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The competition analysis in the field of corporate income tax in the EU

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Abstract
Beáta Blechová: **The competition analysis in the field of corporate income tax in the EU**

With the emergence of multinational corporations and globalization of their economic activities, the competition between these companies is being expanded also on the competition between individual states. This competition is also manifested in the tax area, when less economically developed countries are trying to attract the foreign investors from economically advanced countries to their country through a lower corporate tax burden, which is considered as harmful tax competition. This article contains a comparative analysis of developments in the corporate income tax burden in the EU, with the aim to assess the merits of the opinion on the harmful impact of tax policy in this area, used by thirteen new, economically less developed EU member countries. As an indicator of the size of the tax burden are used herein both the statutory and the effective corporate tax rates.

Key words

corporate income tax rates, global economy, tax competition, tax coordination and harmonization

JEL: F21, F62, H25, H26

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Introduction

Much discussed topic today is the globalization process, which has developed into its present form as a result of continuous development of the world economy. J. Stiglitz characterizes the globalization as "the closer integration of the countries and peoples of the world, brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and people across borders" (Stiglitz, 2002).

Globalization is indissolubly linked with the emergence of Multinational Corporations (MNC), i.e. companies which have their headquarters in one country and develop continuous operation under its control in at least two other countries with the use of Foreign Direct Investment (FDI). The poorer countries are trying their best to attract investments of these companies, since they enable them capital inflows and attracting or invoking secondary investment. They also provide them with access to advanced technologies, to advanced managerial experiences, to the developed markets and also create new jobs at the same time. The one of the tools used for this is the lower rate of corporate income tax burden, causing the emergence of tax competition, which most economically advanced states considered harmful.

However, tax competition may also represent certain medicine against efforts to expansion of state power and to increasing of the government spending associated with them, which have an impact on the taxes increasing. So it can act more effectively than political mechanisms, because in this case it has the same effect as competition in business. Under the influence of tax competition, governments would be forced to behave more efficient and more responsive to the priorities of their "customers" i.e. the business entities and private individuals.

Numerous discussions about the impact of tax competition on economic and fiscal situation in each country are currently being held among politicians and among economists also within the EU. Economists and politicians from the original fifteen Member States (EU15MS) mostly critically evaluate tax policy of thirteen new economically less developed Member States (EU13MS) that manifests an effort to attract capital from EU15MS by decreasing the statutory tax rates on corporate income and by providing various tax benefits.

They argue that these activities of EU13MS give rise to harmful tax competition, which has a negative impact on their tax and fiscal policy. As a result, they are themselves forced to reduce the tax burden of incomes, to prevent the leakage of capital to the EU13MS, causing the reduction of their tax revenues. This then has resulted in limiting their opportunities in the provision of public goods and in fulfilling of social functions. These states therefore endeavour to enforce greater tax coordination and harmonization within the EU, particularly in the area of income taxation.

1. Review of Relevant Literature

The articles concerning the consequences of uncoordinated fiscal policies in different political jurisdictions were already presented relatively long time ago, for example Tiebout (1956). He argue that fiscal autonomy enables to apply different tax systems for local governments. Individuals and companies can then choose the appropriate tax jurisdiction, while the tax competition causes screening of various preferences, which are provided to economic units and relate with public expenditure, to different tax rates.

Other articles, e.g. Wilson (1986) or Zodrow and Mieszkowski (1986) are inclined to think, that due to the effect of tax competition, governments will shift the tax burden from mobile production factors, falling into economic function "capital", on the immobile factors falling into the economic functions "labour" and "consumption". This can cause the effect known as "Race to the Bottom" in the taxation of mobile factors and lead to economic decrease due to the reduction in consumption, caused by higher tax burden of labor and consumption. Bradford and Oates (1971) also argue that the involvement of jurisdictions to tax competition will lead to a limitation of the scope of provided public goods, because the result of efforts to attract mobile production factors will be set tax rates lower than optimal. The opinion that tax competition is harmful and leads to sub-optimal low tax rates for mobile production factors supported among others also Wilson (1986), Bucovetsky (1991) and Wildasin (1988).

However, other literary sources, e.g. Ludema and Wootton (2000) or Baldwin and Krugman (2004), point to the fact that competition in the area of FDI flows is affected not only by the amount of applied tax rates, but also by the agglomeration advantages existing in some states. These benefits can e.g. include the proximity of sources of necessary raw materials, the assumption of high sales, the proximity of companies that can provide the necessary cooperation, quality local education system, enough skilled workers, advanced infrastructure, etc. This agglomeration benefits may in fact to ensure also the higher profits for companies taking up residence in those jurisdictions. Therefore the jurisdictions that offer more of agglomeration advantages can afford to apply a higher tax rate.

A certain area of the literature dealing with international tax competition also deals with the consequences of tax coordination, see e.g. Wang (1999) or Konrad (2009). These authors incline to believe that if this coordination was possible and did not require the increase in costs, it could lead to an optimal result. However, with regard to various restrictions of coordination capacity it is not clear, whether the tax coordination could lead to an increase in the average level of welfare.

In generally, tax competition is defined as utilization of such activities by stakeholders within the tax policies that can preserve or increase the attractiveness of a given area as a good place to settle these taxpayers. This competition may take place within one country (between regions, due to better conformity of the tax burden with the needs of the region), or between countries.

At a summit in Brussels in 1997, the European Commission defined "Harmful Tax Competition" as "the level of freedom in the area of tax law, which contributes to significant differences between the taxation of domestic and foreign investment and even to liberation of foreign investment from tax in some EU countries." The phenomenon of harmful tax competition has provoked a reaction also from the Organisation for Economic Cooperation and Development (OECD), which theoretically has accepted tax competition leading to tax cuts and forcing governments to streamline state spending, but at the same time she has implemented activities aimed against harmful tax competition. This is manifested not only between EU Member States, but already represents a global problem and weakens the positive effects of tax competition.

In 1998, the OECD has drawn up a comprehensive report "Harmful Tax Competition - An Emerging Global Issue" (OECD, 1998), which dealt with this issue. In its report were identified factors that are typical for the harmful preferential tax regimes, which can potentially cause harmful tax competition and the emergence of "tax havens". This report has proposed the measures, which should help to eliminate the factors leading to harmful tax competition. A similar position to the issue of harmful tax competition is also presented in the EU, where can be reported the efforts to harmonization or at least to some coordination of tax systems. However, this effort has not yet been very successful because of the differing opinions of individual MS on the extent of this harmonization, which is in many cases influenced by the interests of large multinationals.

2. Analysis of the extent of tax competition in the area of the corporate income taxation between EU13MS and EU15MS according to the development of corporate income tax rates

2.1. Top statutory corporate income tax rates

In assessing the degree of tax competition between EU MS in corporate income taxes is most often based on a comparison of statutory tax rates that are applied at the corporate income tax (SCITR - Statutory Corporate Income Tax Rates). These statutory rates are widely used because of their easy availability. In addition to nominal tax rates they also include the effects of various tax surcharges or reductions, including tax rates concerning local taxes. Their structure is not so uniform in different states.

The following Table 1 shows how have developed the maximum value SCITR in the EU MS in the years 2000-2015. In the reporting period, there has been a decline in the average value of this rate within EU28MS by 9.2 pp, which was affected by approximately the same decline of this average in both groups of EU MS. The average value of SCITR at EU13MS has decreased by 9.6 pp (from 28.2% to 18.6%), at EU15MS this value also decreased by

8.9 pp (from 35.4% to 26.5%). Approximately the same degree of the SCITR average values reduction in both groups EU MS has resulted also the very little change in the difference between the average values for both groups within the observed period, namely the increase of 0.7 pp (from 7.2 pp to 7.9 pp).

Tab. 1: The development of the corporate income tax rates in EU countries

State / Year	SCITR			ECITR1			ECITR2		
	2000 (%)	2015 (%)	Δ1 (%)	2002 (%)	2013 (%)	Δ2 p.b.	2002 (%)	2013 (%)	Δ2 p.b.
Belgium	40,2	34,0	- 6,2	3,0	3,1	0,1	6,7	6,5	-0,2
Bulgaria	32,5	10,0	- 22,5	3,0	1,9	-1,1	10,5	6,8	-3,7
Czech Republic	31,0	19,0	- 12,0	4,2	3,2	-1,0	12,0	9,2	-2,8
Denmark	32,0	23,5	- 8,5	2,9	2,7	-0,2	6,0	5,6	-0,4
Germany	51,6	30,2	- 21,4	1,6	2,5	0,9	4,2	6,3	2,1
Estonia	26,0	20,2	- 5,8	1,1	0,3	-0,8	3,6	0,9	-2,7
Ireland	24,0	12,5	- 11,5	3,7	2,4	-1,3	13,1	7,9	-5,2
Greece	40,0	29,0	- 11,0	3,4	1,3	-2,1	10,0	3,5	-6,5
Spain	35,0	28,0	- 7,0	3,2	2,2	-1,0	9,3	6,6	-2,7
France	37,8	38,0	0,2	2,6	2,7	0,1	5,9	5,7	-0,2
Croatia	35,0	20,0	- 15,0	1,8	2,0	0,2	4,9	5,5	0,6
Italy	41,3	31,4	- 9,9	2,7	2,5	-0,2	6,6	5,8	-0,8
Cyprus	29,0	12,5	- 16,5	6,0	6,5	0,5	19,6	20,6	1,0
Latvia	25,0	15,0	- 10,0	2,0	1,6	-0,4	7,1	5,7	-1,4
Lithuania	24,0	15,0	- 9,0	0,6	1,4	0,8	2,0	5,1	3,1
Luxembourg	37,5	29,2	- 8,3	8,0	4,9	-3,1	20,4	12,1	-8,3

Hungary	19,6	20,6	1,0	2,3	1,3	-1,0	6,1	3,3	-2,8
Malta	35,0	35,0	0	3,5	5,6	2,1	11,8	16,5	4,7
Netherlands	35,0	25,0	- 10,0	3,6	2,2	-1,4	9,4	5,8	-3,6
Austria	34,0	25,0	- 9,0	2,4	2,2	-0,2	5,5	5,1	-0,4
Poland	30,0	19,0	- 11,0	2,0	1,8	-0,2	6,3	5,5	-0,8
Portugal	35,2	29,5	- 5,7	3,3	3,4	0,1	10,5	9,0	-0,5
Romania	25,0	16,0	- 9,0	2,6	2,0	-0,6	9,3	7,3	-2,0
Slovenia	25,0	17,0	- 8,0	1,6	1,2	-0,4	4,1	3,2	-0,9
Slovakia	29,0	22,0	- 7,0	2,5	2,9	0,4	7,6	9,5	1,9
Finland	29,0	20,0	- 6,0	4,2	2,2	-2,0	9,3	5,0	-4,3
Sweden	28,0	22,0	- 6,0	2,0	2,7	0,7	4,3	6,0	1,7
United Kingdom	30,0	20,0	- 10,0	2,8	2,4	-0,4	8,1	6,8	-1,3
arithm. Ø EU28	32,0	22,8	- 9,2	3,0	2,6	-0,4	8,4	7,3	-1,1
arithm. Ø EU15	35,4	26,5	-8,9	3,3	2,6	-0,7	8,6	6,5	-2,1
arithm. Ø EU13	28,2	18,6	-9,6	2,6	2,4	-0,2	7,5	7,6	0,1
Δ3	7,2	7,9	0,7	0,7	0,2	-0,5	1,1	-1,1	2,2

Δ1 = 2015 – 2000 (pp), Δ2 = 2013 –2002 (pp), Δ3 = Ø EU15 – Ø EU13
Source: Eurostat, own calculation

So the SCITR development within the observed period shows the more significant influence of the SCITR level and the extent of their reduction in EU13MS on the development of these rates in EU15MS (see Figure 1).

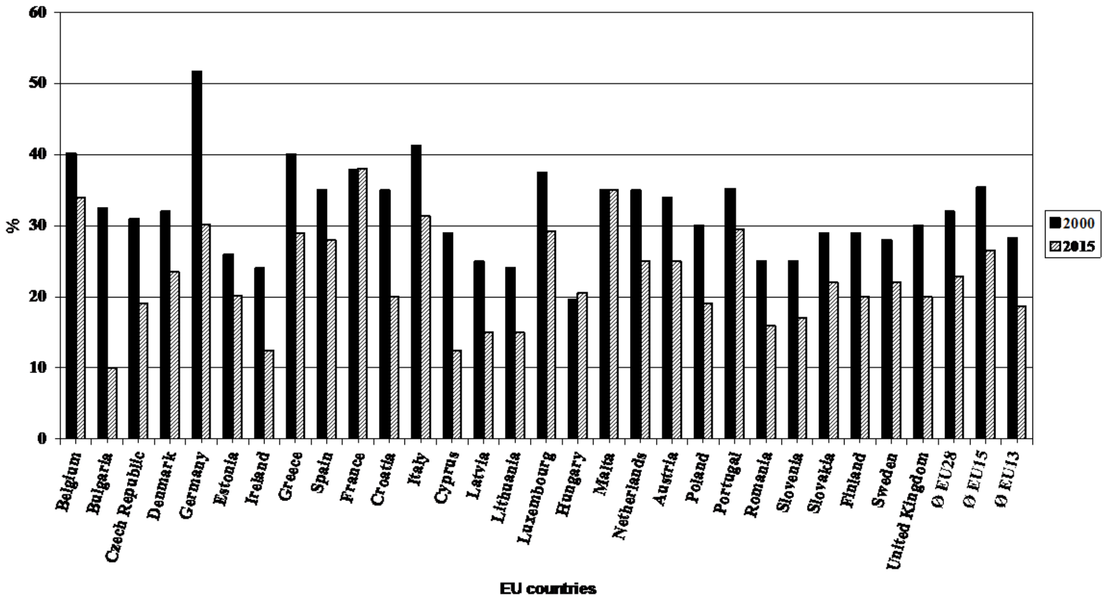

Fig. 1: The development of SCITR values in EU countries between the years 2000 -2015
(Source: Table 1)

2.2. Effective corporate income tax rates op statutory corporate income tax rates

The comparison of degree of the corporate income tax burden in different countries by using the statutory rates do not seem as satisfactory access. The possibility of objective tax burden comparison in different countries according to statutory rates is significantly reduced due to different rules for determining the amount of the corporate income tax base arising from tax legislation in these states. So the statutory tax rates are mainly used for the purposes of the mutual tax burden comparison in different countries due to the simplicity their findings. However, they cannot fulfil the role of objective indicator and therefore the Effective Corporate Income Tax Rates (ECITR) are also used for such purposes.

These effective tax rates take into account not only the size of the statutory tax rates, but also other aspects of tax systems determining the total amount of really paid taxes. Thus, they take into account both the tax base and the method (if any) by which the systems of corporate and personal income tax are integrated. Comparison of statutory and effective tax rates gives an idea of the tax incentives provided by the authorities in individual countries. Comparison of effective tax rates across countries also provides an indication of whether there are fundamentally different tax approaches to the taxpayers with the same characteristics, but residing in different countries. These data can show whether behind the large variances of the statutory tax rates are not hidden only the small differences in effective taxation, because the countries with high statutory tax rates can reduce the size of the tax base or soften tax enforceability. The analysis of the effective corporate taxation can thus better illuminate the workings of tax competition between countries.

Table 1 and Fig.2.shows the evolution of the tax burden on corporate income in the EU MS between the years 2002 to 2013 using two kinds of effective tax rates, set by methods known as “macro backward-looking methods” (Nicodème 2001), namely, as a percentage of aggregate tax revenues from corporate income in a given country to its GDP (Effective Corporate Income Tax Rates 1 - ECITR1) or to its total tax revenues (ECITR2). A different tracking range of the time span than in the case SCITR is here affected by the availability of the underlying statistical data.

The Table 1 shows that the average value of tax rate ECITR1 decreased by 0.4 pp within EU28MS due to a decrease in both groups of MS. In EU15MS this decrease amounted to 0.7 pp (from 3.3% to 2.6%), when in 10 MS has been reported the ECITR1 reduction and in 5 MS its increase on the contrary. In EU13MS the average value of ECITR1 decreased by 0.2 pp (from 2.6% to 2.4%), when the 8 MS showed reduction of ECITR1 and 5 MS its increase.

As a result of the higher ECITR1 average value decline in the EU15MS compared to EU13MS, the difference between these values at the end of the reporting period decreased compared to its beginning. This conclusion, however, cannot be universally applied for each MS in both groups, where it showed the considerably different trends. Nevertheless we can say that tax competition between EU15MS and EU13MS had a certain coordinating effect on the corporate income taxation, expressed by rate ECITR1.

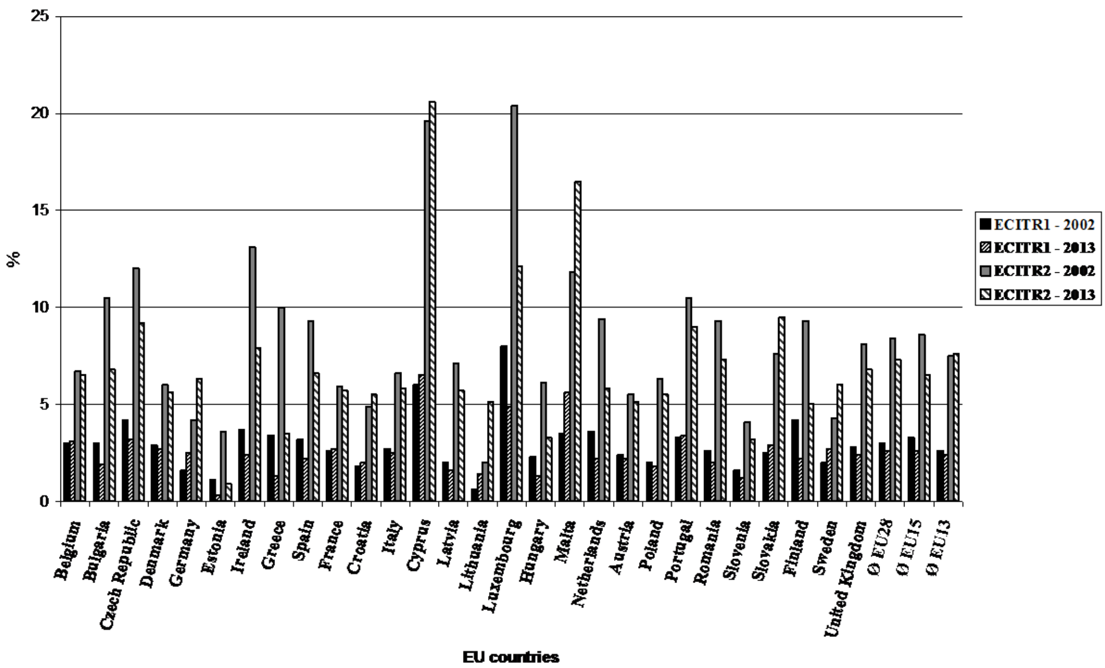

Fig. 2: The development of ECITR1 and ECITR2 values in EU countries between the years 2002 -2013

(Source: Table 1)

If we use the effective tax rate ECITR2 for the assessment of the competitive effects in the area of corporate income taxation between EU15MS and EU13MS, then according to the data in Table 1, we can conclude that the average value of this rate have decreased within EU28MS by 1.1 pp (from 8.4% to 7.3%). In EU15MS this decrease amounted to 2.1 pp (from 8.6% 6.5%), when in 13 MS has been reported the ECITR2 reduction and in 2 MS its increase on the contrary. In EU13MS the average value of ECITR2 has increased by 0.1 pp (from 7.5% to 7.6%), when the 8 MS showed reduction of ECITR2 and 5 MS its increase. The average value of ECITR2 in EU15MS in 2002 was by 1.1 pp greater than in the EU13 MS, while in 2013 it was the opposite.

From the development of ECITR2 average values in both groups of MS so cannot be deduced that the development of this value in the EU15MS was influenced by the development in the EU13MS. However, we can also observe here the considerably different trends in the development of corporate income tax burden, expressed by ECITR2 rate, in individual Member States in both their groups.

Conclusion

The comparative analysis showed that the dependence of the development of corporate income tax burden in the EU15MS on development in the EU13MS had a different character according to the used tax rate. Unambiguous dependence has proven by using the statutory tax rates, when the development of their average value showed a significant decrease in both MS groups in the reporting period. However, the evaluation of the tax burden by using the statutory tax rates is not objective because it does not take into account the amount of tax bases neither various tax advantages granted to tax subjects.

When using the effective tax rate, determined the percentage of the aggregate corporate income tax revenues to GDP in individual states, is possible assume a certain dependence of the income tax burden corporate in the EU15MS on its development in the EU13MS, although there were only minor changes in both groups of MS.

In the case that has been applied the effective tax rate, determined by the percentage of the aggregate revenues of this tax in total tax revenues in individual states, then the development of corporate income tax burden had opposite trend in both groups MS. From the development of this effective tax rate cannot therefore be assumed that the development of the corporate income tax burden in the EU13MS had an influence on its development in a group of EU15MS.

The effect of competition in the area of corporate income tax between EU MS should also be reflected in the volume of foreign direct investment (FDI) flows between the EU MS. However, an analysis (Blechová, 2015) shows that FDI trends in the EU in the period 2004 to 2012 showed no functional dependency on the development of both the statutory and the effective corporate income tax rates. Random character of this dependence also does not indicate the harmful impact of the corporate income tax rates development in EU13MS on this development in EU15MS. Far more harmful effect on the development of the corporate income tax burden and on the development of revenues from these taxes in all EU countries have tax jurisdiction, referred to as "tax havens" and "offshore financial centers".

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