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Impact of the Tax System on the Competitiveness of Businesses and Capital Inflow

International comparison within the CEE region

SUMMARY: This study starts the investigation of the correlations between taxation and the competitiveness of businesses by clarifying some general issues. It examines the different channels of tax regulation that affect the competitiveness of businesses. Although the study has an international scope, it focuses primarily on the Visegrád countries. The relationship between the investors' willingness and taxation is also analysed. The study concludes that in a European context there is no close correlation between the competitiveness of the tax system and capital inflow. In the opinion of the author, the regulatory system should be simplified primarily, with a view to improving the investment environment of the Visegrád countries. One important conclusion of the study is that the competitiveness of the businesses of the region is encumbered less by the size of tax burdens and much more by the complications of tax regulation and the time-consuming nature of the administrative tasks connected to taxation.

KEYWORDS: competitiveness, tax system, capital inflow, Central and Eastern Europe

JEL CODES: H20, H25, H32, F21

The role of fiscal policy in the improvement of competitiveness and economic growth has gained higher importance recently. The tax system is one of the most important economy-stimulating and competitiveness-improving measures of fiscal policy, the efficient transformation of which may bring favourable results. It is an important requirement that the tax system should be fair to economic players, should respond to changes of the economy with a stabilising effect, and should not distort the efficient use of production factors (Lentner, 2005, 2016). The decisions of economic players are beyond

doubt influenced by the tax regulations. Not only radical, but even milder changes have an impact on their behaviour. Theoretical literature and international organisations urge a shift towards indirect, that is consumption taxes, and on the other hand propose the reduction of labour taxes and capital income taxes (Ádám et al., 2016). By restraining the accumulation of capital, high capital income taxes hold back the growth of the economy, and at the same time act as distorting factors in saving and investment decisions. And labour taxes distort human capital accumulation and the decision-making of the enterprise. As far as economic growth is concerned, indirect taxes are the least harmful. Recognising this,

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tax reforms were implemented in the countries of our region, in line with the tax policies of advanced economies. Consumption taxes do not distort the saving and investment decisions of economic players, and entail comparatively low administrative costs.

The tax system is able to influence competitiveness via several channels at the same time. Predictability and stability are significant characteristics of the tax system that are expected by the investors as well, and that improve the competitiveness of the country by decreasing uncertainty. At the same time, the incentive effect of a tax system that consistently follows the principle of cost efficiency is not negligible either. Tax policy – within the framework of allocation and reallocation – should ensure the sustainable growth path of the economy. As the competitiveness of the economy is significantly influenced by the effective and efficient spending of public funds, the role of value-generating audits that promote the transparency, accountability and orderliness of public funds is also becoming more important.¹

After clarifying some general issues of competitiveness, this study endeavours to identify the correlations of taxation and the competitiveness of businesses, covering the relationship between the investors' willingness and taxation as well. It examines whether the currently effective tax regulations in the countries of the region influence capital inflow, or rather the choice of business sites is determined by other factors.

CORRELATIONS OF THE COMPETITIVENESS OF NATIONAL ECONOMIES AND BUSINESSES

With the acceleration of the global processes of our time, any economic growth that is sustainable in the long term can be ensured

primarily through the efficient operation of the private sector. With the strengthening of globalisation trends and the almost exponential development of technologies – besides the efficiency of businesses – the role of competitiveness (which is frequently mentioned these days and has also acquired several different meanings) is also gaining importance.² Although economists have to this day failed to come to a full agreement as far as the exact definition of competitiveness is concerned, identifying it with productivity would be a serious mistake. *Samuelson and Nordhaus* (1990), authors of an essential work in teaching economics have already pointed out several decades ago that competitiveness meant much more than the examination of productivity. Productivity, efficiency and profitability can be quantified in trivial mathematical terms, whereas competitiveness “*describes the state* [of a company or – when applied at the level of national economy – of the economy] *interpreted from a particular aspect based on a combination of several different indicators*” (Török, 2007, p. 1066). Török (1997, 2007). Accordingly, competitiveness means persistence in the face of market competition in relation to companies and succeeding in international competition in relation to countries.³

With the split of economics into two main branches, the research of competitiveness initially fell within the scope of business studies, which obviously supported the research of the competitiveness of businesses (Török, 2008). As a consequence, in the 1990's *Porter* (1990) and *Krugman* (1994) explicitly refused to interpret competitiveness at the level of the national economy.⁴ Although *Porter* (1990) pointed out the significance of macro-economic factors that promote the international successes of countries,⁵ he did not think any of these to be sufficient. In his opinion, due to the irresolvable conflicts of interest and dif-

ferent behaviour of the economic players it is almost impossible to analyse the competitiveness of the national economy in a consistent manner. He concluded that the competitiveness of countries moved together with a high level of productivity and growth rate achieved in global competition, practically drawing a parallel between the competitiveness of the individual countries and their productivity.⁶ *Krugman* (1994) argued that apart from competition, economic relations between the different countries were based on cooperation as well, as a consequence of which countries – as opposed to companies – do not compete to the detriment of one another. Porter is convinced that the standard of living in a country depends on the performance of the national economy. At the same time, partly due to the existence of comparative advantages, it is not a problem if the productivity of a country is lower than that of its commercial partner. As regards *Krugman's* arguments, however, *Török* (2008) called attention to the fact that the measurement of commercial benefits was traditionally (Smith, Ricardo, Mill, Heckscher and Ohlin) based on a business site approach rather than a company-wide approach, which is also followed by international commercial statistics.

Krugman in fact disregarded the differences in the level of development among the individual countries and regions, the inequality of capital allocation and the distribution of income, and the economic policy factors, which were not to be overlooked, on the other hand he failed to take into account an economic environment based on the cooperation of the competitors. However, today the competition among business sites should be treated as an indisputable fact. There is a global competition for investments that boost the economy, generate income, create jobs and utilise research and development potentials. Although the ability of the countries to attract capital is

inherently different, the state can still counter-balance “comparative disadvantages” by creating an investor- and enterprise-friendly economic and business environment through the sufficient engagement of its economic policy tools. Although the welfare of a country does not change depending on the productivity of other countries, despite this *Csaba* (2008) warns that in a small and open economy it is not at all indifferent how the relative situation of the country develops. Sharing his opinion one can argue that competitiveness is supposed to illustrate the forward-looking attitude of investors.

Economy is beyond doubt an extensive and complex system, therefore it would be frivolous to draw sharp lines between the different levels of competitiveness, whether we are talking about competitiveness at the level of businesses, industries or national economies. All in all, the competitiveness of national economy is not the sum total or average of the productivity of the companies, but it rather “*responds to the competitiveness of businesses through complex, structural factors*” (*Éltető*, 2003, p. 270). And the set of these factors comprises the country-specific conditions in the framework of which the companies of the private sector operate. The regulation of taxes by the state – which constitutes the subject-matter of this study – is only one of these.

THE COMPETITIVENESS OF BUSINESSES AND THE REGULATION OF TAXES BY THE STATE

Since the first publication of Porter’s macro- and micro-economic competitiveness models⁷, several authors have tried to incorporate the increasingly complex global correlations into the original models. In Hungary the Porter diamond model was elaborated further by *Hoványi* (1999)⁸ proposing a triple diamond

structure instead of the double diamond for the examination of the competitiveness of businesses. The factors of the first level of the model are practically identical with the well-known corner points of the “magic square” in macro-economic analysis. At the second level of the model the different factors are less quantifiable as compared with the first level, although their effect on the competitiveness of businesses and the national economy is not negligible, as ultimately it is exactly these factors that explain the development of the values of the first level. It is at the third point of the second level of Hoványi’s model where the state’s economic policy and the regulation of the economy appear as competitiveness-influencing factors. Level C of the triple diamond model comprises the factors of the global environment.⁹

Lentner (2007) developed a national economic competitiveness model with an empirical approach that rests on three pillars, and is basically rooted in public funds. He emphasizes the indispensable concordance between the national economy and the pillars of society. The balance of a stable public finance environment, an education system supporting human resources that are able to participate in the social division of labour in the long term, as well as healthy labour force and a well-funded social security system is ensured by co-ordinate fiscal and monetary policies through specific public funds mechanisms.

In Kovács’ (2010) definition of the correlation between taxation and competitiveness the tax system must follow the income conditions of society. The designed ratios should stimulate social and economic development, and furthermore as regards tax reforms it is an important objective that these should “*distort the decisions of economic operators to the least extent possible*” (Ádám et al., 2016, p. 604). When examining the relationship between competitiveness and taxation, one should

keep in mind primarily that although the regulation of taxes by the state is only one of the factors influencing competitiveness, the taxation system is able to exert an influence on the competitiveness of businesses through several different channels. The most important mechanisms are highlighted by Akar (2005).

First of all let us examine *cost requirement*, which has a significant influence on the competitiveness of businesses. Although corporate income tax constitutes only a minimal part of the total costs of an enterprise, it is not negligible, and increasing employment costs via public dues, as well as other tax burdens levied on businesses should not be overlooked either. With its impact on *investment and innovation processes*, taxation indirectly influences the competitiveness of businesses as well. In order to establish a tax system that supports investments, the impact of the corporate income tax that distorts investment decisions should be softened. In this context, the size of net income available for investment and development purposes is a determining factor. In line with the view expounded by Nobilis and Svraka (2014), the number one problem arising in connection with corporate income tax is that the tax base is constituted by profit understood on an accrual basis, and not by the difference between the actual incomes and expenses of the company. Besides, tax regulations and accounting rules significantly differ from each other. Certain accounting costs do not qualify as tax base reducing items according to the rules of taxation,¹⁰ and besides, when determining the tax base, depreciation write-offs cannot be taken into account at the rates determined in the accounting policy of the company. Corporate income tax is not neutral from the point of view of the capital structure of businesses either. The costs of debt, in other word interest expenses may be accounted as costs when determining the corporate income tax base, whereby these do not

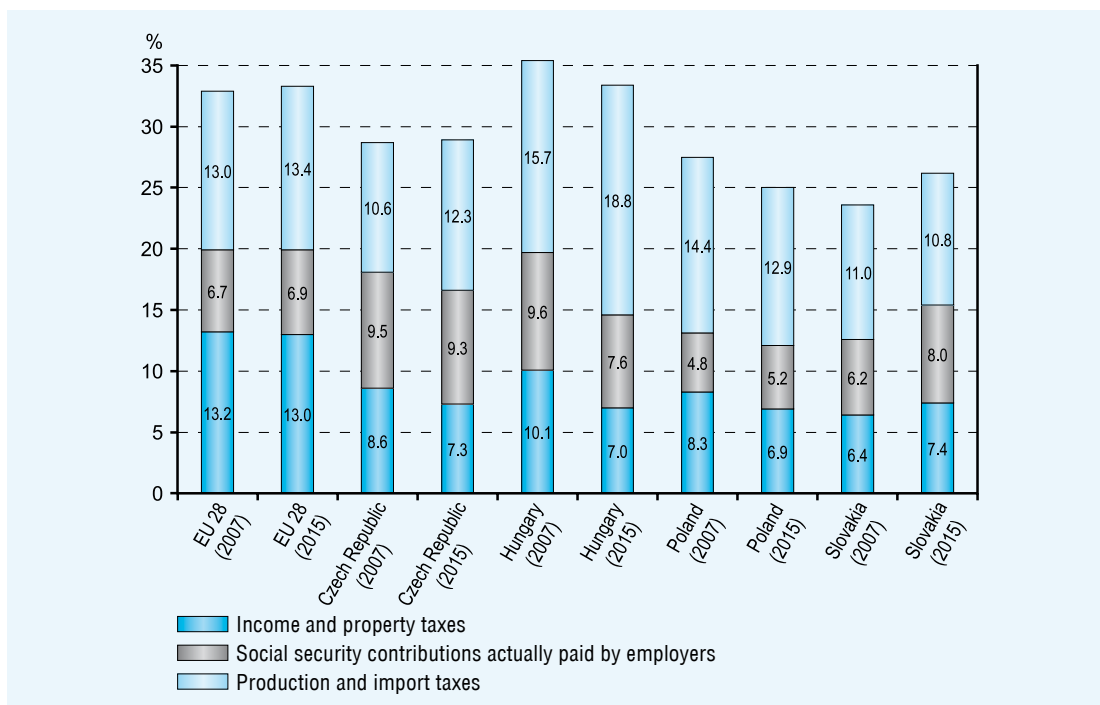
only decrease corporate income tax, but also the costs of debt financing. The positive effect of the tax shield, however, does not prevail in the case of dividends paid from the net profit. With a view to eliminating the distortions caused by corporate income taxes, an OECD study (2007) primarily recommends cash-based taxation for new enterprises. This practically would make it possible for investment costs to be used to reduce the tax base in the year when the expense has incurred. This kind of approach would in fact encourage businesses to reinvest profits into the enterprise and make new investments. As a shift to cash-based taxation would cause severe complications due to accrual-based accounting, investment stimulation by the tax system could be ensured by increasing depreciation write-off

rates, introducing more advantageous terms of taxation for small and medium-sized enterprises and applying different tax benefits. As far as the evaluation of tax benefits is concerned, *Servén's* conclusion is indisputable, (1997), stating that the predictability and stability of incentives is much more important than the level of such incentives.

In the member states of the European Union, the three main types of government revenues¹¹ are constituted by production and import taxes (i.e. consumption taxes), income and property taxes, and social security contributions.¹² Changes in these in relation to GDP are shown in *Figure 1*, which compares the situation directly preceding the crisis with the 2015 data of the Visegrád countries¹³ *Figure 2* illustrates changes in revenues from

Figure 1

REVENUES FROM DIRECT AND INDIRECT TAXES AND SOCIAL SECURITY CONTRIBUTIONS ACTUALLY PAID BY EMPLOYERS IN RELATION TO GDP IN THE VISEGRÁD COUNTRIES IN 2007 AND IN 2015



Source: author's own editing based on Eurostat data

corporate income taxes compared to GDP between 1995 and 2015, again in the Visegrád region.

A remarkable rearrangement could be witnessed in the structure of Hungarian taxes as a result of a series of measures implemented since 2010. In Hungary the ratio of consumption taxes has increased noticeably, while indirect taxes relative to GDP have shrunk considerably. In the Czech Republic, as compared with the conditions prevailing before the crisis, changes in the structure of taxes are more restrained, although a certain shift towards consumption taxes can be seen, counter-balancing a moderate decrease in income taxes. In 2008 the Czech Republic scrapped its progressive tax system, introducing a 15 per cent tax rate for personal incomes. From the initial 42 per cent in 1992, the corporate income tax rate in the Czech Republic was reduced almost from year to year,¹⁴ settling at 19 per cent in 2010 as a result of the tax rate reductions.¹⁵ Poland complied with international requirements by introducing a series of structural reforms from the turn of the millennium, including the establishment of a more efficient and more transparent tax system. With the importance of income taxes reduced, the weight of turnover taxes increased, and at the same time the level of tax centralisation gradually shrank. This trend has not changed since the onset of the economic crisis. In the Polish economy the massive reduction of the tax revenues to GDP ratio practically comprised government revenues from both tax types. In Slovakia, as compared with the pre-crisis period, the tax revenues to GDP ratio has increased significantly. As regards the ratio of indirect taxes in relation to GDP only a slight decrease could be seen, as minor modifications occurred in the regulation of turnover taxes in the period under review.¹⁶ In Slovakia, the increase of income taxes not only counteracted the minor drop in consumption tax revenues, but – together with

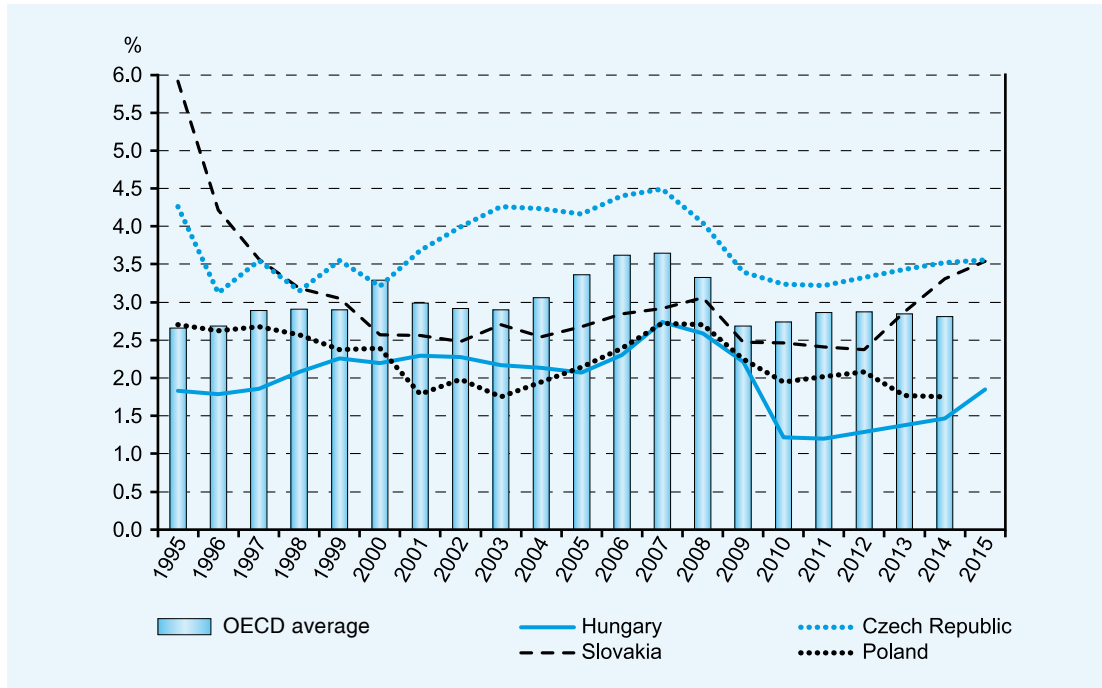
the growth of social security burdens¹⁷ – also generated an increase in government revenues. In 2013, the Slovakian government increased the corporate income tax rate from 19 to 23 per cent, which was subsequently reduced to 22 per cent in 2014.¹⁸ Terminating the flat-rate taxation of natural persons, they introduced two-rate taxation for personal incomes, then radically reduced the eligible flat-rate expenses of small businesses.

From the aspect of competitiveness, within our region it is the structure of the Hungarian and the Czech tax systems that is best adjusted to international trends and expectations. The moderation of the weight of income taxes is in fact counter-balanced by the rise of consumption taxes, which is a significant advance in terms of economic growth and employment as well. As far as tax centralisation is concerned, Hungary exceeds the level of the other three Visegrád countries, however we could witness a significant tax reduction as a result of a successfully implemented tax reform in the recent period. The ratio of indirect taxes as compared to GDP is the highest in Hungary among the V4 countries, whereas the weight of income taxes and social security contributions has dropped noticeably. What is more, in recent years – with the exception of Poland – the income tax and social security contribution revenues in relation to GDP of our peers in the region significantly exceed the Hungarian levels of 7 and 7.6 per cent, respectively, as compared to GDP. (*See Figure 2*)

At the time of the economic crisis, the tax revenues to GDP ratio decreased; however, starting from 2012 – with the exception of Poland – it entered a moderate growth path. Among the countries of the region, the ratio of government revenues from corporate income tax as compared to GDP is the highest in the Czech Republic and Slovakia. The industrially advanced Czech Republic is richer in comparison with her Northern and East-

Figure 2

CHANGES IN CORPORATE INCOME TAX REVENUES IN RELATION TO GDP IN THE VISEGRÁD COUNTRIES, COMPARED WITH THE OECD AVERAGE, BETWEEN 1995 AND 2015



Source: author's own editing based on OECD data

ern peers, therefore it is no surprise that the increasing profitability of the Czech private sector produces higher income tax revenues for the state budget. In Slovakia, significant growth could be witnessed over the recent four years, which is not only due to the 2013 raise of the corporate income tax rate, but to other factors as well. Based on the figures available in the Slovakian FinStat database¹⁹, following the second wave of the economic crisis the net income of the Slovakian private sector has noticeably increased from year to year. In 2014 for example the profit before taxation of the corporate sector increased by almost 2 billion euro as compared with the profit of the previous year. And although the government reduced the corporate income tax rate – raised to 23 per cent in 2013 – by one percentage point in 2014, public revenues

from corporate income taxes did not decrease, but actually increased by 432 million euro. Although in a more moderate measure due to the crisis, in Hungary a major increase in corporate income tax revenues could be seen after the structural reform of the tax system, starting from 2014.

The simplification of the tax system, rational and transparent tax regulations and less bureaucratic procedures have beyond doubt had a more than favourable effect on the competitiveness of businesses. As it is highlighted in the report *Paying Taxes 2017* by the World Bank and business consultant PwC,²⁰ electronic processes supporting efficient and quick administration have made the payment and collection of taxes easier. Despite this, the survey results disclosed in the aforementioned report still show that businesses in Hungary

spend an average of 277 hours per year, in Poland 271 hours per year, in the Czech Republic 234 hours per year, and in Slovakia 192 hours per year, with administrative tasks associated with taxation. Although the fulfilment of administrative tasks connected to tax payment is the least time-consuming in Slovakia among the countries of the region, it still exceeds the EU average of 164 hours per year by more than one full day.²¹

Tax collection of course entails administrative costs as well. From the perspective of the costs of taxation and the willingness to pay taxes, theoretically it would seem reasonable to operate a less differentiated, neutral and in the long term stable tax system, because its maintenance is cost-efficient and it curbs tax evasion. Data for years 2005 to 2011, available in the OECD tax administration database, still strongly belie the above statement. As compared with the Slovakian economy, operating a flat-rate tax system in the period under review, Sweden and Denmark, with their high reallocation system and progressive taxation, collected taxes with an indisputably larger efficiency.²² The costs of taxation as compared to tax revenues, fluctuating between 2.41 and 3.06 per cent, were the highest in Slovakia among the countries of the European Union. As regards the cost requirement of tax collection, Slovakia was followed by her Northern neighbour²³. Among the Visegrád countries, administrative costs are beyond doubt the lowest in Hungary. As regards the level of the costs of taxation, the Hungarian economy ultimately was around the European average. Administrative costs in relation to tax revenues slightly increased from 0.99 per cent in 2005 to 1.2 per cent in year 2010, and in 2011 taxation costs per every HUF 100 of tax revenue amounted to HUF 1.12. The Czech Republic shows an average value of 1.3 per cent, comparable to Belgium. On the basis of the international tax competi-

tiveness index (ITCI) published by *Tax Foundation* (2016) in Washington, D.C. – to be discussed in more detail later – the flat-rate tax system of Estonia was the most efficient among those of the OECD countries over the past three years. This is not contradicted by OECD data concerning the cost-efficient collection of taxes either, since in fact the costs of taxation are the lowest in Estonia among the OECD countries.²⁴ In summary of the findings, it can be concluded – with some reservations – that the differentiation of the tax system has no significant effect on the costs of taxation; presumably the long-term stability of the tax system and modern online procedures in support of the administrative process have a more essential role.

Last but not least, the ability of the tax system to attract capital is examined. One of the decisive factors of the economic competition in our region is tax competition, which undoubtedly also has an effect on the decisions of the investors. Before the crisis, our region was characterised by a fairly strong tax competition. Although rivalry for the favours of the investors has not ceased, action had to be taken to curb the budget deficit caused by the economic recession. Hungary tried to find a solution by raising indirect taxes and reducing income taxes, and Slovakia by increasing both indirect and direct taxes.

The European Union regards free competition as the engine of economic growth and prosperity, and in this spirit it set the elimination of factors hindering competition as its goal. Tax law harmonisation is aimed to resolve the competition-distorting effects of the differences between the tax systems of the member states. The strongest harmonisation of tax laws within the European Union occurred in respect of turnover type taxes due to the fact that it is consumption taxes that affect free trade most between the member states. With the intensification of the compe-

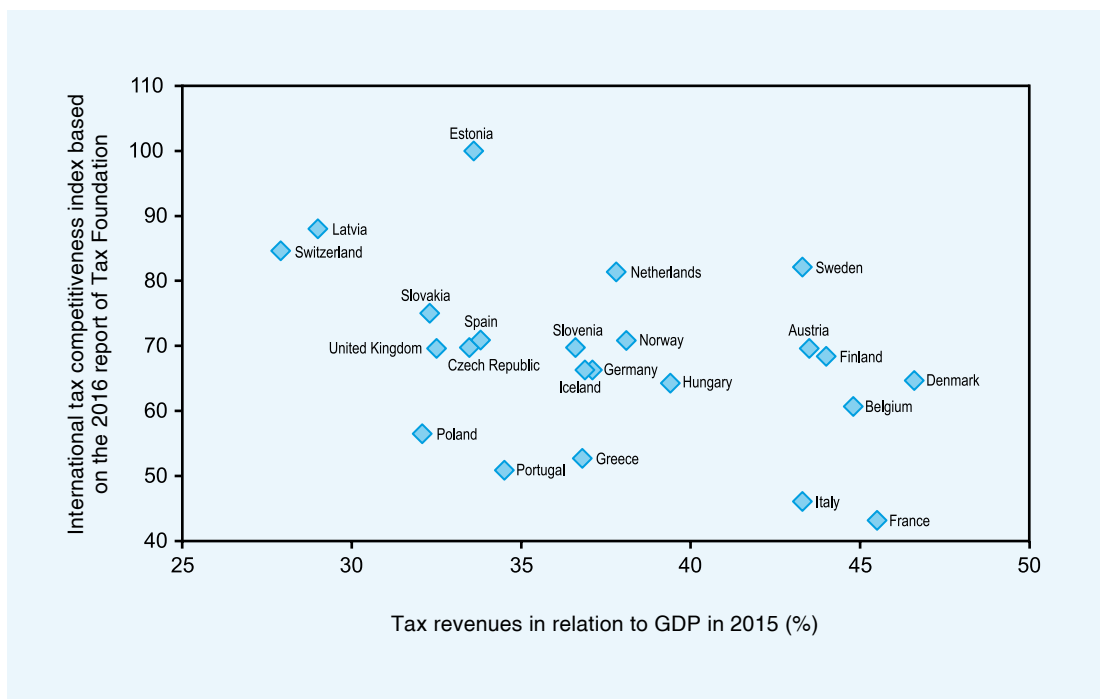
tion for foreign direct investments, the international tax competition also intensified. As a result of the EU level harmonisation of turnover type taxes, income taxes, and within these profit taxes have become one of the tools of tax competition. *“Among the factors of production, capital is the most mobile, and on top of that in the present stage of development of the world economy the importance of capital – as a source of growth – is on the rise (...) economic rationality demands that capital, and especially the business sector, should be taxed to a smaller extent”* (Losoncz, 2006, p. 487). With the extension of EU borders, tax competition has further intensified, and the majority of the member states have reduced high corporate income tax rates. As tax regulation is an impact factor of business competitiveness, the development of a competitive tax system

may increase the ability of the economy to attract capital.

The international tax competitiveness index examines the tax system of the countries from two important aspects, namely competitiveness and neutrality. A competitive tax system is able to maintain marginal tax rates at a low level in the long term as well. Working capital prefers business sites offering more favourable tax conditions and lower tax rates, whereas high marginal tax rates may encourage tax evasion among market economy players. While increasing tax revenues, a neutral tax system endeavours to distort the decisions of economic operators as little as possible, and at the same time to limit and reduce the range of tax benefits. When establishing the ranking of international tax competitiveness, *Tax Foundation* examines

Figure 3

TAX COMPETITIVENESS AND TAX REVENUES IN RELATION TO GDP IN 2015 IN EUROPEAN ECONOMIES



Source: author's own editing based on OECD and Tax Foundation data

more than forty tax policy variables in detail, focusing, besides tax burdens, on the structure of taxes as well as on the evaluation of tax regulation and puts all this in an international framework.

Figure 3 highlights the essential features of the tax competitiveness index. It compares the values of the index with the 2015 tax revenues to GDP ratio in the different European economies. Among OECD countries, Estonia, New Zealand, Latvia, Switzerland, Sweden and the Netherlands have (in this order) the most competitive tax systems.²⁵ And although the tax revenues of the Swiss and the Latvian budget compared to GDP do not even reach 30 per cent, this is not the number one viewpoint in the evaluation of the tax revenues of these countries from the aspect of competitiveness. Operating a progressive tax system, Sweden – with its high tax revenues in relation to GDP – has one of the most competitive tax systems among the OECD countries. Therefore the competitiveness of a tax system is not determined by the volume of tax revenues, but by having the marginal tax rates of the different types of taxes kept at a low level and the neutrality of taxation.

THE EFFECT OF TAXATION ON FOREIGN DIRECT INVESTMENT

Due to the nature of resource seeking investments that are rather capital intensive and tend to settle for extremely long terms, the expected payback period is extended, therefore it is no surprise if they respond to cost and tax factors rather sensitively. Due to the nature and the long lifespan of the investment, it is the stability and predictability of the tax system that is relevant. In the case of market seeking investments, the tax policy of the recipient country essentially determines the choice between production on the spot and the need

for import. The tax policies of the business sites logically mostly affect efficiency seeking investments that restrict themselves to search cheap production factors. Although in the case of efficiency seeking investment decisions the cardinal issues are the low workforce of the recipient country and the cost-efficient use of available natural resources, tax and social security burdens that remain low in the long term support cost-efficiency.

The European Union regards the ability of CEE member states to attract capital especially important also as an incentive for structural development, technology transfer, job creation and economic growth. One of the sine qua non conditions of the development of the private sector is intensive capital accumulation and its adequate structural composition. Capital inflows – that promote a rise in the level of economic output that is sustainable in the long term – may be facilitated by direct and indirect government incentives. One of the indirect government tools to encourage FDI is a tax policy that supports investments. Although the long-term stability and predictability of the tax system is an extremely important factor in investment decisions, it does not play a primary role in the selection of investment targets. It is also emphasised in an OECD study (2008) that only those target countries will attract foreign working capital where the general conditions of the business environment can ensure the continuous increase of the profitability of the enterprise in the long term. The aforementioned OECD study and similarly a UNCTAD report (2015) also asserts that the tax policy factor is not a primary consideration in the investment decisions of international companies. Cardinal factors primarily include quick and smooth access to markets and to funding, a predictable, transparent and non-discriminatory legal environment, macro-economic stability, skilled workforce, flexible labour market con-

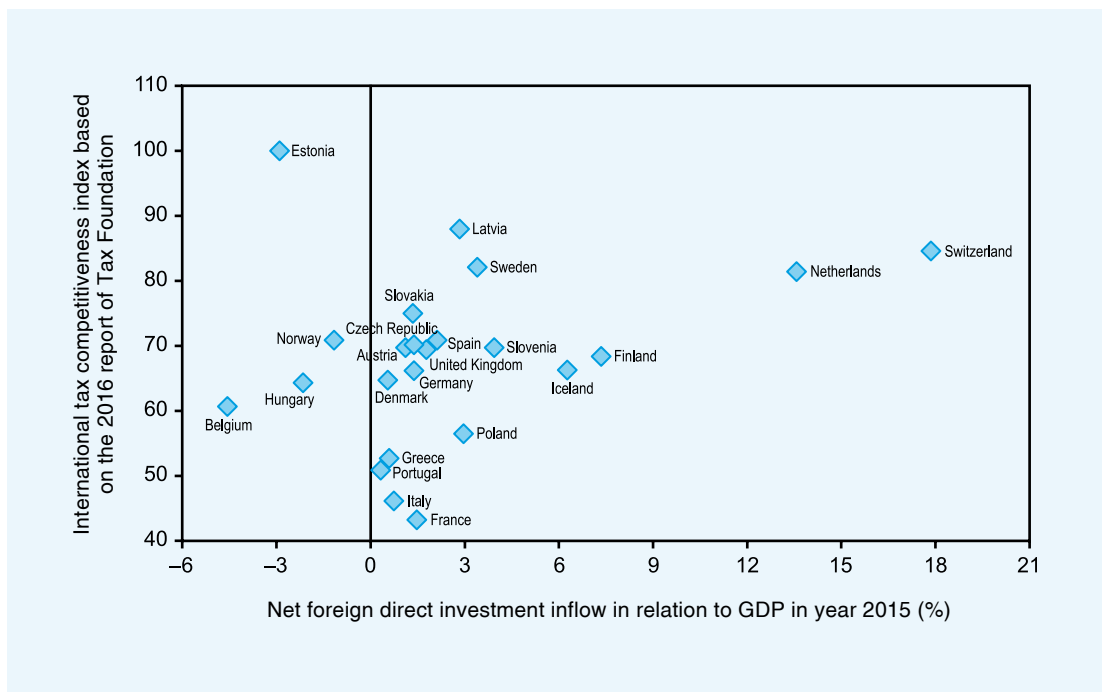
ditions, and last but not least a well-developed infrastructure.

The key question is whether the recipient country is able to keep corporate income tax burdens at an adequate level for foreign investors, and how working capital responds to quantitative and qualitative changes in the tax system. Earlier investigations by the OECD (2008), carried out before the shock of the economic crisis, revealed that foreign direct investment decreases by 3.7 per cent after a 1 percentage point increase in the tax rate. Later on wider estimates were made as well, and most studies compiled by the OECD established a much wider range when examining the resilience between tax rate changes and FDI, while also acknowledging the heterogeneity of the recipient countries.²⁶ In many cas-

es – especially in the case of developed economies – no interaction could be identified, as FDI is also determined by several other factors besides taxes. All this is supported by the aforementioned recent UNCTAD report. The response given by foreign direct investments on tax reforms is not uniform, as it depends on the interaction of numerous factors that are rather hard to measure or interpret. FDI’s sensitivity to tax raises may depend on the recipient country’s level of economic development and the mobility of business activities, especially if companies operate with significant cost saving as a result of production on the spot and the opportunities provided by big regional markets. In this case the radical increase of tax burdens would entail a certain level of inertia.

Figure 4

**TAX COMPETITIVENESS AND FOREIGN DIRECT INVESTMENT INFLOW
(% GDP)
IN 2015 IN EUROPEAN COUNTRIES**



Source: author’s own editing based on World Bank and Tax Foundation data

It is indisputable that the international tax competition did not cease in the years following the crisis either, and with the harmonisation of indirect taxes at EU level attention was drawn to income taxes; it is not always clear, however, whether tax reduction is attractive for investors. The reason for this is that in tax competition the predictability, consistency and stability of tax regulations are just as important as the effective tax rates. If a higher corporate income tax burden is coupled with strong and advanced infrastructure, a state-of-the-art public service system and a competitive labour force in a recipient country, all this will not scare off investors, but much rather attract them. Low tax burden is unable to compensate for a generally weak, unstable and underdeveloped economic environment. Tax is only one of the factors influencing capital inflow, and streamlined tax burdens are unable to counter-balance underdeveloped public services, an incomplete and backward infrastructure, limited access to the markets or poor investment conditions.

Figure 4 is supposed to illustrate the relationship between the tax competitiveness of European economies and the inflow of foreign direct investment based on the 2015 data. On closer examination, it would be foolish and irresponsible of us to draw general conclusions, but it is not our intention anyway. We only wish to call attention to the facts established in the aforementioned OECD and UNCTAD studies suggesting that tax factors do not play a primary role in the selection of the target country. When examining the 2015 data shown in the illustration, it is undoubtedly hard to find any correlation between the competitiveness of the tax system and net FDI inflow. The net FDI to GDP ratio of Finland – which has relatively high tax revenues in relation to GDP and an average tax competitiveness index – far exceeded that of her neighbours, which operate more competitive

tax systems. At the same time it is a fact that Greece, Italy and France – which are less competitive as far as taxation is concerned – each has a rather moderate net capital inflow. Denmark, which has an average tax competitiveness, but levies the highest taxes on economic operators as compared to OECD countries, is not the number one choice for foreign investors either.²⁷

As a side-effect of the financial shock of 2008, the previously characteristic accumulation of foreign direct investment slowed down, and in the years of 2009 and 2010 the crisis in fact strongly withheld FDI inflow. This did not leave our region unaffected either. Starting from the first wave of the crisis, the stock of foreign direct investment in Estonia – the country maintaining the most competitive tax system – shrank noticeably.²⁸ Similarly, in the CEE region the annual flow of net FDI also slowed down considerably, and from the outburst of the crisis one could even witness the deterioration of the effectiveness of investment incentives. The country reports of the European Commission (2016a, 2016b) associate the slowing down of FDI with measures that have a potentially detrimental effect on the business environment, among which the influence of the tax system is practically negligible. As regards Hungary, mostly market restrictions, while as regards the Slovakian economy the underdeveloped digital infrastructure, the slow digitisation of the public administration, the inflexibility of the labour market and the extremely lengthy judicial processes were listed as factors impeding the inflow of FDI.

SUMMARY

Until the onset of the crisis, our region was characterised by steady convergence, which was supported by a number of factors. The

processes of economic transformation and privatisation have been concluded. The engagement of foreign capital, accession to the European Union, the creation of tax systems adjusted to the tax policies of developed countries and the establishment of enterprise-friendly market environments had a favourable effect on the competitiveness of the economy as well as of the businesses. Starting from the turn of the millennium, the economies of our region eventually radically transformed their tax systems, which was archived in variable steps, following the example of economically more advanced European countries by shifting emphasis from direct taxes that distort saving and investment decisions to consumption type taxes that influence the decisions of economic operators less. The EU-level harmonisation of indirect taxes demolished the free trade barriers between member states, and corporate income taxes became one of the major tools of tax competition. The weight of income taxes in our region shrank further as compared with the situation before the financial shock, although in Slovakia revenues from direct taxes slightly increased in order to reduce the budget deficit that had grown in the wake of the recession.

The marginal tax rate of corporate income taxes is actually low in the Visegrád countries. In Hungary and in Poland revenues from corporate income tax in relation to GDP fall short of the OECD average. In Slovakia and in the Czech Republic, however, due to the increasing profitability of businesses, corporate income tax revenues have reached as much as 3.5 per cent of GDP in recent years, exceeding the OECD average of around 2.8 per cent. In our opinion, the competitiveness of the businesses of the region is encumbered less by tax burdens and much more by the complicacies of tax regulation and the time-consuming nature of the administrative tasks connected to taxation. In all four Visegrád countries tax

related administration exceeds the OECD average to an alarming degree, and actually Hungary and Poland could reach one of the top places in this respect. Generally in economies operating more competitive tax systems the tasks related to tax administration take less time. There are exceptions of course. In Latvia for example businesses spend 169 hours with administrative tasks related to taxation, which is close to the OECD average.

The increased efficiency and effectiveness of tax collection is in fact a tax rate reduction tool, which contributes to the improvement of the competitiveness of the national economy as well. *Domokos* (2016) recommends the introduction of “sustainable whitening”. In essence this means that the state should leave the surplus arising from the “whitening” of the economy with the taxpayers via lower tax rates or specific tax benefits. Lower tax rates not only encourage taxpayers to abandon the intention of tax evasion, but promote the development of economic conditions as well, as they give green light to the growth of competitiveness.

Although tax competitiveness is determined by marginal tax rates (kept at a low level) and neutrality, at the same time the long-term stability of the tax system is another element considered in the selection of the target country. However, it is rather hard to see any correlation between the competitiveness of the tax system and capital inflow in a European context. European economies that levy higher taxes (Denmark, France) are undoubtedly not the number one FDI targets. On the other hand, lower tax burdens are unable to counter-balance factors that frighten off investors, such as weak infrastructure, labour market disturbances or complicated regulatory environments. Slovakia’s tax revenues to GDP ratio may be termed low in European comparison, and they operate the most competitive tax system among the

Visegrád countries. Despite this, FDI inflow slowed down after the crisis and actually in its country report the European Commission criticised Slovakia's burdensome regulatory system, imbalanced labour market and lack of interest in digitisation. Investment decisions are determined less by tax burdens, and much more by the transparency of regu-

lation. In our region, primarily the regulatory system should be simplified, and made transparent and stable in the long term, with a view to improving the investment environment. Resolving the issues of labour market inflexibility and market restrictions, and establishing a digital infrastructure would also improve investor sentiment.

NOTES

- ¹ The chief guardians of public funds are the state audit offices of the individual countries. They promote the operation of the states by conducting audits, by sharing their audit experiences, and by analysing and evaluating the same, as well as by consultation (Domokos et al., 2016).
- ² Competition – as a fundamental institution of market economy – has an important role according to Lentner (2015) also in the promotion of efficiency and economic growth, therefore ensuring the perpetuance and fairness of competition is in the interest of the community.
- ³ Quite many different definitions of competitiveness are known. Authors tend to refer to the definition used in OECD studies, according to which the competitiveness of an economy indicates to what extent the given country is able to produce products and services for which there is demand in international markets within free and fair market conditions.
- ⁴ The opposite view was represented for example by Maskell, Ezeala, Harrison and Garelli, who asserted that the competitiveness of national economies was not only comparable, but measurable as well.
- ⁵ Cheap workforce, the abundance of natural resources, or low budget deficit can be mentioned as examples.
- ⁶ Porter's works have strongly divided the scientific community. Although his empirical research managed to identify truly original and unique correlations, economists tend to appreciate his work less on account of the methods applied by him, going as far as considering some of his findings "unscientific" (Török, 1996; Lengyel, 2000).
- ⁷ See PORTER, M. E. (1985): *Competitive Advantage*. New York, Free Press.
- ⁸ Due to the similarity of their shapes, Porter named its basic models diamonds.
- ⁹ According to Hoványi (1999) these include natural resources, demographic features, technical development, power centres, the global financial system, global communication, giga enterprises and value changes on a social scale.
- ¹⁰ For example in Slovakia – in contrast to the Hungarian regulation – donations granted to public benefit organisations to support their public benefit activities does not reduce pre-tax profit at all.
- ¹¹ Classification as per ESA 2010.
- ¹² In 2015, capital taxes amounted to only 0.3 per cent of the GDP in the EU-28 region.
- ¹³ Significant differences can be seen in the tax revenue

structure of the different member states of the EU. The relatively high budget expenses of certain countries obviously require higher tax revenues. In 2015, the ratio of revenues from taxes and social security contributions as compared to GDP was the highest in Denmark (48 per cent), followed by France (47.5 per cent) and Belgium (45.9 per cent). Whereas in Ireland, Romania, Bulgaria, Latvia and Lithuania revenues from the taxes and contributions paid by businesses and households, relative to GDP, was below 30 per cent (based on Eurostat data).

¹⁴ Slovakia followed the Czech example. They started to reduce the corporate income tax rate – amounting to 45 per cent in 1993 – even before launching their comprehensive tax reform. The decreasing trend of the tax burden of Slovakian businesses in the 1990's is illustrated in Figure 2.

¹⁵ Corporate income tax rate was lowered in 2008 from 24 to 21 per cent, then in 2009 to 20 per cent. Investment funds are subject to a reduced corporate income tax rate of 5 per cent.

¹⁶ In addition to a value-added tax rate of 20 per cent, Slovakia introduced a tax rate of 10 per cent for medical devices and pharmaceuticals in the period under review.

¹⁷ The escalation of social security burdens was generated not only by the increase of the tax base (which followed the growth of annual minimum wages), but by another, highly unusual factor as well. The reason was that capital revenues were subject not to tax, but to social security contribution payment.

¹⁸ After last year's amendment of the income tax act, a 21 per cent corporate income tax rate entered in force in 2017.

¹⁹ FinStat processes the data of the Slovakian private sector in a confidential and prudent manner. The data are not freely accessible.

²⁰ Cf. Doing Business 2017 European Union.

²¹ As regards the time requirement of administrative tasks, Bulgaria takes the cake with an average of 453 hours per year. On the other hand, tax-related administration requires the least time in Northern European countries, in Finland for example it takes 93 hours per year, and in Estonia only 84 hours per year.

²² In Sweden, the ratio of the costs of taxation to tax revenues is almost constant, around 0.4 per cent, whereas in Denmark it fluctuated between 0.6 and 0.7 per cent in the period under review.

²³ In the period under review, taxation costs as compared to tax revenues fluctuated significantly in Poland. First they decreased, then entered a growth path as a result of the crisis. The value of the ratio was 2.73 per cent in 2011.

²⁴ Starting from 2008, in Estonia the taxation costs to tax revenues ratios were 0.38 per cent, 0.4 per cent, 0.35 per cent and 0.34 per cent.

²⁵ In the ranking of OECD countries, Slovakia (ITCI 75.0) ranks ninth, the Czech Republic (ITCI 70.0) thirteenth, Hungary (ITCI 64.3) twenty-third, and Poland (ITCI 56.5) twenty-ninth.

²⁶ Between 0 and 5 per cent according to OECD (2008).

²⁷ The average stock of Denmark's foreign direct investment in relation to GDP between 2002 and 2015, calculated from annual UNCTADstat data, does not even reach 1 per cent.

²⁸ Based on UNCTADstat data, in 2010 it amounted to 7.73 per cent, in 2011 to 4.33 per cent, in 2012 to 6.76 per cent, in 2013 to 2.16 per cent, in 2014 to 1.91 per cent and in 2015 to 0.93 per cent, of GDP.

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