**11.8**	**12.2**	**13.1**	**13.4**	**13.3**	**13.5**	**13.8**	**13.9**	**14.1**	**14.2**	**14.5**	**14.0**
Austria	Q1	15.2	0.5	14.8	14.8	14.8	15.2	15.2	15.1	15.1	15.2	15.2	15.4	16.1	15.9
Belgium	Q1	16.1	-0.3	16.2	16.5	16.7	16.8	16.6	16.4	15.8	15.7	15.5	15.4	16.0	15.1
Bulgaria	Q4	7.9	0.5	6.6	6.7	6.8	7.4	7.8	7.8	7.7	8.2	8.7	8.8	9.2	9.3
Croatia	Q3	11.6	0.0	11.9	11.8	11.5	11.3	11.8	11.8	11.7	11.7	11.5	11.3	11.7	11.3
Cyprus	Q4	8.8	1.3	8.0	7.9	7.8	7.6	8.3	8.3	8.2	8.4	8.5	10.3	11.2	11.6
Czechia	Q1	15.0	1.1	14.5	14.6	14.7	14.6	14.5	14.3	14.7	14.9	15.4	15.5	16.0	16.6
Denmark	Q4	1.0	0.0	1.3	1.3	1.2	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8
Estonia	Q3	11.8	0.2	13.0	11.8	11.4	11.2	11.1	11.4	11.5	11.7	11.8	12.0	12.7	12.2
Finland	Q2	12.3	0.2	12.2	12.1	12.7	12.7	12.7	12.7	12.8	12.1	12.0	11.9	11.6	12.1
France	Q1	18.1	0.1	18.1	18.3	18.5	18.8	19.0	18.8	18.7	18.7	18.0	16.7	17.0	16.8
Germany	Q1	16.9	0.5	16.6	16.4	16.6	16.6	16.5	16.6	16.7	16.8	17.0	17.2	18.1	17.7
Greece	Q1	14.2	0.4	13.3	13.4	14.1	13.6	13.6	13.8	14.3	14.7	14.6	14.5	15.4	14.9
Hungary	Q2	12.5	-1.2	11.8	12.9	13.7	13.4	13.2	13.2	13.7	12.8	12.1	11.7	11.2	10.5
Ireland	Q4	5.1	-0.5	5.7	6.4	6.1	6.1	6.0	4.6	4.8	4.6	4.5	4.5	4.1	4.0
Italy	Q2	13.3	0.3	13.3	13.1	13.3	13.4	13.2	13.2	13.0	13.0	13.2	13.5	13.9	13.8
Latvia	Q4	9.2	0.1	8.8	9.1	8.9	8.8	8.7	8.6	8.5	8.7	9.5	10.0	10.4	10.1
Lithuania	Q3	11.5	0.7	12.1	11.4	11.2	11.1	11.4	11.9	12.5	12.5	13.0	10.0	10.7	10.7
Luxembourg	Q3	11.9	-0.6	11.6	11.8	11.9	11.8	11.5	11.6	11.5	11.9	12.1	12.3	12.6	11.7
Malta	Q4	6.3	0.6	6.7	7.0	6.8	6.6	6.4	6.0	6.1	5.9	5.9	5.7	6.4	6.3
Netherlands	Q1	14.4	-0.3	13.5	14.2	15.1	15.3	15.2	14.5	15.2	14.3	14.4	13.9	14.1	13.6
Portugal	Q3	11.9	1.0	11.9	12.0	11.4	12.0	11.8	11.6	11.6	11.6	11.6	11.8	12.8	12.8
Romania	Q3	9.7	0.1	9.4	9.1	8.8	8.6	8.5	8.1	8.8	9.4	11.4	11.3	11.9	11.4
Slovakia	Q2	14.1	0.9	12.2	12.2	12.4	13.5	13.7	13.9	14.4	14.8	14.9	15.2	15.7	16.1
Slovenia	Q1	16.0	0.8	16.1	15.9	16.2	15.8	15.6	15.7	15.7	15.7	15.7	16.0	17.2	16.8
Spain	Q2	12.8	1.4	12.8	12.7	12.6	12.4	12.5	12.2	12.2	12.3	12.4	12.9	14.5	14.3
Sweden	Q4	3.3	-0.1	3.1	3.3	3.3	3.4	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.3

Note: Net social contributions as a % of GDP. The change in the ratio in percentage points. Quartile Q1 represents the group of EU countries with the smallest contributions (measured as a % of GDP, based on the average for the period analysed), while quartile Q4 represents the group of EU countries with the largest ratio. European Union – 27 countries (from 2020). Euro area – 19 countries (from 2015).
Source: Own compilation based on Eurostat, 2022

Another source of public sector taxation revenue is the tax on income and wealth. This category encompasses taxes levied by the general government on the income and wealth of institutional units and some periodic taxes which are assessed neither on that income nor that wealth. Poland's average tax-to-GDP ratio for 2010–2021 of 7.3% is relatively low by EU standards (see Table 4). In this respect, Poland belongs to the third quartile of countries across the EU. Nevertheless, this ratio increased in the pandemic years (from 7.9% in 2019 to 8.4% in 2021), which was not the case for some EU members like Belgium, Croatia, Czechia, France, Greece, Hungary and Luxembourg. It is worth noting that the share of income and wealth taxes in GDP varies enormously across the EU, with 31.2% for Denmark and only 5.1% for Romania in 2021.

Table 4: Current taxes on income and wealth in Poland and other EU countries in the period 2010–2021

Country	EU quartile	Average 2010–2021	Change in the ratio 2021/2019 (p.p.)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
European Union	-	12.7	0.3	11.7	11.9	12.4	12.7	12.7	12.7	12.7	12.9	13.0	13.0	13.0	13.3
Euro area	Q2	12.5	0.4	11.5	11.7	12.3	12.5	12.5	12.5	12.6	12.8	12.9	12.9	13.0	13.3
Poland	**Q3**	**7.3**	**0.5**	**6.7**	**6.7**	**7.0**	**6.8**	**6.8**	**6.9**	**7.1**	**7.3**	**7.8**	**7.9**	**7.9**	**8.4**
Austria	Q1	13.3	0.3	12.7	12.8	13.1	13.4	13.7	14.2	12.8	13.0	13.6	13.7	13.0	14.0
Belgium	Q1	16.1	-0.1	15.4	15.9	16.2	16.7	16.7	16.3	16.0	16.6	16.8	15.7	15.7	15.6
Bulgaria	Q4	5.4	0.6	4.6	4.6	4.6	5.0	5.2	5.4	5.6	5.9	5.8	5.8	5.9	6.4
Croatia	Q4	6.3	-1.1	6.5	6.3	6.2	6.6	6.2	6.1	6.4	6.2	6.3	6.5	6.5	5.4
Cyprus	Q3	9.8	1.2	9.4	10.1	9.9	10.4	10.4	9.9	9.3	9.5	9.5	9.4	9.7	10.6
Czechia	Q3	7.8	-1.7	7.2	7.4	7.4	7.6	7.7	7.7	8.0	8.1	8.5	8.5	8.5	6.8
Denmark	Q1	30.1	0.0	28.5	28.4	29.2	30.2	33.2	30.6	29.6	29.8	28.4	31.2	31.3	31.2
Estonia	Q3	7.3	1.2	6.6	6.3	6.6	7.2	7.4	7.8	7.5	7.2	7.5	7.4	7.8	8.6
Finland	Q1	16.1	0.7	15.4	15.8	15.5	16.1	16.3	16.5	16.4	16.4	16.0	16.0	16.0	16.7
France	Q2	12.6	-0.1	11.2	11.7	12.4	12.9	12.7	12.7	12.5	12.8	13.2	13.1	13.2	13.0
Germany	Q2	12.4	0.3	11.0	11.4	11.9	12.1	12.1	12.3	12.7	12.9	13.2	13.2	12.7	13.5
Greece	Q3	9.8	-0.5	8.3	9.4	11.0	10.5	9.8	9.5	10.2	10.0	10.4	9.7	9.2	9.2
Hungary	Q4	6.7	-1.0	7.7	6.2	6.7	6.5	6.7	6.8	7.2	7.1	6.6	6.6	6.7	5.6
Ireland	Q2	11.3	0.5	11.7	12.1	12.7	12.8	12.8	10.6	10.7	10.3	10.5	10.2	10.0	10.7
Italy	Q1	14.5	0.6	14.1	13.8	14.8	14.9	14.6	14.7	14.6	14.4	14.0	14.4	15.1	15.0
Latvia	Q3	7.6	0.2	7.3	7.5	7.7	7.7	7.8	7.8	8.3	8.5	7.4	7.0	7.2	7.2
Lithuania	Q4	6.1	1.0	4.6	4.3	4.8	5.0	5.0	5.4	5.6	5.4	5.7	8.9	8.8	9.9
Luxembourg	Q1	14.6	-1.2	13.5	13.5	13.5	13.4	13.1	13.8	14.3	14.7	16.8	16.8	15.9	15.6
Malta	Q1	12.9	1.0	11.9	12.3	12.7	13.1	13.2	12.4	13.1	13.1	12.7	13.0	12.9	14.0
Netherlands	Q2	11.7	0.3	11.0	10.5	10.0	9.9	10.5	11.3	11.5	12.7	12.5	13.2	13.2	13.5
Portugal	Q2	9.9	0.0	8.4	9.4	8.9	11.3	10.9	10.7	10.1	9.9	10.1	9.7	10.1	9.7
Romania	Q4	5.7	0.2	5.8	6.1	5.8	5.9	6.2	6.6	6.4	6.1	4.9	4.9	4.7	5.1
Slovakia	Q4	6.7	0.1	5.5	5.6	5.7	6.2	6.7	7.1	7.2	7.2	7.3	7.3	7.3	7.4
Slovenia	Q3	7.6	0.1	8.0	7.8	7.5	7.0	7.2	7.2	7.5	7.5	7.9	7.8	7.8	7.9
Spain	Q2	10.2	1.5	9.1	9.2	10.0	10.0	10.1	9.9	9.9	10.1	10.6	10.4	11.2	11.9
Sweden	Q1	18.1	0.0	18.1	17.5	17.4	17.7	17.8	18.3	18.9	19.0	18.6	18.1	18.1	18.1

Note: Current taxes on income and wealth as a % of GDP. The change in the ratio in percentage points. Quartile Q1 represents the group of EU countries with the largest taxes (measured as a % of GDP, based on the average for the period analysed), whereas quartile Q4 represents the group of EU countries with the lowest ratio. European Union – 27 countries (from 2020). Euro area – 19 countries (from 2015).
Source: Own compilation based on Eurostat, 2022.

3 The current state of tax policy in Poland

During the current economic crisis triggered by the COVID-19 pandemic, Polish policymakers have reacted proactively and decided to overhaul the tax legislation. This reform is called the Polish Deal, which refers to the New Deal introduced in the USA in the 1930s and aims to make the economy more resilient and the social system fairer. In general, under the new regulations the tax system is more progressive, eliminating areas of tax evasion and tax optimization and easing the burden on lower-income taxpayers. The Polish government claims that the effect of the reform is approximately USD 18 billion per annum or USD 160 billion until 2030. The reform has been implemented in 2022. The regulations are contained in a bill passed on 29 October 2021 by the Polish Parliament that amends the Personal Income Tax Act, the Corporate Income Tax Act, and other acts (for information about the Polish Deal reform, also see Sobański (2021a). The main elements of the reform with regard to personal income tax regulations include (Deloitte, 2022a; EC, 2022; KPMG, 2022; PWC, 2021; SRP, 2022):

- raising the PIT tax-free allowance to PLN 30,000 (around USD 7,000), which is closer to the thresholds applied in the old European Union member countries;
- raising the tax threshold separating the two PIT tax brackets, from PLN 85,528 to PLN 120,000 (around USD 27,000) – the upper bracket is still subject to a 32% tax rate;
- middle-class relief for contractors and self-employed in the form of an income deduction, individually estimated according to the income earned, with the aim of compensating for the unfavourable changes in the rules governing the methods for assessing tax liability (discontinuation of the health insurance premium deduction, i.e., the 7.75% health insurance premium can no longer be deducted from the tax liability);
- tax-exempt pensions of PLN 25,000 or lower (around USD 600);
- zero PIT for large families raising at least four children, i.e., a PIT exemption for families of 4+ with an annual income of up to PLN 85,000, which is to encourage Poles to have more children;
- child benefit scheme for parents of young children (aged 1-3 years) of up to 12 thousand PLN (around 3 thousand USD);

- relief for taxpayers returning from abroad, i.e., a PIT exemption on selected income earned in four consecutive tax years by citizens relocating after 31 December 2021, with the aim to attract Poles living abroad back to Poland; and
- relief for working seniors, i.e., a PIT exemption of selected income of citizens who have reached retirement age but are continuing with their economic activity in order to further support their professional engagement.

All of these measures, which have narrowed the national PIT tax base, came into effect on 1 January 2022. The Polish government estimates that under the Polish Deal approximately 18 million Polish citizens should benefit from paying less PIT. Beyond this, at the same time the Polish government implemented a measure to broaden the national tax base – a new optional method of taxing foreign income for individuals provided that they transfer their tax residence to Poland (lump-sum tax of PLN 200,000 annually). Problems with the smooth implementation of the Polish Deal have led the Polish government to introduce several important amendments to the new bill since 1 July 2022, with a cost to the state budget of around PLN 7 billion in 2022 and PLN 24 billion in 2023 (Podatnik, 2022; Notes, 2022):

- the PIT rate for the lower bracket (income up to PLN 120,000) has been reduced from 17% to 12%, applicable from 1 July 2022, while the newly introduced middle-class relief has generally been simultaneously abandoned (in order to simplify tax liability estimations);
- the preferential taxation for single parents has been reinstated; and
- healthcare contributions might again be deductible for self-employed entrepreneurs operating under the flat-tax system.

The Polish Deal also entails several changes of a significant nature with regard to the PIT of the self-employed and unincorporated businesses (EC, 2022). These include (EC, 2022):

- a robotization relief allowing up to 50% of robotization costs to be written off from the tax base at the end of the tax year; eligible costs include: the purchase of new robots, machines and peripheral devices used to ensure ergonomics and work safety, systems for remote management and human-machine interaction, associated intangible assets and training services;
- a tax relief for prototypes, allowing tax base deductions of 30% for the costs of new products incurred in the testing phase, before they are launched on the market; the deduction cannot exceed 10% of income from non-agricultural activity;
- a relief for business expansion, which allows expenses for business expansion like promotional activities or participation at trade fairs to be deducted twice – one time as tax-deductible costs, and then as deductions from the tax base of up to PLN 1 million (thus, the maximum tax benefit amounts to PLN 190,000 annually);

- a tax relief for the employment of innovative employees conducting research and development (R&D) activities, designed for entrepreneurs at an early stage of their business cycle who generate losses or insufficient income to deduct the qualified R&D costs, also allowing the deduction of R&D costs from tax advances calculated from the income of innovative employees (if the business tax base is insufficient);
- a regulation allowing the simultaneous use of R&D and IP Box reliefs for entrepreneurs conducting R&D activity, commercializing products and deriving income from intellectual property rights (IP), according to which qualified R&D costs are deducted from the tax base (R&D tax relief) and then the IP income is taxed at a tax rate decreased by 5 p.p. (the IP Box incentive has been available in Poland since 2020) – both tax incentives apply at the same time;
- a tax incentive to support selected areas of social life (higher education, science, sports, culture), this so-called Corporate Social Responsibility (CSR) relief allows such qualified expenses to be deducted twice – once as tax-deductible costs, and then from the tax base in the amount of 50% of those costs;
- decreases in flat-tax rates on registered revenue for selected categories of professionals, such as doctors and engineers (a reduction to 14% of revenue) or IT staff (12% of revenue);
- amendments made to the R&D tax relief, including an increase in the deduction of qualified staff costs to 200% for all R&D centres (except for patent costs which the deduction has not altered); and
- a relief for the acquisition of payment terminals whereby outlays for the purchase and operation of a payment terminal are deducted twice – as tax-deductible costs and also as a deduction from the tax base up to the prescribed amount ranging from PLN 1,000 to PLN 2,500.

Most of these measures aim to support entrepreneurs in innovative sectors engaged in the commercialization of innovative products. All of the aforementioned regulations came into effect on 1 January 2022 and have led to a narrowing of the tax base for businesses and thus to tax relief. However, other amendments impose new burdens, for example, healthcare contributions by the self-employed are now calculated as for employment contracts – on a pro-rata basis to income. Further, corporations have witnessed material changes in tax regulations, especially in the area of innovation-targeted tax relief (EC, 2022). The corporate income tax was amended in 2022, among others, using the following measures (EC, 2022; KPMG, 2022; SRP, 2022):

- a new tax, the 'Minimum CIT' with a 10% tax rate, has been imposed on companies that incur tax losses or have profitability below 1% (as measured by the ratio of income to revenue), with the tax base estimated as the sum

of the following elements: a) 4% of revenues; b) deferred income tax related to intangible or fixed assets; and c) 'excess expenses' (including that part of interest costs attributable to related entities exceeding 30% of EBITDA, and that part of the costs of intangible services such as advisory, management or royalties paid to related entities or entities seated in tax havens, exceeding PLN 3 million increased by 5% of tax EBITDA); the minimum CIT paid for a given year is deductible from tax liability estimated based on general provisions; some entities are excluded from this regulation (e.g., financial, mining, marine or air transportation companies; those owned exclusively by individuals and not having shares in other entities; start-ups; or corporations facing a sudden fall in their revenues of at least 30%);

- modification of the distributed profit tax (the 'Estonian CIT') by reducing the tax rate to 20% for larger entities and 10% for smaller ones; including limited partnerships, limited joint-stock partnerships and simple joint-stock companies as eligible entities, simplifying the conditions for eligibility (abandoning of the obligation to incur specific investment outlays and concerning the income threshold);
- tax relief supporting larger companies such as the consolidation relief – allowing the deduction of costs connected with the acquisition of other companies, and the relief for initial public offerings (IPOs) – allowing costs to be deducted that relate to an initial public offering of shares in the equity market;
- the conditions for establishing tax capital groups have been relaxed, i.e. the share capital each member of the tax capital group requires has dropped by 50% to PLN 250,000; share cross-holdings among subsidiaries and selected restructuring processes (such as mergers or spin-offs) within the capital group have been allowed; while the requirement to demonstrate income profitability of 2% (ratio of income to revenues) has been abandoned – in general, these are neutral amendments from the perspective of the tax base assessment;
- provisions counteracting tax evasion by, among others, extending the definitions of the tax resident, the controlled foreign entity (CFC), and the beneficial owner; the clarification that the excess of interest costs exceeding PLN 3 million (or 30% of EBITDA) is not tax deductible; the 'pay and refund' mechanism of collecting withholding taxes on passive income (e.g., dividends, interest, licence fees) in transactions with related entities;
- a tax exemption for a holding company (limited liability company or joint stock company) for 95% of dividends received from its subsidiaries (both Polish and foreign) and for 100% of profits from shares in subsidiaries sold to unrelated entities; the exemption applies when certain conditions are met, including when at least 10% of a subsidiary's share capital is held directly for at least 1 year; and
- the business expansion relief has been implemented also for corporations

in the same form as for unincorporated businesses, with the maximum tax benefit amounting to PLN 190,000 annually; the same holds for the cashless payments relief, CSR relief, robotization relief, the relief for the employment of innovative employees performing R&D activities, the relief for prototypes, the regulation allowing to simultaneously use R&D and IP Box reliefs, the provision increasing deductions of qualified staff costs to 200% for all R&D centres.

Most of the abovementioned measures in the area of corporate income tax have narrowed the tax base or decreased the tax rates for businesses. Further, the value-added tax (VAT) provisions have been significantly modified in Poland, starting from the early months of the COVID-19 pandemic. In addition, from 2022 an anti-inflationary package decreasing VAT rates for selected products (such as fuel, basic food, natural gas, system heat, and fertilisers) has been temporarily introduced – in two stages, initially from 1 January 2022 (Anti-inflation shield 1.0) and then from 1 February 2022 (Anti-inflation shield 2.0) – prolonged until the end of October 2022. These measures included (Deloitte, 2022b; EC, 2022; PM, 2022; Reuters, 2022):

- implementation of the shortest VAT refund period in the EU of 15 days, available to retailers using only online registers (meeting some additional criteria), with the automated verification of the refund conditions;
- provisions allowing capital group companies not to settle VAT for internal transactions;
- a 0% VAT rate temporarily implemented as of 1 February 2022 for basic food (previously taxed at 5%), natural gas (taxed at 8% from 1 January 2022 and 23% previously), items used in agricultural production;
- a 5% VAT rate temporarily implemented for electricity (as of 1 January 2022, previously taxed at 23%) and for system heating (as of 1 February 2022, taxed at 8% from 1 January 2022; 23% before);
- an 8% VAT rate temporarily implemented as of 1 February 2022 (replacing the regular rate of 23%) for motor fuels and bio-component fuels;
- the EU VAT e-commerce package – new regulations for cross-border business-to-client (B2C) sale transactions, in effect from July 2021;
- a 0% VAT rate temporarily implemented for donations of medical and pharmaceutical products to public organizations, and the renovation of buildings of public healthcare institutions (during the epidemic state, in effect from June 2021);
- an 8% VAT rate reintroduced in August 2020 for selected equipment for blind persons; and
- beyond this, the anti-inflation shield 1.0 waived the excise duty on electricity and reduced it on fuel.

4 Challenges and opportunities for tax policy in Poland and the EU

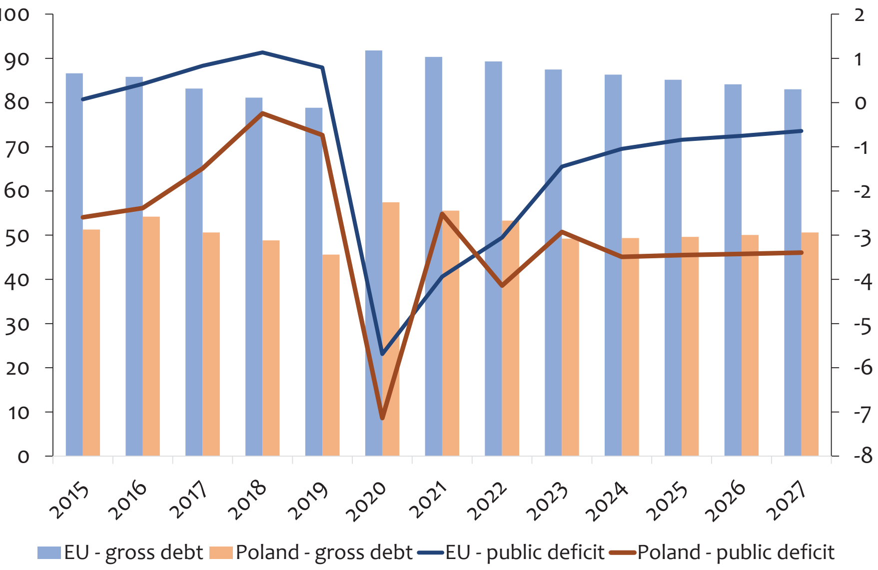
The Polish Deal reform and anti-inflation shields pose a serious challenge from the perspective of the sustainability of public finance in Poland, especially as they have been implemented at a time of economic crisis created by the COVID-19 pandemic and exacerbated by the war occurring on the edge of the European Union – in Ukraine. On one hand, the tax reform aims to revive demand in the Polish economy after the economic slowdown caused by the pandemic, thus providing a chance for a faster recovery. On the other hand, however, the tax reforms might lead to reduced tax revenue (particularly in the case of PIT taxation) during a period of increased public expenditures, and thus to a further deterioration of the fiscal stance. One should bear in mind that public finances are already strained by the consequences of the pandemic and the war in Ukraine. First, governments across the world, including the EU and Poland, were forced to design significant aid packages for citizens and businesses during lockdown periods in 2020 and 2021, which has considerably added to public debt levels. Then, inflationary pressures originating from the pandemic and the turmoil in the commodity and goods markets have further deteriorated the situation. The Polish government addressed this issue with another fiscal package, lowering rates of VAT and excise duty for selected goods in 2022, to slow the surge in inflation.

The share of gross domestic debt in Poland's GDP increased by 11.8 p.p. from 45.6% in 2019 to 57.4% in 2020 as a result of the sizable general government budget deficit in the first year of the pandemic (see Figure 3). The ratio of public budget deficit to GDP rose to 7.1% in 2020 from just 0.7% in the previous year. The extent of deterioration of the fiscal stance in the whole EU was quite similar - the budget balance (as a % of GDP) decreased from +0.8% to -5.7% (by 6.5 p.p.) and gross debt rose by 13 p.p. Nevertheless, Poland's indebtedness is still much lower than for the European Union, where the ratio reached 91.8% of GDP at the end of 2020. The sizable difference in the debt ratio of 34.4 p.p. at the end of 2020 translates into a relatively better fiscal capacity in Poland and thus the ability to respond to future adverse events. On a positive note, the IMF expects the fiscal balance for both the EU and Poland to gradually improve in the medium term. Still, the forecast for the EU indicates a larger fiscal consolidation than with Poland. Although the general government in Poland managed to slash the deficit to 2.5% of GDP, the forecast for 2022 shows it rising again to 4.1% of GDP. This is largely driven by the Polish Deal and the two anti-inflation shields implemented from 2022 onwards. In the coming years, the deficit for Poland is expected to remain at an elevated level of slightly over 3% of GDP (i.e., clearly above the EU average), while public debt is forecast to fall to 53.3% of GDP at the end of 2022 (well below the 60% threshold prescribed by the Maastricht

convergence criteria) and further below this level.

Figure 3: Fiscal capacity - gross domestic debt and public budget balance in Poland and the European Union in the period 2015–2027

Note: Gross debt incurred by the general government (left axis, % of GDP). The public deficit is measured by the general government's primary net lending/borrowing (right axis, % of GDP). Estimates start after 2020.



Source: Own compilation based on IMF, 2022a.

The above projections are put at risk by several risk factors looming on the horizon. Key among these is rising inflation, which might lead to a further depreciation of the Polish zloty despite rising interest rates. Inflation jumped to 8.6% at the end of 2021 compared with just 2.4% in 2020. The IMF forecast from April 2022 for the whole year is 8.1%, but the CPI level realized (data from the main Statistical Office) in June 2022 is already 15.5% per annum as compared with 13.9% in May (IMF, 2022a; GUS, 2022). In this environment, the National Bank of Poland is forced to sharply adjust interest rates. The reference rate rose from 0.1% in September 2021 to 6.5% in June 2022, still well below the inflation level, keeping real interest rates negative (NBP, 2022). On 20 June 2022, the yield on 10-year Treasury bonds in Poland reached a 5-year peak of 8.1%, well above the yield of 3.71% at the end of 2021. During this period, debt-servicing costs in the EU rose just from 0-0.5% to 2.5%, on average (Arak, 2022). On

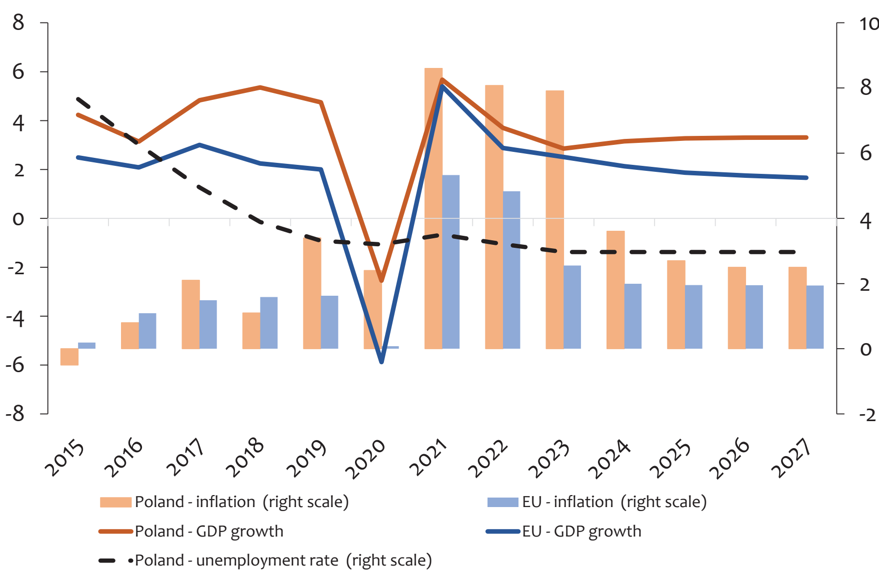
> "The government in Poland faces unprecedented uncertainty in the planning of public finances."

the one hand, the mix of depreciating domestic currency and rising interest rates might increase the budget deficit in Poland beyond the forecast via the debt-servicing cost channel. Although the 10-year Treasury bond yield decreased slightly to 5.36% on 8 August 2022, it still results in an elevated level of servicing burden (Investing, 2022). The government expects its debt cost to double to PLN 70 billion in 2022 from the previous year (RP, 2022). This affects financial creditworthiness and, consequently, financing capacity. Moreover, the depreciation of the Polish zloty might negatively affect the public debt ratio since approximately one-third of Polish public debt is denominated in foreign currencies (valuation effect). On the other hand, rising prices support the government through a positive effect on budget revenues ('inflationary tax'). Overall, however, the government faces unprecedented uncertainty in the planning of public finances. This is why the dispute with the European Commission related to the National Reconstruction Plan is such a serious challenge for the Polish government. Acceptance of the programme by the European Commission could give the government EUR 23.9 billion (approximately PLN 114 billion) in non-repayable grants, which it could use for investment in the energy, transport and high-tech industries, plus EUR 11.5 billion (around PLN 55 billion) in preferential loans with costs based on the relatively low interest rates in the euro area (as debt is raised by the European Commission on behalf of the European Union) (Arak, 2022). The inflows from the EU could largely solve the problem of the rising macroeconomic tensions, have an appreciating effect on valuation of the Polish zloty, contain inflation, and make Polish public finances more resilient to increasing interest rates.

Macroeconomic forecasts for Poland indicate that the growth rate is expected to slow down to 3.7% in 2022 and even faster in the coming years, as compared with an average of 5% in the pre-pandemic period 2017–2019 (see Figure 4). This is still more dynamic growth than that

seen in the European Union (2.9% expected in 2022). At this pace of growth, Poland is expected to maintain its low unemployment rate, which should fall below pre-pandemic levels in the coming years (to 3.2% in 2022 and 3% thereafter). Nevertheless, the inflation rate differential between Poland and the EU should exert downward pressure on the zloty's valuation (macroeconomic developments in Poland and the EU during the COVID-19 pandemic are discussed in Sobański (2021a, 2021b, 2022c).

Figure 4: Macroeconomic developments in Poland and the European Union in the period 2015–2027



Note: Inflation is measured based on consumer prices at the end of the year (right scale, %). The unemployment rate is measured by the National Statistics Office in Poland (right scale, %). Growth in GDP is estimated in constant prices (left scale, %). Estimates start after 2020 (for unemployment) or 2021.

Source: Own compilation based on IMF, 2022a, 2022b, 2022c.

The current economic turbulences might negatively affect the general living standard in Poland. As Brzeziński et al. (2021) show, inequalities in living standards have increased significantly throughout the post-transition years. The Gini coefficients estimated by these researchers rose by 14%–26% already between 1994 and 2015. This indicates that Poland has become one of the most

unequal European countries, having been a relatively unequal country already in the early 1990s. Moreover, income at the top increased the fastest during the post-transition period as the progressivity of direct taxation fell to the lowest level in the EU. On one hand, the rapidly rising inflation (especially related to food and energy products) might further exacerbate the inequalities observed. On the other hand, changes in the PIT regulations can deter these tendencies.

5 Policy recommendations for Poland

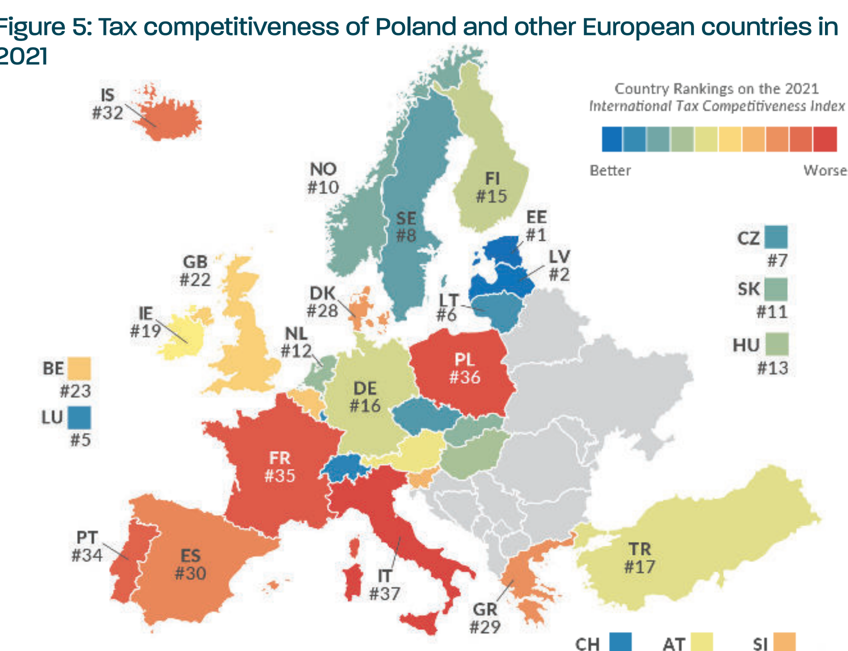
The tax reform that started in Poland in 2022 is one of the biggest reforms of this kind implemented in the last three decades. It officially aims to boost the economy in the turbulent times of the COVID-19 pandemic and the war in Ukraine. Despite the sizeable scope of this reform, it was planned within a relatively short period (approximately a few months), which led to confusion in its implementation. The following guidance should streamline the sustainability of future tax policies in Poland.

First, future reforms of tax legislation should be carefully planned and consulted upon with taxpayers. There is no point to add uncertainty in uncertain times by changing the tax rules at very short notice. With the introduction of the Polish Deal, the tax system was supposed to become fairer and more equitable by lowering the taxation burden for low-income citizens and increasing it for top-income taxpayers. Unfortunately, it soon became apparent that even low-income citizens needed to pay larger tax advances and were not gaining from the new regulations. It turned out that, despite the relatively large increase in the tax-free amount, a higher tax threshold and new tax exemptions, the tax burden that was larger than the health contribution, hitherto mostly deductible, was transformed into an additional tax. This resulted from interpretative chaos with the new tax rules coming into effect in January 2022. As the Polish Deal was drafted at a fast pace and the general rules were made public no earlier than May 2021, there was insufficient time for tax authorities, advisors and accountants to familiarize themselves with them. The Polish legislator did not adequately address the worries expressed by entrepreneurs that the new regulations might start wide-scale disputes with the tax authorities (Sobański, 2021a). Consequently, the government, even after initially blaming accountants for the problems with implementation, was finally forced to patch up the brand-new legislation several times and amend the Polish Deal project already soon after its implementation. Entrepreneurs began to become lost in the new regulations. In the future, the vacatio legis for new regulations should be much longer than the approximately 2 months given in the case of the Polish Deal. It is obvious that taxpayers need time to adapt their systems to any new tax environment.

Second, policymakers should not put short-term financing needs or political objectives ahead of long-term economic competitiveness. A country's tax law

is one of the key factors determining its economic performance in the long term. Transparent and easy-to-apply tax legislation fosters economic growth, which positively affects the government revenue collected. Complex and non-transparent tax systems might distort the decision-making by economic agents and can contravene the sustainability of public finances. A competitive tax system offers low marginal tax rates and, thus, can attract international investors and discourage tax avoidance. In turn, a neutral tax system is able to raise the most revenue with the least economic distortion and does not favour consumption over saving, or offers no targeted tax breaks (Bunn and Asen, 2021). The designers of the Polish Deal failed to take into account that the Polish tax system is relatively complex and any reform should lead to its simplification rather than further complication. The planned lowering of the tax burden on low earners (which is desirable) came at the expense of increasing its complexity. The Polish system was already perceived as unfriendly in the world before the Polish Deal came into effect. Poland was ranked 36th overall in the 2021 International Tax Competitiveness Index among 37 OECD countries (with only Italy's tax system ranked lower) (see Figure 5).

Figure 5: Tax competitiveness of Poland and other European countries in 2021



Note: International Tax Competitiveness Index for 2021; the index is estimated for a group of 37 OECD countries.
Source: Tax Foundation, 2022

In 2021, the Competitiveness Index, which compares tax systems across the OECD with regard to their competitiveness and neutrality, reached 45.7 for Poland compared with 100 for Estonia or 85.1 for Latvia. The rank for Poland has gradually deteriorated in recent years. In 2019, Poland was ranked 33rd, while a year later the rank had dropped to 36th. The main weaknesses of the Polish tax law, mentioned by experts, concern consumption taxes (37th position in the 2021 ranking), property taxes (31st position) and cross-border tax rules (29th position). In contrast, Poland ranks in the middle in terms of corporate taxation (14th place in the OECD) and individual taxation (12th place). Still, although Poland is quite competitive in terms of the rate and progressivity of its wage taxation (6th rank) and the extent to which the individual income tax double taxes corporate income (16th rank) (Poland has signed a large number of avoidance of double tax treaties with foreign countries; Bunn and Asen (2021) state 81 treaties), the Polish individual tax system is perceived as relatively complex (30th rank) (Bunn and Asen, 2021). The same applies to corporate taxation – although the CIT rate and rules for cost recovery in Poland seem competitive (ranked 5th and 14th in the OECD, respectively) (the corporate tax rate in Poland of 19% is below the OECD average of 22.9% (Bunn and Asen, 2021)), the CIT taxation is not neutral and is complex (28th position).

Last but not least, implementation of the new tax legislation should be carefully monitored and analysed. The impact of the Polish Deal ought to be analysed from a wider perspective. The fiscal policy effects should also be evaluated from the perspective of monetary policy and the policy mix. With inflation soaring in the post-pandemic period, the National Bank of Poland is rapidly raising interest rates (the reference rate was lifted from 0.1% in September 2021 to 6.5% in July 2022). The level of restrictiveness of monetary policy also depends on the scope of relaxation of the fiscal policy. Any decrease in public revenue as a result of the Polish Deal might require a larger hike in interest rates and hence a bigger interest burden on indebted economic agents.

6 Conclusion

Like other EU members, Poland has been severely affected by the current global crisis caused by the COVID-19 pandemic and the war in Ukraine. During this difficult time, policymakers in Poland have reacted proactively and decided, among others, to overhaul the tax legislation. The reform, known as the Polish Deal, came into force in 2022 and is one of the largest such reforms implemented in Poland in the past three decades. The government claims that it aims to make the economy more resilient and improve the fairness of the social system in Poland. Generally, the new law makes the tax system more progressive by reducing the burden on low earners and seeks to eliminate areas of tax evasion. According to the Polish government, the financial effect of this reform

is USD 18 billion per year. Passed by the Polish Parliament on 29 October 2021, the regulation has amended the Personal Income Tax Act, the Corporate Income Tax Act and some other laws.

The tax reform has been implemented in Poland – an EU member with a relatively low revenue-to-GDP ratio – for the general government of just 39.9% for the period 2010–2021 compared with the EU average of 46%. Yet, the ratio has been on an upward trend in recent years, which might be explained by the government's active policy during the COVID-19 pandemic and the fall in the country's GDP. The distribution of indirect taxes, direct taxes and social contributions as budget revenues is quite diverse in Poland, in contrast to the entire EU where their distribution is quite even. Direct taxes, which account for just over 20% of total revenue in Poland, are less significant than similarly important social contributions and indirect taxes. From the point of view of the economic function, labour taxation constitutes the largest part of general government revenue, followed by consumption taxes and taxes on capital. Poland's implicit tax rate on labour, which measures the effective average tax burden, at 33.9% in 2020 is clearly lower than in the EU as a whole (38.1%). Nonetheless, this competitive advantage has been shrinking over the years. In turn, the implicit tax rate on consumption, at 19% in 2020, is higher in Poland than in the EU (17.1%). Moreover, while the Polish rate was increasing, the rate for the EU was falling as the standard value-added tax rates in EU countries such as Germany or Ireland were being reduced.

The Polish Deal has introduced several solutions narrowing the national PIT tax base, including an increase in the PIT tax-free allowance to PLN 30,000, an increase in the threshold for the lower bracket from PLN 85,528 to PLN 120,000, or tax-exempt monthly pensions of up to PLN 2,500. Several changes were introduced in the new law on 1 July 2022, with an estimated cost to the state budget of PLN 7 billion in 2022. These include reducing the PIT rate for the lower bracket from 17% to 12%, or reinstating the preferential taxation for single parents. The government estimates that around 18 million Polish citizens should benefit from paying less PIT. The Polish Deal additionally encompasses several tax reliefs for the self-employed, unincorporated businesses (in PIT) and corporations (in CIT), aimed at supporting innovative sectors and products. In contrast, some other amendments have imposed new burdens; for example, healthcare contributions made by the self-employed are now calculated on a pro-rata basis, or companies that incur tax losses are obliged to pay the 'Minimum CIT' at a tax rate of 10%. Moreover, the legislator in Poland has significantly modified the provisions on VAT in recent years, initially in the first months of the COVID-19 pandemic, and then in 2022 through anti-inflationary packages reducing VAT rates for selected products (such as fuel, basic food, natural gas, system heat, and fertilisers).

The Polish Deal and the anti-inflation shields represent a significant challenge for the sustainability of public finance. They may simultaneously result in

lower tax revenues in a period of elevated public spending and greater public indebtedness during the COVID-19 pandemic and the war in Ukraine. This constitutes a considerable risk factor that needs to be analysed in conjunction with other macroeconomic issues looming on the horizon for the Polish economy, such as a dynamic increase in inflation (to 15.6% in July 2022) and interest rates (from 0.1% in September 2021 to 6.5% in June 2022), and the considerable depreciation of the Polish zloty. On the other hand, changes in the PIT tax law and increased tax progressivity may, at least to some extent, deter a repeat of the inequalities in living standards observed in Poland during the transition period and exacerbated by the recent economic turmoil. It is worth noting that Poland has become one of the most unequal countries in Europe in the last 30 years.

Despite its huge scope and significance, the Polish Deal was planned within a relatively short time frame, with the general principles not being made public until May 2021. This led to difficulties with its implementation and made things less clear during a time of considerable uncertainty. The Polish government should apply the following guidelines to avoid such problems in the future and foster the sustainability of tax policies. First, future tax reforms should be carefully planned and consulted upon with the public, and the government must address the concerns expressed by businesses and citizens during the legislative phase. This will act to reduce the risk of widespread disputes with the tax authorities and the need to patch up the new legislation soon after being introduced, as happened with the Polish Deal. The vacatio legis period for the new law should be longer than the 2 months given to the public during the Polish Deal reform because taxpayers need sufficient time to adapt their systems to the new tax environment. Second, policymakers should not prioritize short-term political objectives over the long-term economic competitiveness of the tax system since the latter is a key determinant of any country's long-term economic performance. Poland's tax system is relatively complex and perceived as quite unfriendly – in 2021, it was ranked 36th in the International Tax Competitiveness Index among 37 OECD countries. Consequently, future tax reforms should aim to simplify rather than complicate the tax system. In the case of the Polish Deal, however, the planned reduction of the tax burden on lower-income taxpayers appears to have come at the expense of an even more complex tax system.

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Chapter 5

Tax competitiveness in the EU: Evidence from Slovenia

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1 Introduction

Globalization is considered to be a continuing trend attributable to the accelerated integration of individual countries and their economies. The increasing integration of countries has created an environment for the emergence of tax competitiveness, which is often regarded as a mechanism for boosting economic development (Helcmanovská & Andrejovská, 2021). Namely, the design of a country's tax system is an important determinant of its overall economic performance. A well-designed tax system, which follows all the fundamental principles of good taxation (neutrality, efficiency, certainty, simplicity, effectiveness and fairness, as well as flexibility) and is friendly for taxpayers to comply with can facilitate economic development while increasing providing sufficient revenue to fund the priorities of the government. On the contrary, a poorly designed tax system can be costly and undermine the domestic economy (Tax Foundation, 2021). Consequently, individual countries are moving towards establishing an attractive environment that would provide a favourable macroeconomic situation, undemanding

legislative environment, inclusive labour market and fair taxation. Countries are thus striving to affect their tax revenue through individual government steps and legislative changes. Moreover, other events can also affect tax competitiveness in an individual country. In the context of the European Union, the gradual accession of new member states to the EU during the last two decades, i.e., eight Central and Eastern European countries plus Cyprus and Malta in 2004, Bulgaria and Romania in 2007 and Croatia in 2013, has caused an increase in tax competitiveness among EU countries. This holds especially for the mentioned new member states, including Slovenia, which are striving for economic development and growth through lower taxation to reduce their lagging behind the old member states (Helcmanovská & Andrejovská, 2021).

The recent globalization trends, which have been additionally accelerated by digital transformation, reveal the obvious shortcomings of the existing tax systems. Since the contemporary economic environment has become more globalized and digital, the current taxation rules no longer fit the modern context (European Commission, 2015). Consequently, the tax systems need flexibility in order to be adopted in a globalized and digitalized economy, which these days is essential. Namely, the adoption, besides other determinants, usually implies the modernization of tax collection systems and policies, particularly when they are ineffective or unjustifiably complex. Modernization can hence have several beneficial effects for the economy, such as preventing tax evasion, constraining illegal activities, providing fair taxation and, in turn, creating higher economic growth (Podviezko et al., 2019; Remeur, 2015). In this way, the EU can pursue its priorities, e.g., encouraging sustainable economic growth within the equitable Single Market. In order to follow this path effectively and efficiently, the EU needs a framework for appropriate tax policy that ensures an equal distribution of the tax burden, promotes sustainable economic growth, diversifies funding sources and strengthens the overall

"The recent globalization and digitalization trends reveal the obvious shortcomings of the existing tax systems."

competitiveness of the EU economy (Ravšelj et al., 2021). Accordingly, the main aim of this chapter is to present tax competitiveness as well as the challenges and opportunities for tax policy in Slovenia compared with the EU-27/OECD situation. The comparative aspect also considers the differences between the old (i.e., Belgium, Austria, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden) and the new (Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia) EU member states. The chapter is structured as follows. After the first section, the introduction, which presents the addressed topic in a broader way, the second section describes taxation trends in Slovenia and the EU. The third section considers tax competitiveness in Slovenia and the EU, covering a general overview of tax competitiveness as well as tax competition through the lenses of personal income, corporate and value-added taxes. Further, the fourth section briefly explains the role of tax administration in tax competitiveness. While the fifth section outlines the main challenges for the tax agenda and some policy recommendations, the final section provides a summary of the main concluding remarks.

2 Taxation trends in Slovenia and the EU

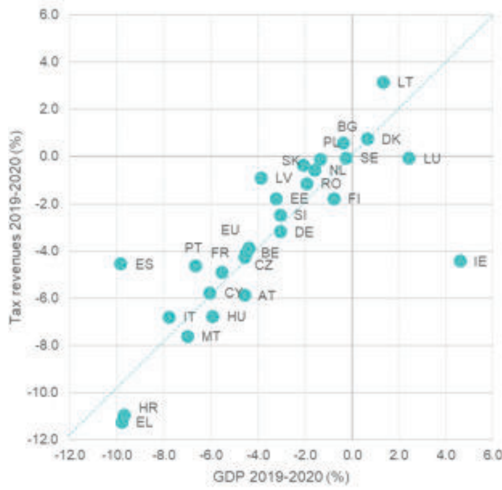
Taxation is considered a fundamental source for funding public expenditures and is thus an important component of the economy of any country. Namely, taxes are recognized by the international community as the most reliable source for financing national objectives and maintaining living standards (Valente, 2019; Ravšelj et al., 2021). Accordingly, countries should strive to establish a tax system which does not discourage taxpayers from paying taxes. Countries should therefore modernize their tax systems and policies by eliminating ineffective or unjustifiably complex taxation practices. In this way, national economies can ensure sufficient funds for financing government priorities. In 2020, taxes, including compulsory actual social contributions in the EU, accounted for 40.2% of gross domestic product (GDP). While the tax burden (in terms of percentage of GDP) increased in 2020 in nominal terms, tax revenue in the EU decreased by 3.9%, marking the first decrease in nominal tax revenue amount since the global financial crisis of 2009. Since GDP fell more than tax revenue (by 4.4% in nominal terms), the tax-to-GDP ratio grew in 2020 by 0.2 of a percentage point (European Commission, 2022). A similar situation in 2020 can also be observed in Slovenia. In nominal terms, tax revenue in Slovenia dropped by 2.4% and GDP by 3.1%, while the tax-to-GDP ratio increased by 0.3 of a percentage point. Further comparison of the EU and Slovenia over time reveals that the tax-to-GDP ratio failed to improve in Slovenia, despite overall progress being made in the EU (see Figure 1).

Figure 1: Tax revenue in Slovenia and the EU for the period 2008–2022 (in % of GDP)

Source: European Commission, 2022.

The economic progress made following the global financial crisis (especially after 2015) has been hardly disrupted by the COVID-19 pandemic. The contraction of economic activity has also caused a decrease in tax revenue in nominal terms across the majority of EU member states. In 2020, only three countries (Bulgaria, Denmark, Lithuania) exhibited higher nominal tax revenue than in the previous year, 2019. Due to general drops in GDP, most EU countries (16, including Slovenia) increased their tax-to-GDP ratio. The biggest increases were seen in Spain, Latvia and Portugal, while the biggest decreases were exhibited in Ireland and Luxembourg (European Commission, 2022) (see Figure 2).

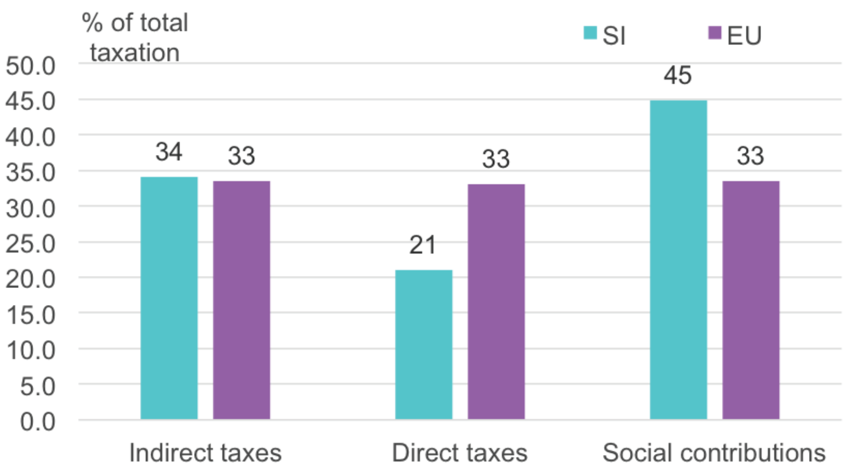
Figure 2: Change in GDP and tax revenues in EU member states (2019–2020)



Source: European Commission, 2022.

Figure 3 presents the tax revenue structure in Slovenia and the EU by type of tax in 2020, namely indirect taxes (value-added tax, taxes on imports etc.), direct taxes (personal and corporate income taxes etc.) and social contributions (from employers, households etc.). Most of the tax revenue in Slovenia is provided by social contributions (44.8%), followed by indirect taxes (34.1%) and direct taxes (21.1%). However, the comparison of Slovenia and the EU reveals that despite shares of total taxation being at similar levels in both economies (SI=34.1%; EU=33.4%), there are differences in the shares of tax revenue stemming from direct taxes and social contributions. Slovenia obtains more tax revenue from social contributions (SI=44.8%; EU=33.5%), while the EU does so from direct taxes (SI=21.1%; EU=33.4%). Although tax revenue in the EU is almost equally distributed across the three main tax types, this is not the case in Slovenia where almost half the tax revenue comes from social contributions, i.e., social insurance taxes.

Figure 3: Tax revenue structure in Slovenia and the EU by type of tax in 2020 (% of total taxation)



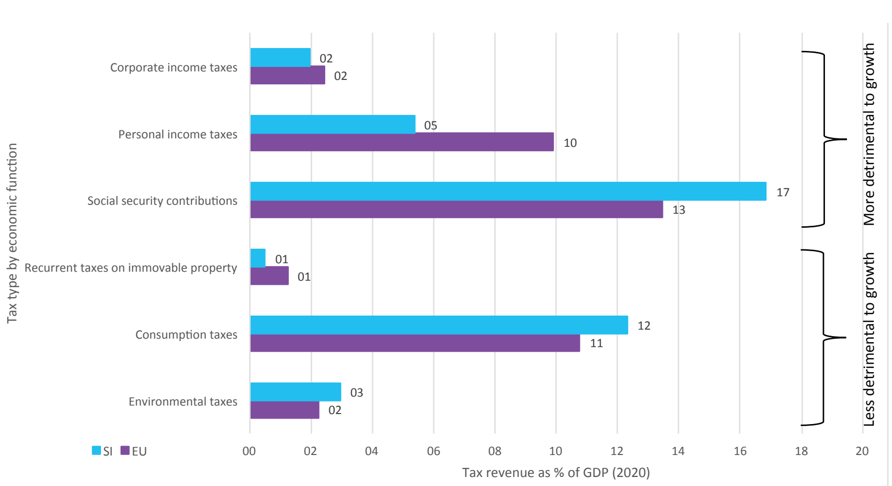
Source: European Commission, 2022.

There is no optimal structure for tax revenue, meaning that the funding sources should be adjusted with the economic and demographic situation in an individual country. Since economic and demographic trends are considered to be very dynamic, especially in times of great uncertainty due to the COVID-19 pandemic and the Russia–Ukraine war in 2022, the taxation framework should

be established in a way that ensures it can keep up with these changes, whereby other characteristics of good taxation (neutrality, efficiency, certainty, simplicity, effectiveness, fairness) should not be compromised. The labour tax burden for average wage earners in Slovenia is higher than the EU average. This especially holds for low-income and secondary earners (European Commission, 2020). In the current taxation framework, low-skilled workers have few incentives to enter employment or increase their work efforts as high-income taxes erode their income gains (OECD, 2021). Therefore, reducing the overall tax burden on labour, particularly for the more vulnerable groups, and enhancing the incentives to work might boost economic growth. This would be especially important in a country with an ageing society (such as Slovenia) whose working population is expected to shrink in the near future. Moreover, the increased labour market participation of older and low-skilled workers might reduce income inequality while having a beneficial budgetary impact through decreased social spending and increased revenues from taxes and social security contributions. In order to at least partly compensate for the revenue losses, the Ministry of Finance of Slovenia has proposed raising the taxes on capital gains, rental and corporate income. However, the "tax and growth ranking" conducted by the OECD suggests that corporate income tax is the most growth-unfriendly tax (Johansson et al., 2008). The aforementioned is supported by a large stand of the theoretical and empirical literature, suggesting that an increase in the effective corporate income tax rate could negatively affect investment, foreign direct investment and entrepreneurship (see, e.g., Lee and Gordon, 2005; Djankov et al., 2010; Arnold et al., 2011). This makes it very important to consider existing findings on this topic while designing tax policy (European Commission, 2020).

In Slovenia, the statutory corporate income tax rate in 2022 is among the lowest in the EU (19%) but lies above the rates of its neighbouring countries, i.e., Hungary (9%) and Croatia (18%), some other Central and Eastern European and Baltic countries, i.e., Romania (16%), Lithuania (15%) and Bulgaria (10%) and other countries, i.e., Ireland (12.5%) and Cyprus (12.5%) (European Commission, 2022). Corporate income tax is paid on profits, while several exemptions exist (i.e., a 0% rate for investment and pension funds, deductions for specific types of investments or losses from previous years). An alternative way to compensate for the revenue losses would be to raise taxes that are deemed less detrimental to economic growth, such as those on property (notably recurrent taxes), consumption and pollution (European Commission, 2018). The revenue from the recurrent tax on immovable property in Slovenia (0.5%) is below the EU average of 1.2% (see Figure 4).

Figure 4: Tax revenue structure in Slovenia and the EU by economic function in 2020 (% of GDP)



Source: European Commission, 2022.

Despite some attempts in Slovenia to introduce a new real estate tax, it was later withdrawn by the government. In its Country Report, the European Commission presented simulations suggesting that lowering the tax burden on labour and raising the recurrent tax on immovable property might reduce inequality and boost the supply of labour (European Commission, 2019). Other international institutions (OECD and IMF) advised Slovenia to rebalance the tax mix away from labour taxes, in particular employees' social security contributions, to consumption or recurrent tax on immovable property, including by broadening the tax base (OECD, 2018a; OECD, 2018b; IMF, 2019a; IMF, 2019b). Namely, the latter types of taxes are considered to be less detrimental to economic growth (European Commission, 2020).

3 Tax competitiveness in Slovenia and the EU

3.1 General overview of tax competitiveness

Tax competitiveness can be viewed through the lens of general and broader competitiveness concepts. According to the World Economic Forum, which defines the concept from an economic perspective, competitiveness is the set of institutions, policies and factors that determine the level of productivity of a country. A competitive economy is considered productive, whereby productivity

leads to growth and contributes to overall well-being (WEF, 2016). The Global Competitiveness Report defines 12 main pillars of competitiveness: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation. All of the presented components of competitiveness are not independent but tend to reinforce each other (WEF, 2014). In the context of general competitiveness, tax policy can be considered a mechanism for enhancing the presented pillars, which may then result in higher productivity, economic growth and prosperity. The tax system therefore cannot be considered in isolation since most taxes can impact the overall competitiveness of a country (OECD, 2011). Given the presented context, the tax system can be considered competitive when it is adequate for increasing productivity and economic welfare while also contributing to raising living standards at a sustainable level and pace (Valente, 2019; Ravšelj et al., 2021). In a narrower sense, tax competition can be defined through the lenses of tax legislation. Here, tax competitiveness is defined as the ability of a tax system to promote the competitiveness and neutrality of taxation (Tax Foundation, 2021).

According to the latest Competitiveness Ranking 2022 of 63 countries, Slovenia has made progress in competitiveness, moving from 40th to 38th place. Still, this progress has not allowed Slovenia to reduce the lag behind the most competitive countries and/or countries with which Slovenia is traditionally compared. Despite similar post-COVID-19 challenges being encountered in other EU countries, the lagging behind of Slovenia can be attributed to the poor management of these challenges, namely: 1) inflation caused by rising energy and food prices; 2) labour market shortages combined with wage pressures and problems with filling vacancies; 3) implementation of the National Recovery and Resilience Plan with an emphasis on digitalization; 4) reforming the public health and pension system and establishing a long-term care system; and 5) managing the public finance deficit (IMD, 2022).

In general, the Slovenian economy quickly recovered in 2021 after the contraction of economic activity following the outbreak of the COVID-19 pandemic. The significant rebound of the Slovenian economy, which in 2021 already exceeded the pre-crisis level, may be attributed to measures for easing the consequences of the COVID-19 pandemic aimed at maintaining economic potential during the crisis. With this action, Slovenia took on a considerable burden of the COVID-19 pandemic, which has resulted in a high public finance deficit and an increase in debt of the government sector, especially in 2020. Still, both already decreased slightly in 2021 (IMAD, 2022). According to the latest assessment of the key attractiveness factors of the economy in Slovenia, a skilled workforce, a high education level and a reliable infrastructure are identified as the economy's main strengths. On the contrary, policy stability and predictability, an effective legal environment, and competitive tax regimes are identified as

the biggest weaknesses of the Slovenian economy (IMD, 2022). The latter is alarming given the important function of taxation in any country, i.e., to provide the fundamental source for funding public expenditures, which is necessary for economic development.

According to the latest data from the International Tax Competitiveness Index 2021 that measures the extent to which tax systems in OECD countries promote the competitiveness and neutrality of taxation, the Estonian tax system is the most competitive in the OECD. Latvia, which recently adopted Estonia's system of corporate taxation, also has a relatively efficient system for taxing labour income. Yet, the Slovenian tax system ranks 25th among 37 OECD countries. Slovenia is lagging behind several EU countries, namely Baltic countries (Estonia, Latvia, Lithuania), Western countries (Luxembourg, Netherlands, Germany, Austria, Ireland, Belgium), Scandinavian countries (Sweden, Finland) and even some countries from Central and Eastern Europe (Czech Republic, Slovak Republic, Hungary). Finally, Italy has been identified as a country with the least competitive tax system in the OECD. It has a wealth tax on financial assets and real estate held abroad, a financial transaction tax, and an inheritance tax. Italy also has a high compliance burden associated with its tax system (Tax Foundation, 2021). Some of the strengths and weaknesses of the tax system in Slovenia are summarized in Table 1, while selected details are briefly described below.

Table 1: Strengths and weaknesses of the tax system in Slovenia

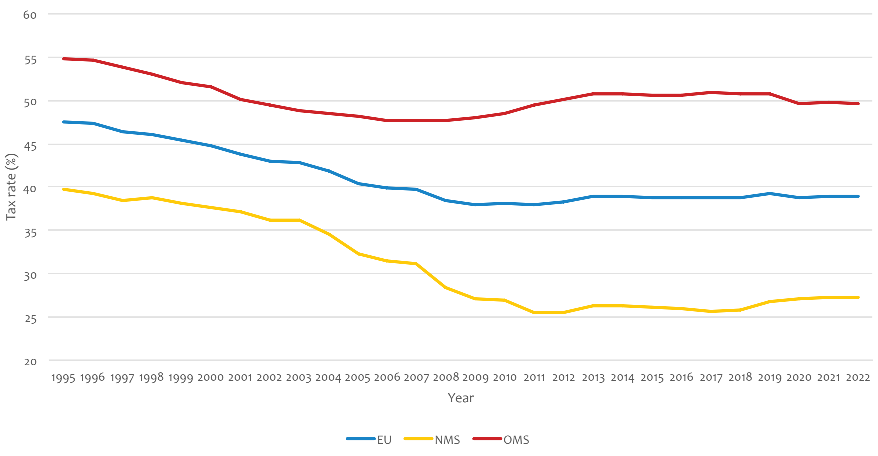
Strenghts	Weaknesses
Slovenia has a 19% corporate tax rate, below the OECD average of 22.9%	Slovenia's tax treatment of investments in buildings and intangibles is less generous than the OECD average
Slovenia's VAT of 22% applies to a relatively broad base	Slovenia has a relatively narrow tax treaty network, with 59 countries and only a partial territorial tax system
Capital gains taxes are reduced the longer assets are held (a 0% rate applies after holding an asset for at least 20 years), encouraging long-term savings	Slovenia has multiple distortionary property taxes with separate levies on real estate transfers, estates, and bank assets

Source: Tax Foundation, 2021

3.2 Personal income tax competition

The EU experienced a period of declining top statutory personal income tax rates between 1995 and the 2008 global financial crisis (see Figure 5). During this time, the average tax rate in the EU fell from nearly 48% to less than 40%. The largest decreases were observed in Bulgaria (40.0 p.p.), followed by Czechia (28.0 p.p.), Romania (24.0 p.p.) and Slovakia (23.0 p.p.), whereby the tax rate in Slovenia decreased by 9.0 p.p. This decreasing trend during the 1990s and 2000s occurred in a context of moderate economic development and under the incentive of a European Commission quite supportive of the idea of some economic competition between the countries in the EU. The biggest expansion of the EU in 2004 (10, mostly Central and Eastern European countries), followed by smaller ones in 2007 (Bulgaria and Romania) and the latest in 2013 (Croatia), have contributed to the continued drop in the average tax rate in the EU, whereby the noted reduction in tax rates was not only the consequence of new countries joining the EU since a declining trend in tax rates was already visible in old EU member states before the gradual accession of new EU member states. Between 1995 and 2008, the tax rate increased only in Portugal (by 2.0 p.p.) (EU Tax Observatory, 2021).

Figure 5: Average top statutory personal income tax rates in the EU (1995–2022)



Source: European Commission, 2022.

The top statutory personal income tax rates have stabilized following the 2008 global financial crisis. Significant further decreases in the tax rate were only observed in Hungary (25.0 p.p.) and Croatia (17.7 p.p.), while the largest

increases were seen in Greece (14.0 p.p.) and Portugal (11.0 p.p.), followed by Slovenia (9.0 p.p.). This trend can be explained by considering that a quicker race to the bottom would have soon drained the tax resources of many EU countries. In response, some EU countries (Austria, Belgium, Cyprus, Denmark, Finland, France, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Spain, Sweden) have implemented other mechanisms to attract taxpayers and economic activity, especially through specific regimes aimed at new tax residents (EU Tax Observatory, 2021).

3.3 Corporate tax competition

The EU has seen declining average statutory corporate tax rates in recent decades (see Figure 6). The average tax rate in the EU fell from 35.0% in 1995 to 21.2% in 2022, with old member states having a more intense decline than new member states. In particular, a strong declining trend can be observed in the years before the global financial crisis. The largest decreases were observed in Bulgaria (30.0 p.p.), followed by Ireland (27.5 p.p.) and Germany (27.5 p.p.). Moreover, France (2.2 p.p.) and Slovenia (3.0 p.p.) were the countries with the smallest tax rate decreases. Between 1995 and 2008, the tax rate increased only in Hungary (1.6 p.p.) and Finland (1.0 p.p.) (EU Tax Observatory, 2021).

Figure 6: Corporate tax rates in the EU (1995–2022)

Source: European Commission, 2022.

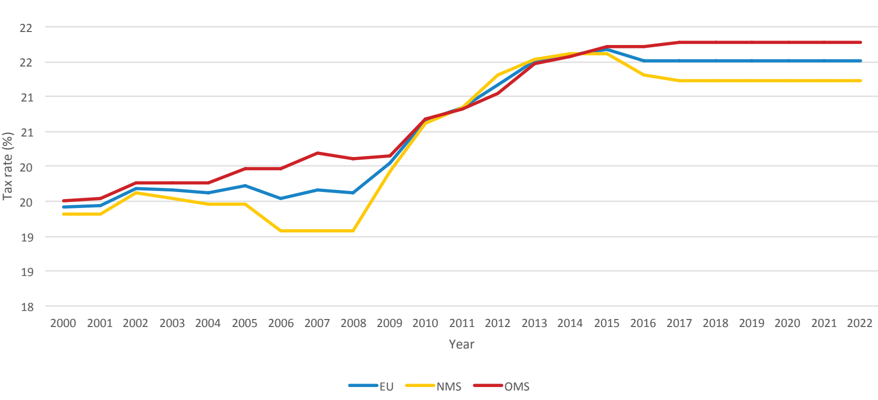
Ever since the global financial crisis, the average statutory corporate tax rate decline has slowed. Even though some countries (14) continued to decrease their tax rate between 2008 and 2022, including Slovenia, with a decrease of 3.0 percentage points, only Greece (13.0 p.p.) and Hungary (10.5 p.p.) saw greater

decreases in their tax rate. Some countries (7) made no changes in the tax rate then, while six countries increased their tax rate, especially Portugal and Latvia, both by 5.0 percentage points. However, the tax competition appears to have increased for certain tax-base-narrowing initiatives, such as expenditure-related investment incentives, R&D incentives as well as relatively new exemptions and deductions targeting the most mobile parts of corporate tax bases – the profits of multinational enterprises. Since these measures are not standardized across countries, it is difficult to assess their quantitative relevance and potential tax revenue effects in any systematic way (EU Tax Observatory, 2021).

3.4 Value-added tax competition

The EU has experienced a period of increasing average standard value-added tax rates in recent decades (see Figure 7). A significant increase can be observed, notably after the global financial crisis (2008–2014) when the EU economy was recovering from the economic downturn. During the recent period between 2017 and 2022, the average standard value-added tax rates remained stable at 21.5% on the EU level, which is 6.5 percentage points higher than the minimum standard value-added tax rate required by EU regulation (Tax Foundation, 2022). According to the EU VAT directive, the standard value-added tax rate must be no less than 15%, while the maximum is not prescribed (European Commission, 2006). The EU countries with the highest standard value-added tax rates are Hungary (27%), followed by Croatia, Denmark and Sweden (all at 25%). Luxembourg levies the lowest standard value-added tax rate (17%), then Malta (18%) and Cyprus, Germany, and Romania (all at 19%). Among EU countries, Slovenia, together with Italy, ranks in the middle with a 22% standard value-added tax rate.

Figure 7: Value-added tax rates in the EU (2000–2022)



Source: European Commission, 2022.

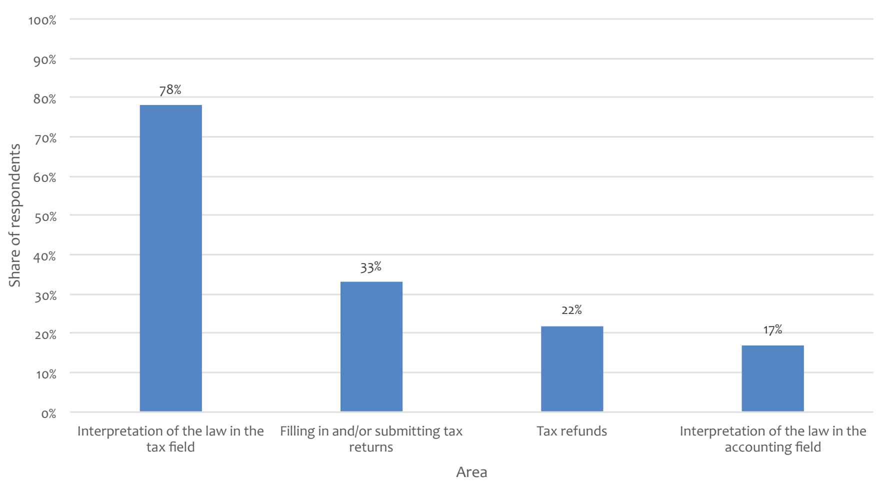
Generally, consumption taxes are considered a cost-effective government strategy for raising money. In order to reduce economic distortions, it is suggested that just one standard rate should be paid on all final consumption, with as few exclusions as feasible. However, EU countries impose lower rates and exclude some goods and services from value-added tax. One of the main reasons for reduced value-added tax rates and exempted goods and services is to promote equity because lower-income households tend to spend a bigger share of their income on goods and services like food and public transport. Other reasons include encouraging the consumption of merit goods (such as books), promoting local services (such as tourism), and correcting externalities (such as clean power). Yet, evidence suggests that reduced value-added tax rates and exemptions are not always effective for attaining these policy objectives and can even be regressive in certain cases. For example, reduced value-added tax rates and exemptions can lead to higher administrative and compliance costs and create economic distortions. The recent evidence shows that scrapping value-added tax reduced rates in the EU would allow standard rates to drop under 15%. International organizations (such as the OECD) therefore recommend measures that directly aim to increase the real incomes of poorer households (Tax Foundation, 2022).

4 The role of the tax administration in tax competitiveness

Taxation (and its competitiveness) is not only important in terms of supporting public goods and services but also plays a crucial role in the social contract between citizens and the state. Namely, the way taxes are collected and spent may define the legitimacy of a government. Sound public financial management and effective tax administration are accordingly considered to be crucial in this context. Keeping governments responsible thus promotes an effective tax administration and sound public financial management (FIAS, 2009; World Bank, 2020a; Ravšelj et al., 2021). All governments need sufficient revenue to meet social needs. Yet, one of the biggest challenges is to carefully select the tax rate as well as the tax base. Governments are also faced with the challenge of designing a tax system that will not discourage taxpayers from paying taxes. The findings of a recent global survey covering 147 countries around the world show that taxpayers (e.g., companies) perceive tax rates to be one of the top five barriers and tax administration to be one of the top eleven (World Bank, 2020a, 2020b; Ravšelj et al., 2021).

According to recent evidence (see Figure 8), most taxpayers in Central and Eastern European (CEE) countries needed assistance from the tax administration, especially with interpretation of the law in the tax field (78%). However, fewer taxpayers needed assistance filling in and/or submitting tax returns (33%) and tax refunds (22%). Finally, the smallest share of taxpayers (17%) required assistance with interpretation of the law in the accounting field (Ravšelj et al., 2021).

Figure 8: Assistance from tax administration in the CEE region



Sources: Sava, 2020; Ravšelj et al., 2021.

This makes it is crucial for the tax administration to regularly support taxpayers when it comes to tax compliance issues and to help overcome related obstacles. This refers especially to so-called tax administrative barriers that unjustifiably hamper the behaviour of taxpayers. Administrative barriers cover all costs resulting from unnecessary administrative obligations, which taxpayers must meet due to the legislation. In other words, an administrative barrier is an administrative burden that is not needed for achieving the public interest, is not rationally justified and can be removed without any damage to the public interest (Ravšelj & Aristovnik, 2018). According to the latest evidence from the Doing Business Report, Slovenia is ranked in 45th place among 190 countries. It lags behind Scandinavian countries (Denmark, Finland, Norway, Sweden), Baltic countries (Estonia, Latvia, Lithuania), Western countries (Ireland, Luxembourg, Netherlands) and even some Mediterranean countries (Cyprus, Spain, Portugal) (World Bank, 2020c).

An effective and efficient tax administration can help increase tax compliance, while an unfair and arbitrary tax administration is likely to put the tax system in a bad light. The aforementioned is also confirmed by past experience. In many transition countries, during the 1990s the failure to improve the tax administration when new tax systems were being introduced led to the uneven imposition of taxes, widespread tax evasion and less-than-expected tax revenue (Bird, 2010; World Bank, 2020a). It is hence unsurprising that tax compliance is critical for keeping the tax system running and fostering the services that

contribute to overall well-being. One possible way to encourage tax compliance is to ensure that the tax rules are as clear and simple as possible. Overly complex tax systems namely create the conditions for tax evasion practices. Moreover, high tax compliance costs are associated with greater informal sectors, bigger corruption, and lower investment. Therefore, economies with well-designed tax systems can enhance their business activity and, as a result, their investment and employment levels (World Bank, 2020a; Ravšelj et al., 2021).

5 Main challenges for tax agenda and policy recommendations

EU countries, including Slovenia, face several challenges with taxation, including outdated tax systems, complex tax rules as well as a taxation and development mismatch (European Commission, 2021). First, the existing tax system was established many years ago. In the case of corporate income taxes, the fundamental principles of tax residence and source considered relevant at the time are no longer suitable for today's challenges. Recent developments in globalization and digitalization have namely pushed these principles more out of step with the modern economy and made the tax rules more difficult to apply to the current realities. Second, the patchwork of national tax rules in the EU complicates cross-border cooperation in the Single Market. There are 27 distinct national tax systems within the EU, which presents unique hurdles for taxpayers, especially those trying to be active across borders. This has a negative impact on investment and growth as well as the overall competitiveness of the EU economy. Finally, taxation is based on national tax rules. However, the individual economies within the EU and beyond are becoming ever more global, digital and complex. This creates high tax compliance costs for taxpayers and the risks of double taxation. Moreover, some taxpayers exploit loopholes between tax systems through aggressive tax planning strategies. This also makes it difficult for citizens to understand how much taxpayers are actually paying in tax, thereby weakening trust in the tax system as a whole (European Commission, 2021; Ravšelj et al., 2021).

A tax system is considered competitive when it is adequate for increasing productivity and economic welfare while also raising living standards at a sustainable level and pace (Valente, 2019; Ravšelj et al., 2021). Still, the efficiency with which tax revenue is transformed into public goods and services varies across EU countries. Namely, economic development often enhances the need for greater tax revenue to finance rising public expenditure. At the same time, it requires an economy that is able to meet those needs. More important than the axationn level, however, is how revenue is collected. Therefore, the tax administration often plays an important role when it comes to increasing tax compliance, while it is also important that tax revenue is used in an appropriate way (World Bank, 2020a). Certainly, tax policy must be adapted to the economic

situation in each country. It is also crucial to bear in mind that economic growth and income per capita depend on a tax system. Namely, all factors that accumulate – tangible (equipment) and intangible (investment) assets, and human capital (education) – depend on tax rates. If tax rates are lower, the investments are in turn higher. This means it is important to seek a balance between economic growth and income inequality (Steiner, 2022).

Slovenia's current tax policy is favourable to business due to the relatively low statutory corporate tax rates, especially in terms of promoting investments. This is one reason explaining why many companies, including foreign ones, have been established in Slovenia in the last decade. Namely, about one-fifth of companies with a profit is not taxed at all, mainly because companies can use the high tax deductions, primarily for R&D investment and the employment of young people. This is a very smart move for a country that desires to increase the added value of its economy. On the other hand, Slovenia has a large tax burden on labour, notably when it comes to highly educated workers. Putting everything together, all the progress that has been made through investments is cancelled by inappropriate labour taxation. Namely, each investment requires people who will be adding value by utilizing the investment (Steiner, 2022).

Accordingly, some policy recommendations to improve tax competitiveness in Slovenia can be proposed. First, the tax mix should be rebalanced in a way which promotes taxes that are less detrimental to economic growth (e.g., recurrent taxes on immovable property, consumption taxes, environmental taxes etc.) and moves away from taxes that are more detrimental to economic growth (e.g., corporate income taxes, personal income taxes, social security contributions etc.). Second, the tax treaty network should be expanded to prevent tax evasion and tax discrimination and enable the resolution of tax disputes. Finally, the tax administration should be improved in a way that increases tax compliance. Slovenia will thereby be able, at least to some extent, to address the main tax agenda challenges like outdated tax systems, complex tax rules as well as the taxation and development mismatch. Briefly, to address all of the challenges Slovenia faces today it will need a robust, efficient and fair tax framework that meets public financing needs while also fostering productivity and economic welfare, in turn leading to increased well-being (European Commission, 2021).

6 Conclusion

Tax systems are primarily aimed at financing public expenditures. Still, tax systems are also used to pursue other objectives like equity and to address social and economic issues. This makes it important that tax systems are designed in a way which reduces taxpayer compliance costs and government administrative costs while also discouraging tax avoidance and evasion. However, taxes also affect the decisions of households to save, procreate, supply labour and invest in human capital, the decisions of firms to produce, create jobs, invest and

innovate, as well as the choice of savings channels and assets by investors. What matters for these decisions is not simply the level of taxes but the way in which different tax instruments are designed and combined to generate revenues. The effects of tax levels and tax structures on the economic behaviour of taxpayers are likely to be reflected in overall living standards (OECD, 2008).

The recent globalization and digitalization trends expose the obvious shortcomings of the existing tax systems in the EU since the current taxation rules no longer fit the modern economic context (European Commission, 2015). The most highlighted challenges refer to outdated tax systems, complex tax rules as well as the taxation and development mismatch (European Commission, 2021). This means tax systems need flexibility in order for them to be adopted in a globalized and digitalized economy, which these days is essential. Namely, adoption, besides other determinants, typically implies the modernization of tax collection systems and policies, particularly when they are ineffective or unjustifiably complex. Modernization can therefore have several beneficial effects on the economy, such as preventing tax evasion, constraining illegal activities, providing fair taxation and, in turn, creating higher economic growth (Podviezko et al., 2019; Remeur, 2015). The aforementioned is associated with the concept of tax competitiveness. A tax system is namely considered competitive when it is adequate for increasing productivity and economic welfare while also contributing to raising living standards at a sustainable level and pace (Valente, 2019; Ravšelj et al., 2021).

Slovenia's tax policy currently favours businesses, yet imposes a considerable burden on labour. Accordingly, the government should reconsider rebalancing its tax revenue sources to promote taxes that are less detrimental to economic growth and moving away from taxes that are more detrimental to economic growth. Moreover, the government should be working on expanding the tax treaty network, which could prevent tax evasion and tax discrimination. Finally, the government should also think about possible ways to improve the efficiency of the tax administration to enhance tax compliance. Following these recommendations, Slovenia can improve the existing tax system to ensure that it is more competitive (European Commission, 2021). In order to be prepared for future challenges, Slovenia requires a robust, efficient and fair tax framework that meets public financing needs, which will consequently foster productivity and economic welfare, leading to increased well-being.

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Chapter 6

Tax competitiveness in the EU: Evidence from Croatia

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1 Introduction

The Croatian tax system has been characterized by constant and dynamic changes, ultimately producing a complex and incomprehensible tax system for both taxpayers and tax administration employees. Therefore, between 2000 and 2018 the tax system underwent numerous tax reforms with a view to making the country more tax competitive. This was followed by amendments to laws and regulations with specific tax impacts. Between 2012 and 2015, 44 changes were made to the way the tax system was regulated. The most significant year was 2017 when eight tax laws were amended due to the high tax burden. These tax reforms aimed to improve the tax system and make it more transparent and efficient for taxpayers in Croatia. Overall, the impact of tax reform is expected to have a positive effect on economic growth. Although each tax reform has positive effects, there are also some disadvantages like frequent changes to tax regulations, which lead to instability and uncertainty among taxpayers. This creates certain obstacles in developing new types of entrepreneurship or attracting new foreign investors. However, in the

future, the impact of the tax reforms is expected to reduce the tax burden, make the country more tax competitive, and simplify tax procedures.

Today, the tax environment of any country, including Croatia, depends strongly on the current state of globalization. Increasing globalization therefore means the tax system and tax environment are subject to intense competition. The aim of the study is thus to present and describe the existing state of tax policy, tax competitiveness, and challenges and opportunities for tax policy in Croatia. The intention is present the basis for a more stable tax system that increases taxpayer confidence in Croatia. The study is organized as follows. After a brief introduction, section 2 presents the main features of the tax system and explains which tax reforms are being implemented to boost the country's tax competitiveness. Section 3 provides key country data on taxation trends in Croatia, while section 4 presents the current state of Croatia's tax competitiveness. The future directions of tax policy together with related challenges and opportunities are presented in section 5. The final section provides a conclusion and describes future challenges.

"The tax environment in Croatia depends strongly on the current state of globalization."

2 Key features of the Croatian tax system

Taxes are the most important and a generous government revenue source for any country. In order to ensure an efficient tax system, numerous tax experts have tried to define tax principles. The most famous tax principles come from Adam Smith, which refers to following (Bibić, 2016):

1. "Every citizen is obliged to pay taxes to the state according to his economic capabilities.
2. The obligation to pay taxes should be regulated by law. The tax must not be arbitrary, but known to the taxpayer in advance.
3. The tax is collected when it is most favourable for the taxpayer.

4. Tax collection costs must be as low as possible, so that the burden on taxpayers is as bearable as possible, and the income of the state treasury is as high as possible”.

In addition to tax principles, there are eight theories in economic theory to justify tax collection. Their task is to define who has a right to tax, who is a taxpayer, and when tax liability begins. For a public or government revenue to be considered a tax, it must have the following characteristics (Šimurina et al. 2012):

1. “Compulsory payment – every taxpayer is obliged to pay the tax liability without delay. In the case of non-payment of the due tax obligation at a given time, the tax takes on the character of coercion: the state sends a tax reminder, and in case of repeated non-payment, it initiates enforcement proceedings.

2. derivation of taxes – the state collects tax revenues based on financial sovereignty. The tax reduces the economic power of the taxpayers, the paid funds cease to be owned by the taxpayer, and become the property of the state – there is a change of ownership: the tax is not the state’s own income.

3. irreversibility of taxes – when ownership changes when paying taxes, the change remains permanent: taxes become the permanent property of the state at the time of payment. Tax refund does not cancel the irreversibility characteristic. The term “tax refund” is used for the refund of overpaid tax, and not for the return of ownership of the financial resources paid.

4. absence of direct compensation – taxes are intended to finance public needs and taxpayers have no grounds for seeking compensation from the state.

5. non-destination – the purpose of spending tax revenues in most cases is not determined in advance, and in practice it is difficult to fully connect individual income with public expenditure.

6. collection due to public interest – taxes are collected exclusively to satisfy public needs.

7. monetary income of the state – taxes are collected in money, except in extraordinary exceptional cases (for example, natural disasters) when they can be collected in kind”.

The tax system in Croatia is based on three main levels. The first one is central or state taxes, the second is regional and local taxes, while the third is mutual – between central and regional and local government.

Generally accepted characteristics needed by a modern tax system, including the one of the Republic of Croatia, are the following (Dražić 2005):

1. “Harmonization of taxes – in order to realize the goals pursued by forming a new tax system as soon as possible, it is necessary to harmonize tax

subsystems and tax policy measures as much as possible. In order for the tax system to function successfully, the system and policies should be as close as possible, aligned, or harmonized.

2. neutral taxes – in order for the state to influence the behaviour of taxpayers with its fiscal policy measures as little as possible, the role of taxes should be limited to the achievement of fiscal goals, i.e., the risk of making business decisions should be left to the entrepreneurs themselves.

3. reducing the tax burden – demands for a more frugal state, for limiting tasks, relieving the economy, in order to stimulate production, increase employment and reduce inflation, are set in all modern countries, so it has become one of the criteria that potential member states of the European Union must complete to obtain membership.

4. simplicity in taxation – taxpayers want their obligation to be clearly, comprehensibly and unambiguously established, and to remove the so-called trifling taxes.

5. consumption taxation in relation to income taxation – there are claims that indicate that consumption taxation is fairer than income taxation, because it is considered that people work for income in order to spent and did not have and thus satisfied their needs. The very orientation towards taxation of consumption encourages savings and thus has a positive effect on economic progress. However, the question remains whether there would be a greater burden on those with a lower income and thus a gap would be created, and what impact such a method of taxation would have on budget revenues in the long term.

6. fairness in taxation – the creators of the tax system must be especially careful when compiling the distribution of the tax burden, i.e., they should strive for as much horizontal and vertical equality in taxation as possible".

At that time, when analysing the tax system of the newly established state it emerged that the financial system had inherited numerous shortcomings from the former state, whereupon it was concluded that the system as such was not efficient enough and did not comply with the principle of tax fairness, which had resulted in a high tax burden. The current tax system of the Republic of Croatia has been subject changes and reforms that are too frequent, making it extremely incomprehensible, especially for taxpayers who do not possess sufficient knowledge to understand their obligations. Table 1 shows the main structure of taxes levied in Croatia.

Table 1: The structure of tax types in Croatia

Strenghts	Weaknesses
STATE TAXES	**Corporate income tax** Value-added tax Excise duties and special taxes - special taxes on motor vehicles - special tax on coffee and non-alcoholic beverages - tax on liability and comprehensive road vehicle insurance premiums - excise duties levied on alcohol, alcoholic beverages, tobacco products, energy products and electricity
COUNTY TAXES	Inheritance and gifts tax Tax on road motor vehicles Tax on vessels Levy on coin-operated machines for amusement
CITY OR MUNICIPAL TAXES	Surtax on income tax Consumption tax Tax on holiday houses Tax on the use of public surface Real estate transfer tax
COMMON TAX	Income tax
TAXES ON WINNINGS FROM GAMES OF CHANCE AND FROM FEES FOR ORGANISING GAMES OF CHANCE	Tax on winnings from lottery games Tax on winnings from betting games Fee for organising lottery games Fees for operating casino games Fees for organising betting games Fees for organising slot machine games Fee for organising occasional one-time games of chance

Source: Ministry of Finance – Tax Administration, www.porezna-uprava.hr (accessed 1.6.2022).

The tax system of the Republic of Croatia is a plural and young tax system, having existed only since the country attained independence. To create this tax system, it was necessary to go through several complex stages of development, particularly in the transition from self-management socialism to a tax system fully adapted to the principles of a market economy. The current tax system of the Republic of Croatia took on its final form in 1998 upon introduction

of the value-added tax, and since then the tax system has included all the basic taxation characteristics of market democracies (Brozović-Bušljeta 2018). The legal sources for the tax obligations and rights of taxpayers and state administrative bodies are the Constitution of the Republic of Croatia (Official Gazette, no. 05/14), the General Tax Act (Official Gazette, no. 106/18) and other laws that regulate the tax system individually. The Constitution prescribes the basic principles of taxation in the Republic of Croatia, as well as the obligation to participate in the settlement of public expenditures (principles of equality, justice and universality), while other principles, rights and obligations arising from the relationship between taxpayers and tax authorities are regulated by the General Tax Act (Official Gazette, no. 115/16). The Constitution of the Republic of Croatia (Official Gazette, no. 05/14) obliges all residents of the country to contribute to the payment of public expenditures according to their economic possibilities, i.e., their economic strength. It also obliges the state to create a tax system based entirely on the principles of equality and justice.

In 2013, the Republic of Croatia became a full member of the European Union, which means that the entire legal system must comply with the Union's rules, including tax rules. Croatia's accession to the European Union also had a significant impact on the country's financial situation, especially through the use of European structural and investment funds.

2.1 Tax reforms carried out in Croatia

Changes in the tax system, i.e., tax reforms, aim to achieve the most efficient and simple system of tax collection. Any tax reform also requires internal organizational changes within the structure of the tax administration with a view to avoiding unequal treatment and making operations as efficient as possible. In Croatia, the most important tax reform arising from European Union membership was implemented to create a more competitive tax system.

One of the fundamental conditions for Croatia's membership in the European Union (which entered into force on 1 July 2013) is a tax system that fully complies with the Union's rules. The basis of the European legislation for the tax system is the full equality of all taxpayers, including domestic and foreign taxpayers, as well as natural and legal persons. This broader framework leaves the member states, including Croatia, the possibility of independently regulating the tax system according to their particular economic situation (Šimović 2012).

Shares of individual tax revenue sources in the total amount of state revenue of the Republic of Croatia reveal the tax system is based on several elements (Šimović 2012):

1. "substantial labour taxation: through the share of income tax and profit tax in total revenues.
2. insignificant property taxation.
3. consumption taxation: share of value added tax and excise taxes".

The following parts of the study present the development and implementation of tax reforms of the three most important types of taxes for the state budget: personal income tax, corporate income tax and value–added tax.

A completely new system of income taxation was introduced in Croatia in 1994. Under this new system, as a result of the tax reform, the part of income intended for consumption is taxed while the parts of income obtained through savings, investments, dividends, interest and other capital income were excluded from taxation. Most of the income tax is based on the taxation of income from self-employment, and horizontal equity is also undermined by numerous tax incentives introduced after 2001. The development of income tax in the Republic of Croatia occurred in three periods (Šimović 2012): 1. 1994–2000; 2. 2001–2004; and 3. 2005–2010. In the first period (1994–2000), the synthetic form of income tax was introduced in early 1994 as part of Croatia adopting the international trend of tax reforms. In addition, the concept of consumption taxation and the surcharge on income tax were introduced. In the second period (2001–2004), the concept of consumption taxation was abandoned by abolishing protective interest and taxing parts of capital income (dividends and profit shares). Many other concessions and tax exemptions are introduced for Croatian war invalids, residents of areas with special state care, incentives for starting self-employment and self-employment itself, concessions for research and development, and so on. The introduction of benefits and tax exemptions led to complications with the implementation of income taxation, but also to greater appreciation of the principle of horizontal equity. In the third period (2005–2010), efforts were made to simplify the income taxation system and adopt tax rules that are transparent and understandable for taxpayers. Finally, after 2017, a new income tax law was introduced with the aim of reducing tax rates and broadening the tax base.

In 1994, the Law on Corporate Income Tax came into force. Under this law, for the first time in Croatia the system of corporate income tax was regulated separately. Profits were taxed in this law at a rate of 25% and a protective interest rate (3%) is introduced. After 1997, changes were made to the Corporate Income Tax Act. The tax rate was increased from 25% to 35% and the protective interest rate from 3% to 5%. In 2001, the protective interest rate was abolished, the tax rate was reduced from 35% to 20%, tax exemptions, reductions and incentives were introduced, and the method for determining the tax base was altered. The biggest share of corporate income tax revenue in the total tax revenue of the Republic of Croatia was seen in the period 2007–2009, while there was a significant decline in 2010. Despite occasional growth tendencies after 2010, the share of corporate income tax revenue does not reach the level of 2009 by the end of the observation period. Such statistics speak about the instability of Croatia's tax system as one of the basic characteristics of the country's tax system.

> "The tax system in Croatia is characterised by high instability."

Value-added tax (VAT) was introduced into the tax system in 1998. The VAT was reformed with less intensity: in 2001, the application of the zero rate was extended. In addition, in 2006 the zero rate for tourism was replaced by a reduced rate and a reduced rate for newspapers was introduced. In 2009, the general rate was increased from 22% to 23%. After 2009, other numerous and intensive reforms of VAT followed. In 2012, the general rate was raised from 23% to 25% and the application of the reduced rate of 10% was extended. The possibility of an input tax deduction for the purchase of goods and services for the needs of the national sports team, and for the purchase and rental of private means of transport, was abolished. The next reform of VAT has been in force since 2017. The tax rates have remained the same, a general rate of 25% and reduced rates of 13% and 5%, but there has been a change in how they are applied. There are no changes in application of the 5% rate. The 13% rate was changed to the 25% rate for catering and the

supply of sugar. VAT has the biggest share in total Croatian tax revenues, allowing the conclusion that it affects the most taxpayers and also represents a high tax burden for them. This form of tax mainly burdens taxpayers by increasing the general tax rate from the original 22% to 25% and replacing the zero rate with a 5% rate.

The above facts show that the tax system of the Republic of Croatia is characterized by a high tax burden and tax instability. The frequent changes to the tax regulations and legal provisions have led to a low level of knowledge and understanding of the tax system among taxpayers and also among tax administration employees. The tax administration in Croatia is denoted as very 'administration-heavy', meaning that it does not provide an efficient service to citizens and entrepreneurs, and that its approach to certain tasks and tax issues is inconsistent and imprecise. This raises the question of the country's tax competitiveness in comparison with other countries of the EU.

3 Key country data showing taxation trends in Croatia

A common characteristic of all the tax reforms implemented thus far in Croatia to achieve the country's improved tax competitiveness is that, during their implementation, public policymakers were only preoccupied with the effects the tax changes would have on revenue collection, and therefore most tax changes were aimed at stimulating growth and, in the period of recession, additionally motivated by the reduction in consumption. Table 2 shows trends in the tax structure by tax type as a percentage of GDP.

Table 2: Trends in tax structure by type of tax (as % of GDP)

	2012	2013	2014	2015	2016	2017	2018	2019
Indirect taxes	18.1	18.6	18.6	19.2	19.4	19.6	20.0	20.3
VAT	12.3	12.6	12.6	12.8	12.9	13.1	13.4	13.7
Direct taxes	6.3	6.6	6.3	6.1	6.5	6.3	6.4	6.7
Personal income taxes	3.6	4.0	3.9	3.5	3.6	3.3	3.5	3.6
Corporate income taxes	2.0	2.0	1.8	1.9	2.2	2.3	2.3	2.4
Social contributions	11.7	11.5	12.0	11.7	11.6	11.6	11.7	11.6
TOTAL	**36.0**	**36.7**	**36.8**	**37.1**	**37.5**	**37.5**	**38.1**	**38.5**

Source: European Commission (2021), Taxation Trends in the European Union, p. 88.

According to the traditional classification of taxes – direct and indirect taxes – we may conclude from the above table that in Croatia there has been a slight decrease in total tax revenues. After 2019 and due to the COVID-19 pandemic, tax revenues in most EU member states will decrease significantly in the short term (2020–2022). The data are presented in Table 3.

Table 3: Forecast of tax revenue in EU member states (as % of GDP)

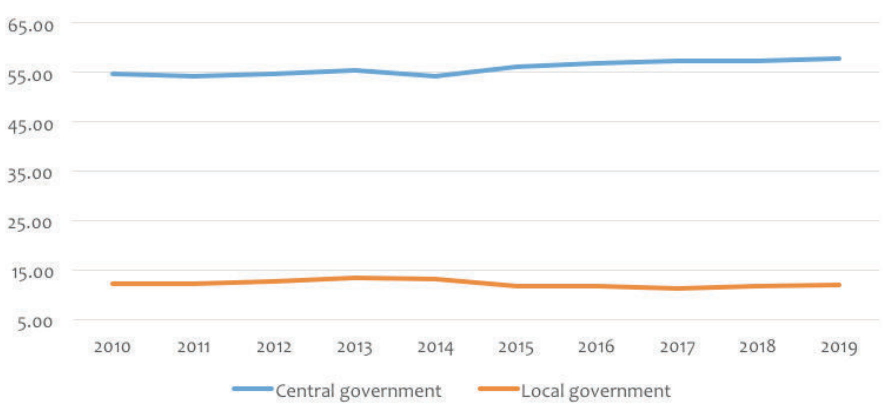
				Trend			Trend
	2017	**2018**	**2019**	**2020**	**2021**	**2022**	**Diff 2019–22**
EU-27	39.9	40.1	40.1	40.4	39.5	39.2	-0.9
Belgium	44.7	44.8	43.6	44.0	43.4	43.4	-0.2
Bulgaria	29.4	29.9	30.4	31.0	30.1	29.8	-0.6
Czechia	35.4	35.9	36.1	35.7	33.6	33.2	-3.0
Denmark	45.7	44.3	46.1	46.5	44.6	42.8	-3.3
Germany	39.4	40.0	40.4	40.5	39.7	39.8	-0.6
Estonia	32.5	32.9	33.1	34.2	35.2	33.5	0.4
Ireland	22.6	22.5	22.1	20.8	20.1	19.8	-2.3
Greece	39.3	40.0	39.5	38.2	37.8	37.7	-1.8
Spain	34.0	34.7	34.8	36.7	35.9	35.0	0.2
France	46.4	46.3	45.5	45.8	44.6	44.5	-1.0
Croatia	37.6	38.1	38.5	37.9	37.7	36.8	-1.6
Italy	41.8	41.6	42.3	42.9	41.8	41.4	-0.9
Cyprus	33.2	33.5	35.5	35.7	36.7	36.2	0.7
Latvia	31.1	31.0	30.9	31.7	31.6	31.3	0.5
Lithuania	29.4	30.0	30.2	31.2	30.6	30.9	0.7
Luxembourg	37.5	39.5	39.0	38.3	38.3	37.9	-1.1
Hungary	38.0	36.9	36.5	36.4	34.7	33.4	-3.0
Malta	30.8	31.2	30.8	30.0	29.5	29.8	-1.0
Netherlands	38.7	38.8	39.3	39.7	39.4	38.0	-1.3
Austria	41.9	42.3	42.6	42.5	41.9	42.1	-0.6
Poland	34.1	35.1	35.1	35.9	35.9	35.3	0.2

				Trend			Trend
	2017	2018	2019	2020	2021	2022	Diff 2019–22
Portugal	34.1	34.7	34.5	34.7	33.8	33.3	-1.2
Romania	24.9	26.0	26.1	25.9	25.8	25.7	-0.4
Slovenia	37.3	37.5	37.4	37.5	36.8	36.6	-0.8
Slovakia	33.9	34.0	34.4	34.6	34.2	33.7	-0.7
Finland	42.9	42.3	42.2	41.8	42.0	41.7	-0.5
Sweden	44.0	43.8	43.1	42.9	42.7	43.2	0.1

Source: European Commission (2021), Taxation Trends in the European Union, p. 19.

The observed data reveal that the countries with the most significant decrease in the tax ratio are Denmark (-3.3), the Czech Republic and Hungary (-3.0), while countries with a positive trend are Cyprus and Lithuania (0.7) and Latvia (0.5). The structure of revenues by level of government for Croatia is shown in Figure 1.

Figure 1: Revenue structure by level of government (as % of total taxation) for Croatia



Source: European Commission (2021), Taxation Trends in the European Union, p. 88.

The data in Figure 1 allow the conclusion that the majority of tax revenues in Croatia between 2010 and 2019 were collected by the central government (the share is 56% on average), which may be explained by the fact that the indicator of the tax autonomy of local governments in Croatia is very low. Therefore,

all decisions on the introduction of new forms of taxation, tax rates, tax bases and tax collection are taken by the central government. If the country's tax competitiveness is to be increased, this must be improved.

4 Current state of Croatia's tax competitiveness

When the European Union was established in 1957, tax competition among EU members. Later, authors took different approaches in the literature regarding whether tax competition has a positive effect on growth or not, and to date there is no consensus. Moreover, there are several criteria for evaluating tax competition in the EU. According to Podviezko, Parfenova and Pugachev (2019, p. 7), there are two categories: factors directly related to taxes and economic factors. The first category is considered by decision-makers of tax-paying companies, while the second category describes the country's development in terms of growth, demographic characteristics, level of wages, corruption etc. Following the IMD World Competitiveness Yearbook (2021), the table below presents data for selected two categories for Croatia.

Table 4: Basic facts concerning Croatia

Economic effect (GDP)		Rank
Land area (square km '000)	57 (2020)	
Exchange Rate (per USD)	6.614 (2020)	
Population – market size (million)	4.05 (2020)	54
Gross Domestic Product (GDP) (USD billion)	56.0 (2020)	54
GDP (PPP) per capita (US$)	27,704 (2020)	44
Real GDP growth (%)	-8.4 (2020)	56
Consumer price inflation (%)	0.26 (2020)	20
Unemployment rate (%)	7.53 (2020)	40
Labour force (million)	1.79 (2020)	54
Current account balance (% of GDP)	-0.57 (2020)	45
Direct investment stocks inward (USD bn)	29.9 (2019)	56
Direct investment flows inward (% of GDP)	1.93 (2019)	35

Source: IMD World Competitiveness Yearbook, 2021, Croatia.

In addition to basic facts, Table 5 presents the largest improvements or declines in the overall performance of the Croatian economy.

Table 5: Improvements and declines

IMPROVEMENTS	2020	2021	DECLINES	2020	2021
Labour force long-term growth	-1.68	1.00	Government budget surplus/deficit (%)	0.39	-7.43
Consumer price inflation	0.77	0.26	Exchange rate stability	0.004	0.036
Patent applications per capita	4.92	8.04	Real GDP growth	2.9	-8.4
Homicides	1.10	0.58	Real GDP growth per capita	3.45	-7.96
Economic complexity index	0.62	0.83	Government subsidies	1.55	3.85
Foreign highly-skilled personnel	1.94	2.44	Gross fixed capital formation – real growth	7.08	-2.94
Unemployment legislation	2.68	3.35	Current account balance	2.81	-0.57
Number of patents in force	11.8	14.4	Women with degrees	56.5	28.9
Total public expenditure on education per student	3.066	3.741	Youth unemployment	14.45	21.05
Skilled labour	3.08	3.67	Exports of commercial services (USD bn)	16.39	9.69
Customer satisfaction	4.58	5.45	Exports of commercial services (%)	27.13	17.32
Attitudes to globalization	3.97	4.68	Justice	2.43	1.62
National culture	3.77	4.43	Legal and regulatory framework	2.58	1.97
Banking sector assets	107.23	125.24	Total general government debt (%)	71.18	87.11
Changing market conditions	4.65	5.41	Employment – long-term growth	9.54	7.49

Source: IMD World Competitiveness Yearbook, 2021, Croatia, p. 1.

In terms of improvements and declines, we note that the main categories of fiscal competitiveness, such as government subsidies, general government debt, and budget surplus/deficit, declined significantly in 2021. As a result, overall fiscal competitiveness has fallen. The results of government efficiency for Croatia are shown in Table 6.

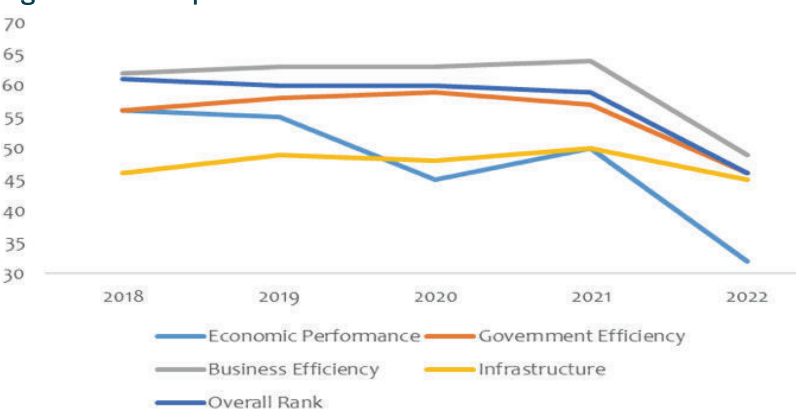
Table 6: Government efficiency

	Value	Rank
Public finances	3.86	39 (2021)
Tax evasion	2.84	54 (2021)
General government expenditure (as % of GDP)	55.6	56 (2020)
Collected total tax revenues (as % of GDP)	37.21	50 (2019)
Collected personal income tax (as % of GDP)	3.62	26 (2019)
Collected corporate taxes (as % of GDP)	2.31	19 (2019)
Collected indirect tax revenues	18.58	63 (2019)
Collected capital and property taxes	0.99	31 (2019)
Collected social security contribution	11.51	45 (2019)
Corporate tax rate on profit	18.00	10 (2020)
Consumption tax rate	25.00	60 (2020)
Employer social security tax rate (%)	16.5	36 (2020)
Employee social security tax rate (%)	20.00	58 (2020)
Public sector contracts	4.49	53 (2021)
Bribery and corruption	1.19	60 (2021)

Source: IMD World Competitiveness Yearbook, 2021, Croatia, p. 1

Although tax policy largely depends on the functioning of the state, the level of state efficiency is very important. Therefore, the data lead to interesting results for Croatia. For example, the value for public finances is 3.86 (2021), which means that they are being managed efficiently. The value for tax evasion (2.84 in 2021) reveals that tax evasion is not a threat to the economy. In tax policy, the tax collection indicator, specifically income tax, corporate income tax, and capital and wealth tax, is scored as follows: income tax 26 (2019), corporate income tax 19 (2019), and capital and wealth tax 31 (2019). The methodology provides that the ranking ranges from 0 to 100, which means that if the ranking is higher, the competitiveness is also higher. In the case of Croatia's fiscal competitiveness, we found very low scores, which can be explained by the fact that Croatia needs to improve the quality of government work, especially in tax policy. The overall performance is presented in Figure 2.

Figure 2: Overall performance of Croatia



Source: IMD World Competitiveness Yearbook, 2021, Croatia, p. 1.

The data in Figure 2 reveal that the overall performance rank decreased after 2021, which may be attributed to the COVID-19 pandemic. For each observed year, the highest score is recorded in business efficiency (62 – 2018), (63 – 2019, 2020), (64 – 2021) and 49 in 2022. The lowest level is recorded in infrastructure and economic performance.

5 Future guidelines of tax policy – challenges and opportunities

By implementing various tax policy measures, the state aims to provide an optimal investment promotion model on one hand, but also not to undermine the neutrality and consistency of the tax system. This makes it very important to plan the future guidelines of tax policy in order to achieve financial sustainability. As for the economic situation in Croatia, a strong recovery in economic activity is expected in the medium term (2020–2024), which will also be influenced by the positive impact of the National Recovery Plan (NRRP) 2021–2026. Economic growth will be primarily based on the contribution of domestic demand, while the contribution of external demand will be negative and relatively stable throughout the projection period. Private consumption will also make a strong contribution to economic growth. Over the coming medium-term period, investment activity is anticipated to strengthen, supported by existing capital inflows from EU funds as well as by new instruments financed mostly with funds from the Economic Recovery and Resilience Mechanism.

The revenue side of the budget is determined by the expected recovery in economic activity, taking into account the fiscal impact of the tax changes

introduced in the corporate and personal income tax system. The withdrawal of funds from EU funds, mainly from the current multi-annual financial framework 2014–2020, will also significantly impact budget revenues, although new funds from the multi-annual financial framework 2021–2027 are also expected. In addition, the budget projections include the use of funds from the new EU instrument "New Generation", which seeks to strengthen the recovery and resilience of the economy through development, strategy and reform projects, for which grants of EUR 6.3 billion are planned by the end of 2026. The expenditure side of the budget aims to implement measures to recover and strengthen the competitiveness and resilience of the economy, while ensuring adequate protection for all segments of the population. Table 7 shows the projections for macroeconomic indicators in Croatia.

Table 7: Projections of macroeconomic indicators in Croatia

	2020	2021 (projection)	2022 (projection)	2023 (projection)	2024 (projection)
GDP – real growth (%)	-8.0	5.2	6.6	4.1	3.4
Household consumption	-6.2	5.1	4.0	3.7	3.6
Government consumption	3.4	2.7	2.2	2.2	2.3
Gross investments in fixed capital	-2.9	9.9	18.0	8.5	4.5
Exports of goods and services	-25.0	12.5	15.8	6.1	3.9
Imports of goods and services	-13.8	12.3	14.7	6.7	4.2
Contributions to GDP growth (percentage points)	-8.0	5.2	6.6	4.1	3.4
Household consumption	-3.6	3.0	2.4	2.2	2.1
Government consumption	0.7	0.6	0.5	0.5	0.5
Gross investments in fixed capital	-0.6	2.2	4.2	2.2	1.2
Stock change	1.3	0.1	0.2	0.1	0.0
Exports of goods and services	-13.0	5.2	7.0	2.9	1.9
Imports of goods and services	7.2	-6.0	-7.7	-3.7	-2.4
Growth of consumer price index (%)	0.2	2.0	1.7	2.0	2.3
Employment growth (%)	**-1.2**	**2.3**	**1.6**	**1.6**	**1.4**

Source: Ministry of Finance, Economic and Fiscal Policy Guidelines 2022–2024.

Due to the COVID-19 pandemic, the positive development of economic activity has come to a halt. In 2020, the biggest real decline in Croatian GDP in history (8.0%) was recorded. The estimated macroeconomic impact of the NRRP shows an acceleration of the GDP growth rate compared to the baseline scenario by 0.3 percentage points in 2021 and almost 1.5 percentage points in 2022 and 2023, when the impact is strongest. For example, real GDP growth is projected at 5.2% in 2021, which then accelerates to 6.6% in 2022, while real GDP growth in 2023 and 2024 will be 4.1% and 3.4%, respectively. Throughout the medium-term period, economic growth will be based on the contribution of domestic demand. The contribution of net foreign demand will be negative and relatively stable throughout the period, only slowing somewhat at the end of the projection period.

The future development of state budget revenues in 2022–2024 is determined by the expected recovery of economic activity, taking account of the full-year fiscal impact of the implemented tax changes in the system of profit tax, income tax, value-added tax, and excise tax regimes. Tax revenues of HRK 86.8 billion are projected for 2022. In the coming years, tax revenues are expected to continue to grow, estimated at HRK 91.9 billion in 2023, i.e., interannual growth of 5.8%, while HRK 96.9 billion or 5.5% more is expected in 2024 compared to the previous year (Economic and Fiscal Guidelines 2022–2024, p. 10). On the other hand, total state budget expenditures for 2022 are estimated at HRK 164.8 billion. Expenditures financed by general revenues, contributions and earmarked revenues are planned at HRK 122.3 billion and will decrease by HRK 3.3 billion compared to the current plan in 2021. In 2023, total expenditures are planned at HRK 165.6 billion, up HRK 0.8 billion over 2022, while in 2014 total expenditures are planned at HRK 162.5 billion. Based on the development of the general government budget balance, the ratio of government debt to GDP is expected to fall by 4.1 percentage points in 2022, reaching 82.5% of GDP. Under the influence of the economic recovery and rational fiscal policy, the ratio of public debt to GDP will continue to decline by an average of 2.9 percentage points per year, i.e., to a level of 79.5% of GDP in 2023, while in 2024 it is anticipated to reach 76.8% of GDP (Economics and Fiscal Policy Guidelines 2022–2024, p. 20).

In line with economic theory, fiscal incentives are a very commonly used tool for increasing the fiscal competitiveness of a country. Therefore, they are divided into two groups – non-tax or non-financial incentives and tax incentives in a broader sense. Non-tax or non-financial incentives refer to various work permits, various restrictions, capital transfer restrictions, and other incentives. A typical example of tax incentives in the broader sense is tax incentives under the corporate income tax. Tax incentives under the corporate income tax can be divided into three basic groups (Dražić Lutilsky et al. 2015):

1. "reduced corporate income tax rate;
2. tax holiday or tax moratorium; and
3. investment allowances".

The reduced corporate tax rate is the simplest, but at the same time the most effective instrument, especially when it comes to investments. Such corporate tax rates are the hardest instrument since the amount of the incentive does not vary with the amount of the investment, and they are most often used for companies that are just starting to operate.

A tax holiday or moratorium provides a period of exemption from paying taxes on business profits/income, mainly for new businesses. This incentive is closely related to the reduced corporate tax rate as there is a milder version of it that applies to the payment of profits, but at a reduced rate and for a certain period of time. The moment the state approves the application of a tax exemption for a company, that company is not obliged to pay taxes on its profit in its entirety or only in a partial amount during the period for which the tax exemption applies, and that is generally the first years of the company's operation.

Investment allowances belong to investment incentives in the strict sense and are typically divided into three basic forms: accelerated depreciation, investment base reduction or investment deduction, and investment tax deduction or investment tax credit. Accelerated depreciation is a method on whose basis taxpayers can realize higher deductions based on depreciation in the first or early years of the useful life of assets, which includes several variants (Šimović, 2008):

1. "a variant that provides the possibility of faster asset write-off compared to linear depreciation so that asset depreciation rates increase, while the useful life of the capital is for calculation of depreciation for tax purposes shorter than the actual economic life of the asset;
2. variant of accelerated depreciation, during which the depreciation life is not shortened, but the life is accelerated depreciation is the same as with linear depreciation, except that in the initial they write off larger and later smaller amounts in periods. Then it's mostly about the method declining balance, where the basis for write-off is not the purchase value but the current value of fixed assets,
3. a variant of accelerated depreciation into a one-time write-off that allows write-off of the total cost investments in the year of its realization".

Higher depreciation amounts in the first periods also mean a lower tax base and therefore a lower tax liability.

Reduction of the investment base or investment deduction is a relief that allows a company to deduct a certain percentage of the investment value from the taxable profit in the year the investment is realized. It is carried out such that a certain percentage of the acquisition cost of the property is added as a relief amount until it is fully depreciated. Accordingly, the allowance, i.e., the deduction based on depreciation, amounts to more than 100% of the original price of the property during its useful life.

An investment deduction or investment tax credit comes into effect only after the tax liability has been deducted. The deduction was approved based on a portion of the investment cost, which affects the way it increases after-tax profit, because the tax credit reduces the tax liability for a certain amount of the investment cost.

In order to increase the country's tax competitiveness, the Croatian government must take advantage of this opportunity, i.e., improve and create new tax incentives. Currently, there are two models here. The first model provides for a reduction of the corporate tax base, and the second for a reduction of the corporate tax liability by lowering the corporate tax rate. We therefore distinguish between the following incentives:

1. state aids – state aids for education and training and state aids for research and development projects; and
2. tax reliefs, exemptions and benefits – reliefs and exemptions for protected areas, and reliefs according to the Law of Investment Promotion (Official Gazette no. 63/22);

State aid to the corporate tax return itself reduces the corporate tax base, while tax abatements, exemptions and incentives reduce the amount of the tax liability assessed by applying reduced corporate tax rates.

State aid for education and training reduces the corporate tax base and relates to general and special education and training. State aid for research and development projects may be used by taxpayers in a way that further reduces the tax base for scientifically based expenditures – research projects. If the research is basic research, the percentage of additional reduction in the tax base is up to 150% of the justified project cost, for applied research up to 125% of the justified project cost, and 100% of the justified project cost code for development research. In order to receive the support or the right to an additional reduction of the corporate tax base, the corporate taxpayer must obtain a certificate from the Ministry of Science, Education and Sports stating that it is the holder thereof. At the same time, the application form for state aid for research and development projects must be submitted at the beginning of the project, but no later than by the end of the tax period in which the support is to be used.

Although there are some forms of tax incentives, the Croatian government must use them more efficiently and transparently.

6 Conclusion

Since the establishment of the Republic of Croatia as an independent state until today, the tax system has been changed and supplemented too many times, among other things to make tax collection as simple and efficient as possible and to increase the country's tax competitiveness. The goal of any tax reform is to promote competitiveness and overall economic growth. As part of Croatia joining the European Union in 2013, one of the most significant and largest reforms of the Croatian tax system took place because it was mandatory to harmonize the country's tax rules with the EU legislation. Therefore, it is expected that by increasing its tax competitiveness Croatia will become more attractive for foreign investors. Tax competitiveness is thus the effort of the tax system to achieve a internationally competitive position, which is operationalized through the tax relief on the economic activities of taxpayers, mainly through the system of corporate income tax, VAT, customs regulations, income tax and others. The highest level of efficiency is achieved when the tax incentives are consistent with an industrial policy that is best able to influence the construction of the structural economy and its competitiveness. Looking at the current situation of the Croatian economic system, the economy is characterized by significant disturbances in the macroeconomic indicators. This means it is unsuitable for strengthening the country's competitiveness and promoting entrepreneurship and productivity. It is thus necessary to reduce the tax burden on entrepreneurs in order to strengthen the economy and competitiveness, and to introduce a more socially just and functional tax collection system, which would help reduce the excessive and persistent budget deficit in Croatia.

According to study by Bogovac and Hodžić (2014), it is essential to provide entrepreneurs with security in taxation law to that they can utilize tax incentives that they can understand without investing too many additional efforts and risks in their interpretation and implementation in business. In addition, according to the IMD report (2021) the following challenges must be addressed: Reform and digitalization of the judicial system, reform and digitalization of public administration and local government units, reduction of the overall tax burden on businesses (parafiscal charges and hidden costs) to improve the business environment, support for entrepreneurial activities based on the SDGs (poverty reduction, green economy, access to education for all), development and implementation of a comprehensive digitalization programme to support the implementation of reforms and enable leapfrog development in selected sectors of the economy. To achieve all of this, it is recommended that policymakers first improve the economic situation and correct macroeconomic imbalances, and then make the tax system in Croatia more efficient, transparent and simple from the perspective of tax administration and taxpayers.

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Chapter 7

Back to the drawing board: Guidelines for rethinking Bulgaria's tax competitiveness

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1 Introduction

1.1 Tax competition: Good and bad?

Tax competition can either be 'good' and 'bad', depending on how it is implemented. The term refers countries' tendency to unilaterally lower their corporate tax burdens in an attempt to attract the ever-mobile international capital (see Wilson & Wildasin, 2004, p. 1067). The phenomenon's international dimension makes the European Union a fascinating case in point, especially as concerns the interaction of the 'new' member states, mostly from Eastern Europe, and the 'old' ones.

Such tax competition can be viewed as 'bad' when it leads to an endless 'race to the bottom' (Baldwin & Krugman, 2004). Namely, some countries' asymmetric refusal to tax international capital could degenerate nightmarish scenarios given the unstable (Nash) equilibrium it creates on the global level (Bucovetsky, 1991; Zodrow & Mieszkowski, 1986) because all countries would be forced to participate in the race and lower their corporate tax burdens and rates.

Nevertheless, some degree of tax competition can

be seen as 'good' and bring desirable reforms. For instance, the attraction of foreign direct investment (FDI) may give weaker economies' growth a boost (Mun et al., 2009). Moreover, low (or no) taxes on foreign capital are the most efficient policy for small, open economies (Zodrow, 2010).

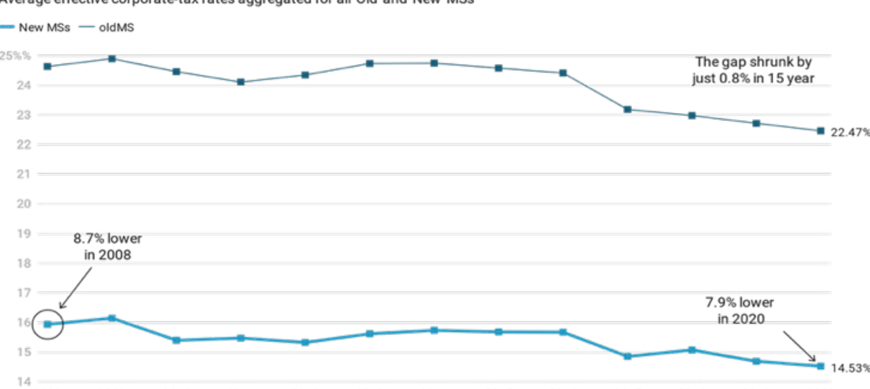
1.2 Tax competition in the EU, its shape and substance

The emphasis on 'good' tax competition in the EU has led to overlooking the negative effects of such policies on the development of weaker economies. It is significant that the domestic dimension is almost missing from the EU's Code of Conduct, which defines "harmful tax measures" as those granting advantages (CONSIL, 1997/1998, p. C2/3): (i) only to non-residents and their transactions; (ii) without affecting the national tax base; (iii) without any real economic activity; (iv) departing from international standards; or (v) lacking transparency. Hence, the idea that "more desirable results" require "intensifying international co-operation" (OECD, 1998, para. 23) has taken hold in policy circles across the EU.

Theoretically, active cooperation between countries can produce less costly equilibria (Konrad & Schjelderup, 1999). Some argue that this is what has already happened within the European Union (Borck & Pflüger, 2006). In fact, the new member states have adopted lower tax rates to attract foreign capital, whereas the old members have maintained relatively high corporate burdens. Yet, this has not led to a healthy influx of foreign capital to the new member states nor has it favoured their convergence to the old members' levels of growth and efficiency. Instead, the new member states remain "non-developed", unequal, and economically inefficient – unlike most of their Western European neighbours (Becker, 2019). Hence, this approach to tax competition is entrenching the existing core–periphery structure (Galanos et al., 2014; Mendoza & Tesar, 2005) and the associated gap between the new and old member states (Figure 1).

"The new member states have adopted lower tax rates to attract foreign capital, whereas the old members have maintained relatively high corporate burdens."

Figure 1: The consistent gap between the new and old member states over a period of 15 years



Source: Author's elaboration; EU Commission, 2022.

1.3 Bulgaria's case: An opportunity to rethink tax competition

At the core, non-harmful tax competition in the EU rests on the mistaken idea that lower tax burdens imply improved capital attractiveness and faster development. Bulgaria's case offers an interesting opportunity to revise its approach to tax competition. After all, the country's entire corporate taxation policy rests on the persuasion of the views held by experts, stakeholders and politicians who state that the only way to attract foreign capital is to keep taxes low (Angelov, 2016; Staneva, 2007). Thus, in the period 1996–2006 personal and corporate income tax rates flattened and were steadily lowered. Eventually, Bulgaria adopted the lowest statutory corporate income tax rate in the EU (10%) and has since registered even lower effective rates (the lowest 9%).

Still, FDI inflows to Bulgaria have been decreasing or stagnating following the Great Recession (2007/2008). Meanwhile, the strict fiscal discipline needed to keep tax rates low without compromising budgetary sustainability has halted economic development. Not only are most macro- and socio-economic indicators worse than in any other EU country, but emigration is causing the labour force to shrink and human development to stagnate.

Shifting the focus of reform from the all-time-low tax burdens to greater-bang-for-buck corporate taxation is a necessary first step in restarting the country's economic engine. On a wider scale, a successful reform in Bulgaria could provide the necessary thrust for other new member states to truly start catching up and ensure that the EU turns into a solidarity-based 'social market-economy'.

2 The problem: Bulgaria's strong commitment to low, flat corporate rates has not paid off

Corporate income tax (CIT) in Bulgaria is quite a complex matter, with many companies paying less than the statutory CIT rate due to loopholes and the excessive complexity (Telarico, 2022, para. 2). On first impression, this should not be the case since in 2006 Bulgaria officially adopted a flat CIT rate of 10%. However, the Law on Corporate Income Taxation is filled with norms and loopholes that unduly favour foreign enterprises by exempting them from paying certain taxes (ZKBO, 2006/2022 Arts. 1.1–1.3, 5). In addition, the tax regime is highly fragmentary because companies in many sectors (e.g., navigation, gambling) manage to escape the apparently simple rule of flat-rate taxation. Not to mention that corporations benefit from a 2% rate when obliged to pay the tax on dividends and foreign ones are not subject to this type of taxation in several cases (ibid., Art. 194, para. 1.1,3.3).

The lower CIT rates have not acted to propel Bulgaria's growth and development or make it more attractive to FDI, despite what many economic advisors had initially suggested. In fact, those favouring low, flat tax rates in Bulgaria supported their position using arguments found in the academic literature that showed the beneficial effects of such policies. Essentially, they have maintained that taxing corporate income in this way will attract more FDI (Ganev, 2016, p. 93), increase CIT revenue (Nikolova, 2016, pp. 63–64) and reduce inequalities (Stoev, 2016, p. 91) by fostering growth (Stanchev, 2016, p. 21). Indeed, similar talking points also often appear in other new member states (see Socol et al., 2007, p. 9 for Romania) as well as aspiring member states (see Stojkov et al., 2008, p. 23 for North Macedonia). Yet, the traditional tax competition has failed to keep any of these promises.

2.1 Effects on FDI: An unstoppable decline in attractiveness

The traditional view on tax competition states that lower CIT burdens attract FDI and prevent "capital flights" (Evans & Aligica, 2008, pp. 55–56). However, the collapse of Bulgaria's FDI inflows demonstrates that the lower tax rates do not suffice to attract international capital. Moreover, most of the little FDI still flowing into Bulgaria comes from foreign enterprises trying to exploit the new tax regime for base erosion and profit shifting (BEPS) purposes away from high-tax jurisdictions (Dimitrov & Kostov, 2018, p. 11). Thus, not only have FDI inflows fallen despite the lower corporate tax burdens, but their quality has too due to the new rules.

Namely, foreign investors have flown from Bulgaria faster than any other new member state, starting in 2008 when net FDI inflows plummeted 35% year-on-year. Noting that FDI inflows in 2021 were EUR 6.48 billion less than in 2007

(Figure 2), this negative dynamic continues today. Despite EU membership and being in the most competitive corporate tax burden region, Bulgaria went from setting "world records for capital inflow" (Ganev, 2016, p. 93) to trailing behind neighbouring Romania and Serbia as well as Slovenia (WB, 2020).

Figure 2: The significant decline in FDI following introduction of the low CIT rate

Source: UNCTAD, 2020, pp. 86–97; WB, 2021d, 2021e.

2.2 Effects on GDP growth: A tale of worsening performances

It is undeniable that proportional CIT taxation has "a negative impact" on growth in Bulgaria (Tanchev, 2016, pp. 73–74). Basically, GDP grew the most in 2008 and has since remained well below those levels (NSI 2022). This is partly due to the strict interconnection between FDI inflows and economic growth, which makes this slowdown unsurprising (Christova-Balkanska, 2009).

In figures, average GDP growth in the first full decade under the low CIT rate (2009–2019) was less than half (4.7% vs 10.4%) that of the previous 10 years (EUROSTAT, 2021). Nevertheless, it is essential to note that the post-Great Recession sluggishness was nowhere as long-lasting as in Bulgaria. In fact, most member states recovered faster than Bulgaria, causing its purchasing power standards to be lower in 2019 than in 2009 (EUROSTAT, 2022).

2.3 Effects on CIT revenues: The Laffer curve disproven

The 10% low CIT rate led to a collapse in CIT revenue as opposed to the increase due to broadening the base that many economists had expected. Indeed, the

supporters of traditional tax competition in both new member states and some old ones often argue that lowering rates will have a positive effect on revenues. As counterintuitive as it may sound, this statement finds some theoretical backing in the "Laffer curve" – a recurrent topic in Bulgaria (Gălăbov, 2009; Ganev, 2016; Gerunov, 2016; Nenovski & Hristov, 2001; Nikolova & Ganev, 2016; Roseva, 2015). The idea is fascinating because of its simplicity: taxing companies and people less stimulates them to work more to reap the benefits of the lower tax burden and vice versa (Laffer, 2004).
However, this theory is not a sound foundation for tax policy in Bulgaria (Tanchev, 2016; Tanchev & Todorov, 2019), nor any member state. In fact, while CIT revenues have followed almost precisely along with the dynamics of GDP during growth periods, they have fallen faster than growth levels during contractions. Thus, despite the two massive crises that have marked the past 20 years, even though GDP grew by 64.8% between 2008–2020 the CIT-to-GDP ratio remains 8.5 percentage points lower (Telarico, 2022, para. 4.2.1). Panel regression, a common econometric method, consistently reveals (Table 1) that rising CIT rates are highly likely to positively impact CIT revenues in Bulgaria: proceeds as a share of GDP would rise by 0.22% for each percentage point of rate increase. This result is consistent across all other new member states, and hence raising the effective rate by 1% would generate an equally significant, yet smaller increase in CIT revenues as a share of GDP. Further, the same results hold for size and are even more significant when considering the old member states.

Table 1: Effect of selected variables on CIT revenues as a share of GDP, 2008–2020

Variable	Bulgaria	Other new member states	Old member states
Statutory rate	0.22*	0	0.04**
Effective avg. rate	NA	0.05*	NA
GDP	0.53	-0.59	-1.24
Payable tax credits (share GDP)	NA	NA	-0.44***
Time-fixed effects	NA	Not reported	NA
Time effects	3.35	Not reported	Not reported

Note: Results obtained using multivariable linear regression and panel methodology.; Signif. Codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1

Source: EU Commission, 2022; EUROSTAT, 2021.

> "Bulgaria may be seen as an extreme case of 'tra-ditional' tax competition gone wrong."

3 Guidelines for a new approach for Bulgaria to tax competition

The first part of this articles focuses on Bulgaria's failed attempt to improve its tax competitiveness. Attention is then turned to rethinking the approach taken and changing the dysfunctional policies involved.

The comparative overview given in this section's first two paragraphs highlights that most new member states approach tax competition in a radically different way to the old ones. Bulgaria may be seen as an extreme case of 'traditional' tax competition gone wrong.

The third part proposes guidelines for a greater-bang-for-the-buck reformist agenda that would allow Bulgaria to bring its policies in line with those of both the old member states and international standards. These suggestions stem from the acknowledgment that despite not practising tax competition in the 'traditional' way, in the last 15 years most old member states have outperformed the majority of the new members in terms of CIT-revenue mobilization and collection. Essentially, the aim is to incentivize growth-enhancing public spending while preventing corporate tax burdens from growing excessively.

The recommendations for streamlining the CIT regime, introduce progressive CIT rates and improve dividend taxation will assist while designing a clear, growth-promoting plan for investing the increased revenues and other public funds.

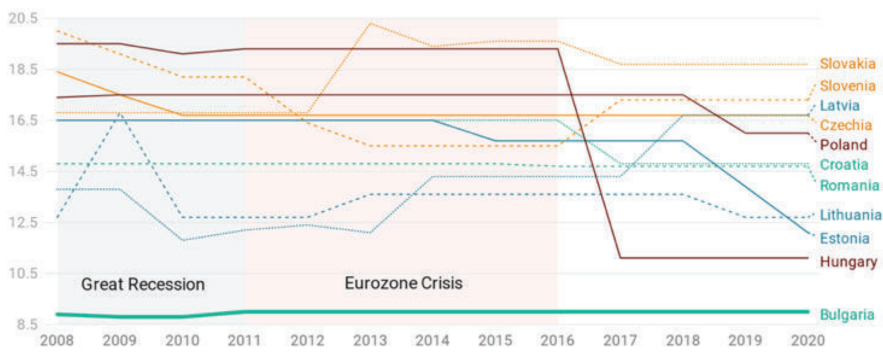
3.1 A look at the old member states' approach to corporate income taxation

Changing the approach to tax competition in Bulgaria could have a significant EU-wide impact because it is a new member state stubbornly pursuing lower tax burdens on capital as a vehicle for succeeding in today's global economy. However, extremely low rates are not all that make Bulgaria's

case peculiar. In fact, all other new member states outperform Bulgaria in FDI inflows per capita (Figure 2) and revenue-to-GDP ratio. Still, experts almost universally agree that reversing this policy would be catastrophic (see Filipova & Draganov, 2021).

Moreover, the data suggest that Bulgaria has gone 'all in' on traditional tax competition and stayed on this course despite the Great Recession and eurozone crisis. Between 2008 and 2020, effective CIT rates remained stable in no new member state, except Bulgaria where they are the lowest in the EU at just 9% (Figure 3). Indeed, while some of these provisions could constitute harmful tax competition according to the EU's definition, they are above scrutiny in both Sofia and Brussels. It is telling that Bulgaria is the only country in the EU unable to "legally, or in practice" fully cooperate with the OECD's Forum on Harmful Tax Practices (OECD, 2021, no. 2 on p. 18). A paradigm shift is thus needed to ensure both an improvement in Bulgaria's economic performance and the smooth functioning of the EU's single market.

Figure 3: Average, effective corporate income tax rates in the new member states

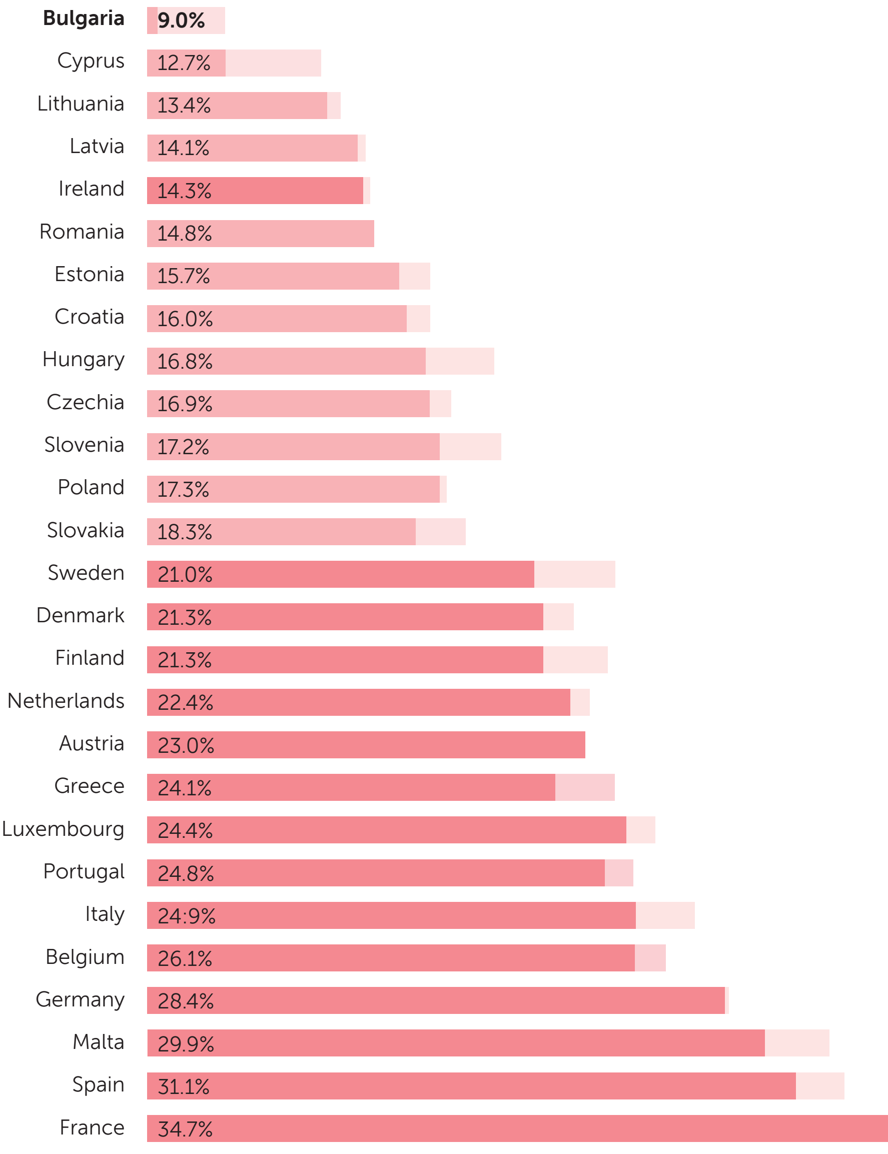


Source: Author's elaboration; EU Commission 2022.

3.2 A look at how the old member states have approached corporate income taxation

At this point, one obtains the impression that economists and policymakers in Bulgaria have overlooked the policy options pursued by most old member states (Figure 4).

Figure 4: More than other any member state (old or new), Bulgaria has gone ‘all-in’ on traditional tax competition



Source: Author’s elaboration; EU Commission, 2022.

Indeed, the governments of old member states claim they are willing to engage in traditional tax competition by promising to lower tax rates. Yet, in reality, they either act so incrementally that their actions have no measurable impact, or end up increasing the corporate tax burden. Effective CIT rates in practice remain solidly above 20%, even in those old member states that have actually lowered the corporate tax burden. Meanwhile, attempts to reduce CIT rates elsewhere have either stalled, like in France (Bray, 2022), or are backfiring such as in Italy (see Lo Giudice, 2020). Meanwhile, the effective tax rate has remained approximately the same in Germany and it even grew visibly in Belgium and following the eurozone crisis in Greece and Portugal.

3.3 Reform guidelines

The conclusion that a low tax burden is not a precondition for mobilizing revenues from corporate income is mistaken. In fact, Bulgaria is the only member state to have betted so heavily on traditional tax competition and is also one of the worst performers in terms of FDI inflows and revenue mobilization (see Boldea et al., 2021, pp. 89–90). Fixing Bulgaria's CIT regime hence requires a radical rethinking of what 'tax competition' really means.

However, the data on the effect of higher corporate tax burdens on FDI is mixed, suggesting that taxes only have a marginal impact on FDI flows. Looking at the old member states' ability to have both higher tax rates and better economic performance, one could hypothesize that a positive relationship exists. At the same time, the picture is more nuanced while focusing on the new member states. The best-performing new member states have in fact decided to either lower their tax rates only marginally (Slovenia, Czechia, Poland) or raise them (Slovakia, Lithuania). Econometric analysis (Table 2) shows that tax policy had an insignificant effect on FDI inflows to new member states in 2008–2020, whereas effective CIT rates even had a significant positive effect on FDI inflows to the old members. These results are also consistent with those of other studies using similar methods, which established that "after controlling for unobserved country characteristics and common time effects, the top statutory corporate tax rate [...] turn non-significant for total FDI" (Wolff, 2007, p. 327).

These empirical results support the thesis that "infrastructure, finance, human capital, and institutions" do impact FDI flows while "taxation does not significantly affect foreign firms' locations" (also see Beyer, 2002, p. 205ff; Kinda & Escolano, 2014, p. 24). Indeed, this explanation is especially suitable in Bulgaria's case given that the country lags behind most other member states in terms of human development (HDRO, 2010), quality of democracy (Dempsey, 2021) and financial institutions (Caporale et al., 2015, p. 51). Crucially, higher tax revenues and targeted tax reforms can help to improve each one of them.

Table 2: Effect of selected variables on FDI inflows (2008–20)

Variable	Other new member states	Old member states
Statutory rate	-0.03	0.15
Effective average tax rates	1.51	0.79
GDP	NA	89.08
Payable tax credits (share GDP)	0.54	18.52
Tax wedge	0.31	NA
Time-fixed effects	Not reported	NA
Time effects	NA	Not reported

Note: Results obtained using multivariable linear regression and panel methodology.; Signif. Codes: '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1.

Source: EU Commission, 2022; EUROSTAT, 2021.

3.3.1 Reform 1: Rationalising the CIT regime

Rationalising the CIT regime would mean abolishing all of the sector-specific rules and closing as many loopholes as possible to widen the tax base. Although this is quite easy, it is nevertheless a necessary first step towards raising more revenues and making the country truly tax competitive. In fact, besides mobilising more revenues it will improve the tax system's overall transparency while combatting corruption and maladministration.

One may expect significant revenue increases from both the betting and navigation sectors. However, it is impossible to precisely estimate this effect because no data are available on the special CIT regimes. Still, an example may be useful. Most companies making EUR 800,000 (approximately BGN 1,600,000) in annual profit currently pay EUR 80,000 in CIT. Yet, a maritime company making the same profit pays taxes depending on the number of days of each ship is in operation and its tonnage. Thus, if 12 ships of 1,000 tonnes each are employed for 200 days a year to generate EUR 800,000 in profits, the amount due is EUR 56,000 (just 7%). The aim must be thus to ensure that the maritime company pays EUR 80,000 on its profits, just like any other firm.

3.3.2 Introducing progressive CIT rates

After levelling the playing field for all enterprises, the government should introduce a two-bracket progressive CIT to fairly mobilize more revenues from this broader base. A reform of this nature could take an example from

the experience of Slovakia, which introduced a similar schedule in 2021 to give small and medium-sized enterprises (SMEs) and sole traders a discounted rate on their first EUR 50,000 in profits. Even though BGN 100,000 (approximately EUR 50,000) may be a reasonable starting point, there is a wide margin of appreciation in determining the tax brackets given that no data are available on industry quantiles in Bulgaria. Crucially, the separate dividend taxation should be abolished and dividends should become part of the new CIT's progressive tax base.

The fear of disincentivising investments by imposing bigger CIT burdens is misplaced: "as long as the corporate tax does not completely deplete [the company's] economic profit there will still be an incentive to invest" (Godar et al., 2015, p. 88). Many of the arguments raised against a progressive CIT (e.g., Pomerleau, 2021) thus make little sense in the first place. Moreover, EU tax regimes tend to favour debt-financing of investments over the reinvestment of profits (see De Mooij, 2012). Therefore, while a progressive CIT would have almost no negative effect on investments, it would favour SMEs' growth and discourage the formation of monopolies (Avi-Yonah & Frank, 2020), which dominate key sectors of the Bulgarian economy (Paneva, 2014; Petkova, 2021).

A progressive CIT would arguably also turn away unproductive, BEPS foreign investment, given that it would make Bulgaria a relatively high-tax jurisdiction for large corporate taxpayers, especially in the light of including dividends in the corporate tax base. By mimicking Slovakia's approach, Bulgaria's CIT would fall "in line with the average CIT rate of small OECD economies [,] but three percentage points above those in peer countries" (Remeta et al., 2015, p. 27).

3.3.3 Setting up a clear, growth-promoting plan for investing the increased revenue

Finally, the government should set up and be accountable for a clear, growth-promoting investment plan for allocating the new CIT regime's increased revenue (as shown in Telarico, 2022, p. 5). Indeed, it has been proven that

Increased government spending on those items that enter private production functions as productive public inputs enhances economic growth. Examples of such productive public spending include public investment and (intragenerational and intergenerational) transfer payments, both of which generate positive externalities that raise private investment and thus economic growth. (Cashin, 1995, p. 262).

It is nevertheless highly unlikely that these investments will have a massive, immediate impact on GDP growth due to the relatively low fiscal multiplier of discretionary budgetary spending (see Karagyozova-Markova et al., 2013). The effect of announcing such a plan, coupled with a clear and detailed list of spending items and targets, would go a long way to attracting the much-needed foreign capital.

Schematically, the sectors to which the plan should allocate a significant portion of the funds are:

Education | Bulgaria has the highest drop-out rate among primary-school-aged pupils: 14.61% against 2.95% for all other new member states and 0.92% for the old ones (Figure 5, Panel 1). Further, Bulgaria is the lowest-ranking EU member state in the OECD's PISA attitudinal tests, with more than 40% of high-school students shown to be functionally illiterate (Figure 5, Panel 2). Given that the "growth-promoting effects of education spending prevail independently of income levels" (Acosta-Ormaechea & Morozumi, 2017, p. 100), this should be a top priority. Amongst others, the plan should fund:

- new textbooks that are better suited to a student's age (on this issue, see Todorova, 2022); and
- a rise in teachers' salaries, currently the lowest in the EU (KT Pordkrepa, 2015).

Realistically, the plan could aim for convergence with the other new member states' levels of primary school pupil drop-out rates and an improvement of five positions in PISA test placements within 5 years.

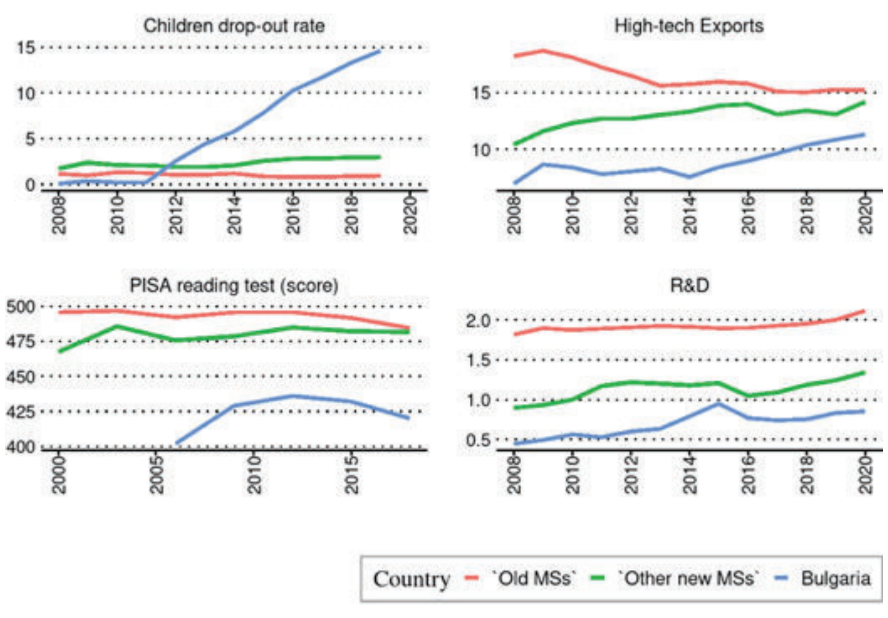
Infrastructure | Investments in the construction of new material infrastructures are crucial for attracting productive FDI (e.g., Kinda & Escolano, 2014). The highest priorities should be:

- communication infrastructure: the extension of 5G and optic fibre coverage beyond Sofia and a few other large cities; and
- transport infrastructure: completing the work on the highways Trakia (to Burgas), Struma (to Thessaloniki, Greece) and upgrading to the high-speed Sofia–Burgas-Varna and Sofia–Dimitrograd railway routes as part of pan-European corridors nine and four, respectively.

However, it is well known that infrastructure spending has a weak growth-enhancing effect in countries where corruption and malpractices dominate (Pritchett, 2000). This is particularly the case in Bulgaria where large public tenders end up being diverted due to widespread clientelism. Unfortunately, these episodes are common both on the national level [e.g., building new highways (Nikolaeva, 2021)] and locally [e.g., buying street lights for the capital (Gerdzhikova, 2022)]. Thus, the plan should delegate these investments to an independent agency accountable to the legislature in order to increase horizontal accountability (see Grimes, 2008).

Research and Development | Before the end of the Cold War, Bulgaria was the most technologically advanced economy of the socialist bloc, after the Soviet Union. Some economists and politicians thus lament the country's low ability to attract high-tech FDI in the early years of the post-socialist transformation/transition (Angelov et al., 2004; Kostadinov, 2021). While it is true that the country is host to a dynamic IT ecosystem made up of both local SMEs and foreign subsidiaries (Barto et al., 2022). R&D and other high-tech activities employ just 5.34% of the workforce (Atanasova, 2019, p. 104). Accordingly, the third sector that should necessarily benefit from these reforms is public R&D, which is complimentary to research privately funded both domestically and through FDI (Tarek & Adnen, 2010). Potentially, Bulgaria could catch up to the other new member states' level of R&D funding as a share of GDP within 3 years [1.34% from the current 0.89% (Figure 5, Panel 3)] and match their share of high-tech exports within 5 years [14.17% vs the current 11.3% (Figure 5, Panel 4)].

Figure 5: Policy targets for allocating increased CIT revenues and other public funds



Source: OECD, 2019; WB, 2021a, 2021c, 2021b.

4 Conclusion

This chapter has detailed the reasons explaining why Bulgaria's 'traditional' approach to tax competition has failed to attract FDI, support growth and mobilize revenues. Addressing both the theoretical notion of tax competition and its empirical development in the EU, the text highlighted Bulgaria's unique position as the least attractive, yet the least taxing EU member state. Unlike those who blame this unsuccessful catching up on unfavourable preconditions, this chapter has pointed out the wrong assumptions that were used to justify the current low-rate and fragmentary CIT regime.

By comparing Bulgaria with other new member states as well as old ones, the analysis showed that a lower CIT burden is in itself not enough to attract FDI. Instead, both old member states and the most successful new ones (e.g., Slovakia, Slovenia, Lithuania) have relatively high tax levels that have barely decreased or even increased in the last 15 years. Thus, the traditional approach to tax competition for which Bulgaria has taken a 'all-in' approach is acting as an obstacle to closing the gap between the core and periphery of the Union, not as a solution to all the inequalities entailed.

Given that Bulgaria is both the poorest member state and the one that has invested the most in traditional tax competition, this chapter has attempted to rethink the country's approach tax competition. Instead of aiming for low statutory and effective rates, the concrete guidelines it provides seek to ensure corporate taxpayers with a greater bang for their buck. The guidelines suggest a way to mobilize greater revenues through the more rational and incisive taxation of dividends and corporate income. Moreover, if they prove successful, these reforms could become a template for other new member states in the near future.

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Chapter 8

Tax competitiveness as a mechanism to promote or distort small economies: The case of North Macedonia

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1 Introduction

The economic performance of one state depends on adequate tax policies, therefore creating sustainable domestic economy is a cornerstone for the economic decision-makers. Among the scholars` most accurate definition for tax competition is the one that Ben Kiekebeld gave: "Improving the relative competitive position of one country vis-à-vis other countries by reducing the tax burden on businesses and individuals in order to retain, gain or regain mobile economic activities and the corresponding tax base, whether at the expense of other countries or otherwise" (Kiekenbeld, 2004). This is definition that EU uses within its policies, recommendations, and documents (Policy Department for Economic, Scientific and Quality of Life Policies, 2021, p. 8)

The legal tax theory put forward a series of arguments for the tax competition, namely: can lead to a reduction in the tax burden; to improve

fiscal discipline; to establish an appropriate balance between the level of taxation and public goods. (Pendovska, Maksimovska-Stojkova, Zafirovski, & Neshovka- Koceva, 2021, p. 222). Therefore, in most cases the tax competition is immanent part of the tax policy of every country. The tax competitiveness is a phenome old as the taxes, having in mind that the states since ever strived to make their tax systems to be attractive as much as possible for the taxpayers- natural persons and big investors. In this meaning, this phenomenon is integral part of the tax system, which leads to its improvement (Pendovska, Maksimovska-Stojkova, Zafirovski, & Neshovka- Koceva, 2021, p. 222). The globalization of the economy and trading (especially e-trade) has imposed an international principles and standards for business-friendly environment which push the developing and transition countries to undertake tax harmonization with the OECD and EU countries.

“Tax competition is an immanent part of the tax policy of every country.”

In 2006th, The Macedonian tax system was redefined, and the country has adopted Flat Taxation, this model is continuing to be in force now days, through amendments and postponing the provisions of the personal income Law that were brought in 2018 and promote the scalable progressive policies according to personal income segments. Most of the nowadays called Western Balkans Countries (Albania, Bosnia and Hercegovina, Croatia (before entering EU), Kosovo (as defined by the UN Security Council resolution 1244), Montenegro, North Macedonia (the former Yugoslav Republic of Macedonia) and Serbia) (European Commision, EU - fYROM: Stabilisation and Association Agreement, 2004) introduced the flat tax as a part of their national tax strategies and policies that will accelerate the national and international economy activity, “seen as an important precondition for faster economic development and a key factor for attracting FDIs” (Zafiroski & Neshovska-Koseva, 2021, p. 38)

Additionally, the national tax system during the COVID-19 pandemic was faced with a major tax policy challenge that reflected a different approach

to tax competition. This research will also focus on the imposed country's tax measures and deferrals and their impact on the tax competition during COVID-19.

The research will be mainly based on sources from: national and international legal frameworks; relevant published reports; EU policy recommendations and adopted policies; and theoretical knowledge.

2 A brief overview of the Macedonian tax system policy

The tax system of North Macedonia consists of several tax forms and different types of taxes. During the last three decades, tax reforms were the main focus of the country, especially with the adaptation to the programmes of the World Bank and IMF (International Monetary Fund). Additionally, the tax system in the country has been reformed for several reasons: by following the OECD and EU recommendations; to ensure indirect and direct investments and trade; to build a mechanism for legal and natural persons to invest and spend in their own country; and to develop the national capital market.

The main tax reform was adopting the flat tax in 2006. Consequently, progressive taxation was repealed, and flat taxation has been implemented with one reduced tax rate of 12% in 2007 and 10 % in 2008. Before this reform, the tax rates for personal income (natural persons) were 15%,18% and 24%, or a taxation rate of 15% for profit income (legal persons/corporations). In this way, the tax burden for the taxpayers was reduced for the first time and listed the country as one of the countries with the lowest tax rate in Europe. Additionally, with the amendments of the Law on Personal Income Tax, the provisions for the taxation of reinvested profit became unenforceable; tax incentives for the companies that invest in the Free Economic Zones; tax holydays; zero tax rate for personal release; postponing taxation on income from capital (ex. interest on time savings and other deposits, postponed until 2023); and capital gain tax exemptions (for sales on securities and units/shares by an investment fund, tax is not payable on capital gains realised from the sale of securities that were issued within the initial public offer, capital gains from the sale of immovable property are exempt in specific cases). This tax reform is one of the most extensive reforms in the country. This is the period when most of the FDI (Foreign Direct Investment) was attracted, and a friendly business environment was introduced. The return to progressive taxation with the 2018 reform. After more than a decade, the proportional tax rate for personal income has been replaced with progressive taxation, while the corporate tax rate remains the same, 10 %. It should be noted that majority of the tax incentives are retained and some of them postponed again (Interest on time savings and other deposits is postponed until 2023, taxation of capital gains from the sale of securities and shares issued by an investment fund is postponed until 31 December 2022).

Throughout these reforms, tax competition has remained the primary driver in the structure of Macedonia's modern tax system. Fair tax competition is one that causes positive effects on the tax system as a whole and thus affects the fiscal discipline of state authorities. This, in general, goes in the direction of reducing tax rates in parallel with the expansion of the tax base, to the line not to erode the tax bases of other countries.

Hence, national tax policymakers must monitor international tax competition and create a fair tax competition environment for all international counterparts. Ensuring fair tax competition is a cornerstone priority included in the Macedonian Tax System Reform Strategy 2020-2023 (The Government of the Republic of North Macedonia, Tax System Reform Strategy (2020-2023), 2020). The Strategy outlines five priorities for tax policy and tax administration in the period 2020-2023: To increase fairness of taxation; To Improve Revenue Collection; To increase tax transparency; To improve quality of services; To introduce Green Taxation. This strategy is a product of joint efforts of several governmental subjects (Ministry of Finance, Public Revenue Office, Customs Administration, Financial Intelligence Office and Financial Police Office) supported by the Delegation of the European Union to the Republic of North Macedonia and the Ministry of Finance of The Kingdom of Netherlands. This work started in 2018 following the strategic approach to policy making adopted by the Ministry of Finance of the Republic of North Macedonia as per the Public Financial Management Reform Program 2018-2021. The Strategy is alight with the Base Erosion and Profit Shifting (BEPS). The Inclusive Framework on BEPS was designed and agreed by the OECD following a call from G20 leaders for increased inclusiveness in the international tax rules. Republic of North Macedonia is already a BEPS Associate and is going to be able to work with the OECD and G20 countries on developing standards on BEPS-related issues and the implementation of the monitoring processes. As a BEPS Associate the Republic of North Macedonia is committed to implement the four minimum standards: Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance; Preventing the granting of treaty benefits in inappropriate circumstances; Transfer Pricing Documentation and Country-by-Country Reporting and Making Dispute Resolution Mechanisms More Effective. (The Government of the Republic of North Macedonia, Tax System Reform Strategy (2020-2023), p. 23)

In 2021, the Ministry of fFinance has promoted the Strategy for economic recovery and accelerated growth (SmartER Growth) (Ministry of Finance, 2021). With this strategy the government of the North Macedonia committed to support the recovery of its economy through the preparation of a Smart Specialization Strategy that will ensure that its post-COVID recovery growth strategy is aligned with the EU Green Deal and the commitments made on implementing the requirements. The implementation of this strategy is supported by the World Bank (World Bank, 2021). The strategy aims to Strength

“The countries should enable and accelerate the development of adequate measures and mechanisms for fair tax competitiveness.”

the Business Enabling Environment, expand access to Competitive and Contestable Markets, to promote Technology Adoption to Raise Productivity. The strategy consists of four pillars: (i) economic recovery from covid-19, (ii) accelerated, inclusive and sustainable economic growth, (ii) strengthening the competitiveness of the private sector and (iv) human resource development and equal opportunities (Ministry of Finance, 2021).

In July 2022, the European Commission started the screening process with the country. This includes fulfilling the Copenhagen criteria, which includes a functional market economy and acceptance of all EU legislation and proposals. Consequently, all rules or conditions from the Treaty Establishing the European Community (Common rules on competition, taxation, and approximation of laws) apply to Member States and future member states, as in this case, North Macedonia. In the field of harmonisation of indirect taxes (VAT and excise duties), considerable progress has been made between the member states, but with regard to the harmonisation of tax rules for direct taxes, the Treaty establishing the EU only in principle mandates harmonisation where it is necessary for the normal functioning of the common internal market. The countries should enable and accelerate the development of adequate measures and mechanisms for fair tax competitiveness, on the one hand, but on the other hand, they should be cautious in undertaking measures that won’t significantly affect the tax policies of the other countries in the region, thus encouraging unfair tax competition.

As a small economy, the country seeks to attract foreign direct investments and one of the main tools that the country uses are tax incentives and tax exemptions, tax incentives have been widely used by the Western Balkan countries aiming to attract FDI (Zafiroski & Nesovska- Kjoseva- Tax competition in the Western Balkans: an open door tax policy, pp.40) , Furthermore, the majority of SEE (South Eastern Europe) countries adhered to the policies

outlined in the Stabilization and Association Agreements (SAAs). Promptly, seven of nine South-Eastern European countries introduced flat taxes for corporate income and re-modelled fiscal environments for FDI (Kjoseva, Maksimovska-Veljanovski , & Pendovska, 2015, pp.730-741). Moreover, most of these countries (North Macedonia, Kosovo, and Bosnia and Hercegovina) and neighbouring EU countries (example, Bulgaria) are listed with the lowest statutory corporate tax rates in the world (10 %) in 2021, see Figure 1.

Figure 1: Corporate tax rates around the world in 2021

20 Lowest Statutory Corporate Income Tax Rates in the World, 2021 (Excluding Jurisdictions with a Corporate Income Tax Rate of Zero Percent)

Country	Continent	Tax Rate
Barbados	North America	5.5%
Uzbekistan	Asia	7.5%
Turkmenistan	Asia	8%
Hungary	Europe	9%
Montenegro	Europe	9%
Andorra	Europe	10%
Bosnia and Herzegovina	Europe	10%
Bulgaria	Europe	10%
Chile*	South America	10%
Kosovo, Republic of	Europe	10%
Kyrgyzstan	Asia	10%
Paraguay	South America	10%
Qatar	Asia	10%
The former Yugoslav Republic of Macedonia	Europe	10%
Timor-Leste	Oceania	10%
China, Macao Special Administrative Region	Asia	12%
Republic of Moldova	Europe	12%
Cyprus	Europe	12.5%
Gibraltar	Europe	12.5%
Ireland	Europe	12.5%

Source: (Bray, Sean, Tax Foundation, Corporate Tax Rates around the World, 2021, p. 6); https://taxfoundation.org/publications/corporate-tax-rates-around-the-world/; OECD, Table II.1. Statutory corporate income tax rate; KPMG, Corporate tax rates table; Bloomberg Tax, Country Guides – Corporate Tax Rate; and researched individually, see Tax Foundation, worldwide-corporate-tax-rates.

2.1 Harmful (Unfair) tax competition

In general, designing the fiscal infrastructure is a matter of national policymakers, and countries should be free to design their own tax systems as long as they abide by internationally accepted standards. There is no particular reason for two countries to have the same rates of tax. Although differences in tax systems may have implications for other countries, these are essentially political decisions for national governments.

It is necessary to mention that there is distinction between the fair and unfair tax competition or harmful tax competition. But this phenomen goes "hand in hand" with the fair tax competition. Fair tax competition can be defined as a decision made by a country to reduce the tax burden of its taxpayers, either by lowering statutory tax rates or by granting tax credits to both resident and non-resident entities, exchange of information with other tax authorities and full transparency. In contrast, the harmful tax competition has been defined as a fiscal policy implemented by initiative of a country that offers a wide range of tax incentives and advantages to attract mobile factors (investment) to that country in the absence of transparency and the effective exchange of information with other countries (Lampreave, 2018).

The last decades of 20th century were in the sign of harmful tax practices and competition. In 1996, OECD launched a Report (OECD, Harmful Tax Competition an Emerging Global Issues, 1998) addresses harmful tax practices in the form of tax havens and harmful preferential tax regimes in OECD Member countries and non- Member countries and their dependencies. Such harmful tax practices diminishes global welfare and undermines taxpayer confidence in the integrity of tax system The Report aims to develop a better understanding of how tax havens and harmful preferential

tax regimes, collectively referred to as harmful tax practices, affect the location of financial and other service activities, erode the tax bases of other countries, distort trade and investment patterns and undermine the fairness, neutrality and broad social acceptance of tax systems generally (OECD, Harmful Tax Competition an Emerging Global Issues, 1998, p. 9). In 1997, the European Commision, has launched the Communication from the Commision to the council and the European Parliament: A package to Tackle Harmful Tax Competition (European Commision, 1997). This package is a non-legally binding instrument that includes a Code of conduct for business taxation, that sets a list of potentially harmful tax measures that could influence the investment decision-making of the company (for example, low or zero tax rates). The OECD and EU closely monitor the evolution of harmful taxation and have desing a mechanism (legal and policy basis) to deal with it, as well as to identify and neutralise harmful tax regimes and practices.

“The OECD and EU closely monitor the evolution of harmful taxation and deal deal with harmful tax regimes and practices.”

A contrary to the different approach to the issue of unfair tax competition, the EU and the OECD do not advocate a completely negative attitude towards tax competition, which they even consider a desirable phenomenon if it takes the form of “healthy” competition (Pendovska, Maksimovska-Stojkova, Zafirovski, & Neshovka- Koceva, 2021, стр. 226). According to the announcement of the government, through appropriate measures, it will be impossible to perform an activity that is not registered, and we will harmonise the Law on the prohibition and prevention of performing an unregistered activity with all the laws that the inspectorates act on. The result of the above will be the reduction and elimination of the grey economy and unfair competition faced by registered private companies, sole traders who respect the laws, pay taxes, meet standards, and duly report and pay their employees (The Goverment of the Republic of North Macedonia, Announcement, 2020).

3 National tax competition in the region and on a global scale - Instruments and mechanisms

Tax competition can be implemented in many different ways, which goes from general to specific measures. The Western Balkan Countries are trying to boost their national economies through fair tax competition in the surroundings of the EU and international tax competition. The country if familiar as a favorable tax environment. Many fiscal measures were adopted during the last three decades, through which the country aimed to maintain the growth-friendly tax policies and attract foreign investments. From some domestic researcher this period was introduced as an open-door tax policy, see: Zafiroski & Nesovska- Kjoseva- Tax competition in the Western Balkans: an open-door tax policy, 2020.

The general measures that accelerate tax competition are mentioned supra (strategies, tax reforms leading to a reduction of the tax rate, etc.). Some specific measures that are released for tax competition on a national level will be elaborate, infra, for example: tax exemption and tax incentives in direct and indirect taxation (adopted and postponed provisions for the natural subjects that invest in the Macedonian capital market and financial institutions (ex. tax exemptions for capital gain from securities, interest income, insurance income), VAT exemptions and VAT refunding to traders (sole proprietor, companies), and lately, VAT refund for natural persons).

3.1 Tax incentives as a specific measure for a competitive tax system

As mentioned, supra, one of the national mechanisms as generic measure was introducing the Flat Tax, as in most of the Western Balkan Countries. With the novels, concerning direct taxation- profit taxes, in the Law on Personal Income Tax and the Law on Profit Tax the progressive tax rate has been replaced with proportional tax rate. Moreover, the country is listed as one with the lowest corporate income tax rates in the world (See Figure 1).

The corporate income tax is 10%, same as the personal income tax. The average top corporate rate among EU27 countries is 21.30%, 23.04% among OECD countries, and 69% in the G7 (Corporate Tax Rates around the World, 2021).

Additionally, the country follows the harmonization with in the indirect taxation in the EU and at the beginning of the 21st century has fully implemented the Value Added Tax (VAT) in the national tax system (Law on Value Added Tax, Official Gazette of North Macedonia No.44/99, ...163/21,). Following the EU VAT Directive and the condition of the national economy, the general VAT rate is 18%, the reduced rate is 5%, which again makes the country as a favorable tax environment. The EU's average standard VAT rate is 21 percent, according to the list of VAT rates applied in EU member countries, North Macedonia has the same VAT rate as Malta. Luxembourg has the lowest standard VAT rate at 17

percent, and the highest standard VAT rate has Hungary with 27 percent. Croatia, Denmark, and Sweden levies standard VAT rates at 25 percent.

Table 1: List of VAT rates applied in EU member countries (last updated as of 23 March 2022)

Member State	Country code	Standard rate	Reduced rate	Super reduced rate	Parking rate
Austria	AT	20	10 / 13	-	13
Belgium	BE	21	6 / 12	-	12
Bulgaria	BG	20	9	-	-
Cyprus	CY	19	5 / 9	-	-
Czechia	CZ	21	10 / 15	-	-
Germany	DE	19	7	-	-
Denmark	DK	25	-	-	-
Estonia	EE	20	9	-	-
Greece	EL	24	6 / 13	-	-
Spain	ES	21	10	4	-
Finland	FI	24	10 / 14	-	-
France	FR	20	5.5 / 10	2.1	-
Croatia	HR	25	5 / 13	-	-
Hungary	HU	27	5 / 18	-	-
Ireland	IE	23	9 / 13.5	4.8	13.5
Italy	IT	22	5 / 10	4	-
Lithuania	LT	21	5 / 9	-	-
Luxembourg	LU	17	8	3	14
Latvia	LV	21	12 / 5	-	-

Member State	Country code	Standard rate	Reduced rate	Super reduced rate	Parking rate
Malta	MT	18	5 / 7	-	-
Netherlands	NL	21	9	-	-
Poland	PL	23	5 / 8	-	-
Portugal	PT	23	6 / 13	-	13
Romania	RO	19	5 / 9	-	-
Sweden	SE	25	6 / 12	-	-
Slovenia	SI	22	5 / 9.5	-	-
Slovakia	SK	20	10	-	-

Source: Your Europe, VAT rules and rates, n.d.

3.2 The Free Economical Zones as an instrument to accelerate the tax competitiveness

The Free Economical Zones have become a main strategic fiscal measure for developing countries and an instrument that encourages tax competition. When first established in the national legal system, they were introduced as Free Economical Zones. Later on, according to the contemporary law, they became Technological-Industrial Development Zones (TIDZs). North Macedonia has several investment zones (see Figure 2) that enable a wide range of national tax incentives. As with the ten-year tax breaks for corporate profits, employment income, VAT exemptions, customs duties (import and export of goods and services), and so on. Therefore, investors in TIDZs are entitled to personal and corporate income tax exemption for the first 10 years. Investors are exempt from the payment of value-added tax and customs duties for goods, raw materials, equipment, and machines. Moreover, up to €500.000 can be granted as an incentive towards building costs depending on the value of the investment and the number of employees. The land in a TIDZ is available under a long-term lease for a period of up to 99 years. Other non-fiscal benefits include completed infrastructure that enables free connection to natural gas, water, electricity, and access to a main international road network. Investors are also exempt from paying a fee for the preparation of the construction site. Fast procedures for business activity registration are provided in TIDZ that further reduce the costs of setting up. (Invest North Macedonia, 2022), (for more see on: https://investnorthmacedonia.gov.mk/free-economic-zones/).

Technological Industrial Development Zones are types of centres regulated by special laws, therefore these exemptions are stipulated in the special laws or imposed by governmental decisions. This model of attracting and stimulating foreign investment was mainly based on accelerating the economic competitiveness in the region. Nowadays, there are 14 (fourteen) free economic zones with ready-to-use infrastructure on the Macedonian territory (see Figure 2). Eight of them are in function and five are not operating, one is alienated.

Figure 2: Technological/Industrial Development Zones in North Macedonia

Source: Invest North Macedonia, 20.07.2022; https://investnorthmacedonia.gov.mk/mk.

We must mention that most of the free economic zones are established by government decisions based on an agreement between the investor and the government, so their presence mainly depends on the government strategies and political aims. Apparently, these free economic zones are "oases" for the companies that invest. On the one hand, they create new jobs, technological innovations, and international networking; on the other hand, they use a wide range of state benefits and incentives: long term leasing on land in free zones up to 99 years on concessionary prices and possibility of the investors to buy land; infrastructure incentives: (free connection to natural gas, water and sewage network, utility services, energy- connection to the main power lines, transport, accommodation of the workers form and outside of the country, education, children care and health care); customs exemption in some cases; export

and import relief; a preferential tax regime for companies and VAT; personal and corporate tax incentives: 10 year tax holiday for profit and corporate tax and 100% reduction of personal income tax for a period up to 10 years; social contribution reliefs; and the possibility of state aid as an investment incentive (up to 500.000 euros) for infrastructure, new employments, capital investments and income with a return of 10+10% of investment costs in new machines and equipment or investment in buildings; exemptions on paying utility taxes to the local municipality and fees for land building permits, etc. Despite the wide range of benefits, tax and custom incentives that the country offers to the foreign investors, the investors in the free economic zones during the years are using state aid as well (see infra, point 3.4).

3.3 Free Trade Agreements

Another tool for tax competition we may consider the bilateral, regional and multinational agreements that stipulate: duty reliefs under special circumstances, allowing goods to enjoy relief from the application of import duties, to be exempted from excise duty, to avoid double taxation, etc. The Republic of North Macedonia has sign three multilateral Free Trade Agreements: SAA (The Stabilization and Association Agreement with the EU), EFTA (Stabilization and Association Agreement with Switzerland, Norway, Iceland and Liechtenstein), CEFTA (parties Albania, Bosnia and Herzegovina, North Macedonia, Moldova, Montenegro, Kosovo, and Serbia). In addition to the multilateral, North Macedonia has also signed bilateral Free Trade Agreements with Turkey and Ukraine, Trade and Cooperation Agreement between the Republic of North Macedonia and the United Kingdom of Great Britain and Northern Ireland, etc. These agreements give North Macedonia duty-free access to more than 680 million consumers. North Macedonia has also been a member of the World Trade Organization (WTO) since 2003 (Invest North Macedonia, Free Trade Agreements, n.d.). As per the obligations arising from the Protocol of Accession of the Republic of Macedonia to the World Trade Organization (WTO), duty-free import of wheat is envisaged within the frames of the annual fixed quantities of tariff quota.

The SAA EU-FYROM was signed in 2001 and entered into force on 1 April 2004. This is the first Stabilisation and Association Agreement to enter into force. The Agreement commits the parties to further work on political, economic and institutional stabilisation of the country, institution building and public administration reform, enhanced trade and economic co-operation, legal approximation with the Community acquis and strengthened co-operation on justice and home affairs. The full implementation of the Agreement will also create a new climate for the development of trade and investment which are crucial factors for the economic restructuring and the modernisation of the country (European Commision, EU - fYROM: Stabilisation and Association Agreement, 2004).

The EFTA States signed a Free Trade Agreement with FYROM (nowadays North Macedonia) in Zürich, Switzerland, on 19 June 2000. The Agreement entered into force on 1 May 2002. The Free Trade Agreement covers trade in industrial products as well as fish and marine products. The transitional period ends ten years after the entry into force of the Agreement. In addition, bilateral agricultural agreements between the individual EFTA countries and North Macedonia have been concluded which form part of the instruments creating the free trade area. Among the objectives of the Agreement (Article 1) are to promote, through the expansion of reciprocal trade, the harmonious development of economic relations between the Parties. The Agreement includes provisions relating to the elimination of customs duties and other trade barriers as well as other trade-related disciplines such as rules of competition, protection of intellectual property, public procurement, state monopolies, state aid, and payments and transfers (EFTA, FreeTrade Agreement/North-Macedonia, 2000). According to this free trade agreement successive reductions were set out to the rate of duty (Article 5). Additionally, according to Article 3,4,6,8 and 13 from the Free Trade Agreement between the EFTA States and Macedonia the customs duties on imports and charges having equivalent effect applies.

The Central European Free Trade Agreement (CEFTA) enlarged it`s membership in 2006 (CEFTA 2006) with six new Parties from the South Eastern Europe (Albania, Bosnia and Hercegovina, Croatia, Macedonia, Moldova, Montenegro, Serbia and Kosovo (in accordance with UNSCR 1244)). Bulgaria and Romania withdrew from CEFTA upon their accession to EU in 2007 and Croatia withdrew following it`s accession to the EU in July 2013 (CEFTA, n.d.) The Western Balkan Six (WB6) aim to build a Common Regional Market based on EU rules. The European Union remains the region's key partner in this undertaking. The Zagreb Declaration (6 May 2020) reaffirmed the unequivocal support for the European perspective of the Western Balkans, noting that "the EU will continue to support such inclusive regional cooperation and urges the Western Balkans leaders to fully exploit the potential of regional cooperation to facilitate the economic recovery after the crisis. This requires strong commitment by the entire region to continue deepening regional economic integration, building on EU rules and standards and thereby bringing the region and its companies closer to the EU Internal Market. Developing this dimension, including through the Regional Economic Area (REA), can help make the region more attractive for investment" (CEFTA, Common Regional Market 2021-2024).

With the free trade agreements, the international and European community support and enable the regional cooperation among the countries in the region. 34 entities in the free trade zones are owned by foreign investors from USA, Canada, Germany, Italy, Turkey, S. Korea. In 2021, they generate approx. EUR 3 bn of exports which equals to 47 % of North Macedonia exports. The export grew by 15% in comparation to 2019 and 22% in compared to 2018. The average net salary was EUR 490 per month (Directorate for Technological

Industrial Development Zones, 2022). Despite the difficulties in the national economy caused by the health crises, it was announced that the export from the zones grew by 15% in comparison to 2019 and 22% in compared to 2018. They consider 2021 as a peak (highest result) in the economy activity for the Directorate for Technological Industrial Development Zones in the last four years. On June 2022, the director of TIDZ, Mr. Jovan Despotovski, presented a feasibility study of the new technological industrial zone Skopje 3, the first high-tech zone that will focus on advanced technologies and will function as a Public Private Partnership with an investment protentional of over 860 million euros (Director of TIDZ, 2022). The Public Private Partnership Agreement for this high technology economic zone should be realized during 2023.

3.4 State aid as a specific measure of tax competitiveness

The government has extended its support for domestic small and medium-sized companies through its plan for economic growth and the measures foreseen in the policy (The Goverment of the Republic of North Macedonia, Announcement, 2020). The government wants to accelerate the national economy growth through extended business activities of the national companies by its governmental programme "A more competitive economy, first at home and then abroad". Encouraging private domestic direct investments, up to 1.2 billion denars per year in 2024 and attracting foreign direct investments with a focus on those based on innovation, a high degree of finalization of products and

services and sustainability of businesses, a total of 1 billion euros by 2024. An increase in company exports. The nominal value of exports in euros is expected to reach 8 billion euros in 2024. The North Macedonia is expected to achieve a competitiveness index in the Global Competitiveness Report (WEF) of 57.6 in 2024 (FinanceThink, 2020).

"State aid is defined as an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities...Tax reliefs can be considered as state aid only when they give the recipient an advantage on a selective basis (for example, to specific companies or industry sectors)" (Petropoulos, 2018). According to the domestic regulation the state aid can be granted for domestic and foreign investments. The Minister of Economy Bekteshi stated that "over 50 million euros have been given in four years only through the approval of the Law on Financial Support to Domestic Companies" (Minister of Economy, Government of the Republic of North Macedonia, 2022). As for the companies that are established in the TDIZ, state aid can be granted through an aid scheme or individual aid. State aid schemes for the TIDZ is granted to the users of the zones under conditions provided by Article 4-a, 5, 5-a, 6, 6-a and Article 8 of the Law on TIRZ and on the basis of concluded agreements for granting of state aid. The aid scheme is granted for: tax exemptions and reliefs; customs exemptions and reliefs; assistance for training and improvement and participation in the construction of a construction facility for a user in the zone up to 500 thousand euros. The Individual aid is granted according to the Law on State Aid Control (Official Gazette of the Republic of

Macedonia No. 145/2010, 2010), the signed agreement and the approval from the Commission for Protection of Competition (issued according to the Law on Protection of competition (Official Gazette of the Republic of Macedonia No. 04/05, 11 January 2005)). According to the State Audit Office, in the period from 2017 to 2021, the Directorate for TIRZ has granted state aid in the total amount of 75.5 million euros, of which 37.5 million euros are directly paid from the RSM Central Budget, and the tax and customs exemptions are in the amount of 38 million euros (Final report of the development and operation of techological industrial zones, State Audit Office, 2022, p. 26)

The fiscal measures imposed during COVID-19, most of which were temporary, including subsidies on private sector wages and social security contributions for firms that maintain employment, the postponement of income tax payments, loans on favourable terms and loan guarantees, and sector-specific support, have become part of the regular policies for financial support of companies. The government stimulates the economic operators that are associated with tourism and promotes domestic tourism, the IT industry, protecting job positions and opening new one, support to innovations, support of the most vulnerable categories, providing goods and services on preferential terms, support of initial investments. For example: the government will launch the "Star Plus" project for state subsidies in the amount of 50% of the investment for a registered catering facility that intends to get one level higher categorization of its facility, in all key tourist spots (The Goverment of the Republic of North Macedonia, Announcement, 2020); The companies that received state financial assistance are expected to create more than 3,700 jobs in the next 5 years or until the end of their contracts (Minister of Economy, Government of the Republic of North Macedonia, 2022); Additionally, for initial investments, compared to domestic and foreign investors, for investors from the diaspora, the financial support from the state is higher by 10% (GOVERNMENT OF THE REPUBLIC OF NORTH MACEDONIA, 2020, p. 53).

The national economy took a new, severe hit as a result of the energy crisis. As a result, the governmental support took a variety of forms of financial interventions increasing the budget expenditures, however "in some circumstances government interventions are necessary for a well-functioning and equitable economy" (European Commission, Competition Policy, 2022).

4 Tax competition during and after COVID -19

The fiscal incentives represent the vast majority of the COVID crisis relief measures. In addition, the restrictive measures to protect against COVID-19 have slowed down or paused production processes and reduced the income of domestic companies. Following the government's 2020-2044 plan, a lot of stimulations and reductions have been made in the direct and indirect

taxation. These measures (economic, reliefs, stimulus) focus on supporting the population, companies and the retail economy. Thus, fall into three categories: measures that cause budget expenditures or direct fiscal implications, measures that cause reduced budget revenues, and measures that have an economic impact and do not have fiscal implications. As mentioned above, during and after the Covid- 19 the government had adopted fiscal measures to help address firms' liquidity problems, protect jobs, and support the most vulnerable categories. These measures, includes subsidies on private sector wages and social security contributions for firms that maintain employment, the postponement of income tax payments, loans on favourable terms and loan guarantees, and sector-specific support. Vulnerable households have also received financial support through existing social assistance schemes and cash vouchers. Students have received the partial reimbursement of university tuition fees and IT courses. During the health crises and now days the energy crises the price controls on basic food products, medicines, gasoline, disinfection products have been lifted and imposed in several occasions. The personal income flat rate tax remains with 10% tax rate, the progressive taxation of the personal income (wages, capital gain, payment of dividends and corporate interest) adopted with the 2018 reform will be postpone until 2023. Another main focus is the IT industry it is planned the personal income tax rate in the IT industry to be reduced to 0% in 2023. This contributed to the sustainability of the debt level of the "households" sector as a whole, but also the further growth of financial assets, which for the most part remain invested in deposits with domestic banks. This is particularly significant for financial stability, because the "households" sector, apart from being a user of credit products, represents the most significant creditor (small investor) of domestic banks, where it increased its invested deposits during 2019. The profit tax remains at the level of 10% throughout the period 20-24 (GOVERNMENT OF THE REPUBLIC OF NORTH MACEDONIA, 2020, pp. 4-6), which broadly aligns with regional trends (the WB6 average was 11.5% in 2020) but is below the average of OECD countries (23.3% in 2020) (COMPETITIVENESS IN SOUTH EAST EUROPE, OECD, 2021, p. 1498). Additionally, In OECD countries, personal income tax (PIT) and corporate income tax (CIT) together account for nearly one-third of annual tax revenues on average (33.5% in 2018). In North Macedonia, these taxes made up 16.8% of the total in 2019, only half of the OECD average (COMPETITIVENESS IN SOUTH EAST EUROPE, OECD, 2021, p. 1498)

The VAT rate for craft services was reduced from 18% to 5% in 2021; For the first time in the Macedonian system a VAT tax rate of 10 % was introduced (a single rate of 10% VAT for all restaurant services, for gasoline); the VAT payment threshold was raised from MKD 2 to MKD 3 million in annual turnover beginning in 2022. Like most WB6 economies, North Macedonia relies heavily on taxes on goods and services. These amounted to 12.1% of North Macedonia's GDP, which is below the WB6 average (15.9% in 2019) but above the OECD average (10.9% in 2018). Value-added tax accounts for more than half of revenues from GSTs,

or 7.5% of GDP. North Macedonia levies a standard VAT rate of 18%, which is the second lowest rate of the WB6, alongside Kosovo; the WB6 average VAT rate is 19% and the OECD average was 19.3% in 2020 (COMPETITIVENESS IN SOUTH EAST EUROPE, OECD, 2021, p. 1500)

Despite ongoing political disagreements with some neighboring countries, North Macedonia follows the tax competition policy of the Western Balkans countries. Therefore, there is need to strengthen the network with the Western Balkan countries and to exchange best practices in order to implement the economic measures in response to support the national economic policy and maintain the country's financial stability. In long term, the tax competition is seen as the adequate mechanism and a key structural economical challenge, therefore the foreign subsidies and aids still remain the cornerstone and adequate mechanism to envisaged the economic recovery and to accelerated economic growth.

5 Conclusions

The North Macedonia's tax system has been reformed several times since independence, in response to international challenges and practices on rational tax systems and fair tax competition. In order to facilitate the free movement of goods and services, the country follows the concept of tax harmonization in accordance to adjust the national legislation to the EU common standards, policies, recommendations and general trends on taxation and tax competition. In general, designing the fiscal infrastructure is a matter of national policymakers, and countries should be free to design their own tax systems as long as they abide by internationally accepted standards.

The political changes in the country were accompanied with a lot of important fiscal reforms. These reforms, mainly, has been determinate by the dynamics of the global economy and the openness on the national economy toward the market economy. Overall, the small economies are not creators, but followers, therefore this global divide should not be overcome but rather enhanced through competition. The globalization of the economy and trading (especially e-trade) has imposed an international principles and standards for business-friendly environment which push the developing and transition countries to undertake tax harmonization with the OECD and EU countries. This is seen through different general and specific measures that the country undertakes to maintain its stability and to accelerate its national economic growth through international recognition. The Western Balkan Countries are trying to boost their national economies through fair tax competition in the surroundings of the EU and international tax competition. Therefore, the tax system in the country has been reformed for several reasons: by following the OECD and EU recommendations; to ensure indirect and direct investments and trade; to build a mechanism for legal and natural persons to invest and spend in their own

country; and to develop the national capital market.

Therefore, the national tax policy was created to be more attractive for foreign investments and to make the country more competitive in the region. It seems that tax competitiveness is more related to the tax treatment of domestic and international, legal and natural persons, and easing the tax burden of their personal and corporate taxable income. Tax relives and exemptions for foreign companies that invest in the so-called Free Economical Zones (Technological Industrial Development Zones).

International tax competitiveness may also be seen through the possibility of creating a business-friendly environment. Throughout these reforms, tax competition has remained the primary driver in the structure of Macedonia's modern tax system.

Regarding the development and operation of the technological -industrial development zones, we should stress that there is a lack of strategies, investment programs, and consistent and harmonized legal framework that will enable transparent and equal operation of all foreign investors and encourage economic cooperation and efficiency.

The policymaker should be able to predict the political and economic developments, to analyse the complexity and radical uncertainty of global finance, and the interrelatedness of the financial system and the global economic activities and structures. Overall, the small economies are not creators, but followers, therefore this divide should not be overcome but rather enhanced through competition.

The country should procced with the low tax rates in the direct and indirect taxation. This is the main fiscal instrument to maintain and accelerate the tax competition. Flat taxation should continue to be part of the tax system, respecting the principles of flexibility and sufficiency of the tax system and in favorem of individual and trade company profits. On the other hand, the postponement of the general provisions of the tax laws should be avoided as a practice. It is necessary to understand how the previous and contemporary practises concerning taxation are pushing the country in legal uncertainty. This prevents the country from long-term sustained international tax competition.

The country needs to adopt digital services taxes (DSTs). In the last few decades, the digital market has become mainfield for the traders. The state follows the EU directives for e-trading, but it seems that at this level we are in the basket for unfair tax competition. Most of the profit made is withdrawn to neighbouring countries to avoid direct and indirect taxation.

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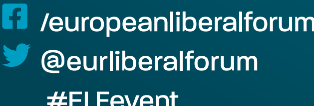

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