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Tax Burden and Competition in the European Union – Does It Change?

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Abstract

Enlargement of the European Union and the globalization process significantly affect tax systems and fiscal policies of individual countries. The level and structure of tax burden is often discussed in the European Union, as well as what is more profitable – keeping tax competition or tax harmonization. Tax environment and tax burden are significant factors when deciding about investment allocation. For international comparison, the easiest way is to use statutory tax rates but the result may be rather inaccurate. More convenient way of comparison is comparing implicit rates where we may express impact of taxes on economic activities according to their functions. The paper first summarizes basic theoretic approaches to tax competition. Then it is followed by an analysis of level and structure of tax burden in the European Union in the period of 1995 to 2006. There is emphasis on the dissimilarity of results depending on the type of tax rates used, namely statutory and implicit. The aim is to verify the hypothesis that value of tax burden (measured by tax quota) falls in time and that indirect taxes outweigh direct taxes in the tax burden of the European Union.

Keywords: *tax competition, tax burden, tax quota, implicit tax rate*

JEL Classification: *H2, F2, E62*

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1. Introduction

Tax burden has always been and always will be a subject of expert and lay discussions as it concerns every citizen as an individual living in the given country and it is also a significant factor for investors. Every state—in order to fulfill its basic functions—must concentrate financial means in the form of public revenues. With growing globalization and internationalization, the level of tax burden is also discussed, as well as what is more profitable – keeping tax competition or tax harmonization. Although there are various opinions on taxes and level of tax burden, tax revenues usually remain the most significant income of public budgets. To put it in a simplified way, in the field of taxes we evaluate positively everything that makes it easy for free movement of goods, services, persons and capital within the single internal market as well as those things that correspond to principles of optimal taxation.

The paper first summarizes basic theoretic approaches to tax competition. The analysis is based on work with expert studies published so far. It is followed by an analysis of tax

burden in the European Union in the period of 1995 to 2006. There is emphasis on the dissimilarity of results depending on the type of tax rates used, namely statutory and implicit. The aim is to verify the hypothesis that value of tax burden (measured by tax quota) falls in time and that indirect taxes outweigh direct taxes in the tax burden. The primary source of data is publication *Taxation trends in the EU* published by the European Commission (2008). This report contains a detailed statistical analysis of the tax systems of the member states of the European Union.

2. Economic Theory and Tax Competition

In economic theory there are two basic opinions of level of tax burden and approaches to tax competition, namely:

- positive—putting an emphasis on so-called tax game;
- negative—claiming that tax competition is actually harmful because decrease in tax revenues leads to providing public estates lower than the socially optimal level¹.

Followers of the first trend - like Tiebout (1956, pp. 416-424) - claim that tax competition is an optimal conception for organization of tax systems and leads to increase in wealth of all individuals in the society as it has positive effects on economic growth of individual countries, on more effective allocation of resources, on increasing efficiency of government activities and public expenditures and more effective providing of public estates and services. Positive evaluation of tax competition is mainly connected to more effective use of public resources and limiting non-productive activities, such as rent-seeking that are linked with the decision-making in the public sector. The stream starting with Tiebout theorem claims that competition enlarged by mobile households (or mobile companies) increases wealth of the society and thus, it is effective. Tax competition lies in the idea that government must have taxes low enough in order to attract sufficient number of citizens (or companies) but at the same time to provide sufficiency of public estates², otherwise citizens use the choice of “voting with the feet” and move to an area that is more convenient for them.

On the contrary, according to Stiglitz (1997), there are many reasons to be skeptical of this hypothesis. The main reason lies in his limited fiscal competition between units, because their number is limited in each division, and other authors also argue that in reality is "voting with the feet" difficult, since there are language barriers, administrative, family ties, etc. It is also necessary to mention the fact that the collected taxes (property, local, income and sales taxes) make distortion effects, which can together with externalities lead to inefficiencies of allocation decisions at local level.

Tiebout's hypothesis further elaborated Richter and Wellisch (1996, pp. 73-93), when extended model of so-called mobile companies, which may behave similarly and also can "vote with their feet". From this perspective, the concept of tax competition is positive and there is no reason to change it.

On the other hand the representatives of the second trend - such as Oates (1973, pp. 188-191) - claim that tax competition is basically harmful as the decrease of tax revenues leads to providing public estates lower than the socially optimal level. This approach mainly

¹ For details see Szarowská (2009)

² One of the reasons should be mechanism of decision of a voter, taxpayer and citizen of a certain region (town or village) according to their real preferences towards public estates on the one hand, and according to their will to pay taxes (local) on the other hand. Tiebout's hypothesis assumes competitiveness and competition between communities when finding citizens' preferences.

examines the impact of capital mobility on the level and structure of tax rates. The authors emphasize negative impact of capital mobility on tax rates of capital and level of public expenditures.

Also Griffith and Klemm (2004) confirm that tax competition may lead to a "race to the bottom" and the lack of provision of public goods and services from the state - the result is the sacrifice of welfare state, and illustrate their argument using the example of countries such as France, Germany and Sweden, which are due to existing tax competition forced in recent years to reduce the scope of the "welfare state".

More generally, the question of tax competition between governments and its impact conceived as a question of size of the state of the economy, the size of the different levels of power, to the extent desired redistribution processes. These two opposing views concerning the issues of tax competition between different degrees of economic integration, including integration in the European Union. Oates points out that the result of tax competition may be a tendency towards ever-lower efficiency provision of local public goods. Reduced if the local government taxes to attract mobile capital, public expenditures below the level where the marginal social benefits of these programs equal marginal costs. This can occur especially in programs that do not directly benefit the local business climate. Oates concluded that such conduct is inefficient governments, is based on the argument that no government eventually fails to win this fight competitive advantage (principle of prisoner's dilemma). Result of tax competition, therefore, is that all communities are worse off than if the political leaders used the normal maximization rule (the marginal benefits equal marginal costs).

Other sources indicate that competition among governments may lead to the fact that the government stop providing certain public goods. As points Wilson (1999, pp. 269-304), concept of "harmful" tax competition to attract investment was later applied to labor and environmental standards, reducing social security and competition in indirect taxes on cross-border consumer . Oates's concept of harmful tax competition was supported by a number of models that describe the consequences of behavior noncooperating regional governments. The success of any single government in attracting the tax base in the form of new residents and businesses leads to erosion of the tax base in other regions. The resulting negative fiscal externalities are reflected in particular in export tax when the government taxed income non-residents, or erosion of the tax base, thus moving the actual economic activity in tax-favorable sites, respectively transfer declaration profits.

The opinions and concerns of insufficient amount of public expenditures may be opposed with data stated in Table 1. Even though there has been tax competition not only in Europe and there could be pressure on decrease of expenditures for the reason of insufficient amount of public revenues, total expenditures of the public sector have not decreased, on the contrary—since 1870 they have noticeably increased.

Table 1 Growth of General Government Expenditure in % of GDP (1870 – 2007)

	<i>1870</i>	<i>1913</i>	<i>1920</i>	<i>1937</i>	<i>1960</i>	<i>1980</i>	<i>1990</i>	<i>1996</i>	<i>2007</i>
<i>Austria</i>	10.5	17	14.7	20.6	35.7	48.1	38.6	51.6	49.7
<i>France</i>	12.6	17	27.6	29	34.6	46.1	49.8	55	53
<i>Germany</i>	10	14.8	25	34.1	32.4	47.9	45.1	49.1	44.3
<i>Japan</i>	8.8	8.3	14.8	25.4	17.5	32	31.3	35.9	36.5
<i>Norway</i>	5.9	9.3	16	11.8	29.9	43.8	54.9	49.2	41
<i>Sweden</i>	5.7	10.4	10.9	16.5	31	60.1	59.1	64.2	53.8
<i>UK</i>	9.4	12.7	26.2	30	32.2	43	39.9	43	44.6

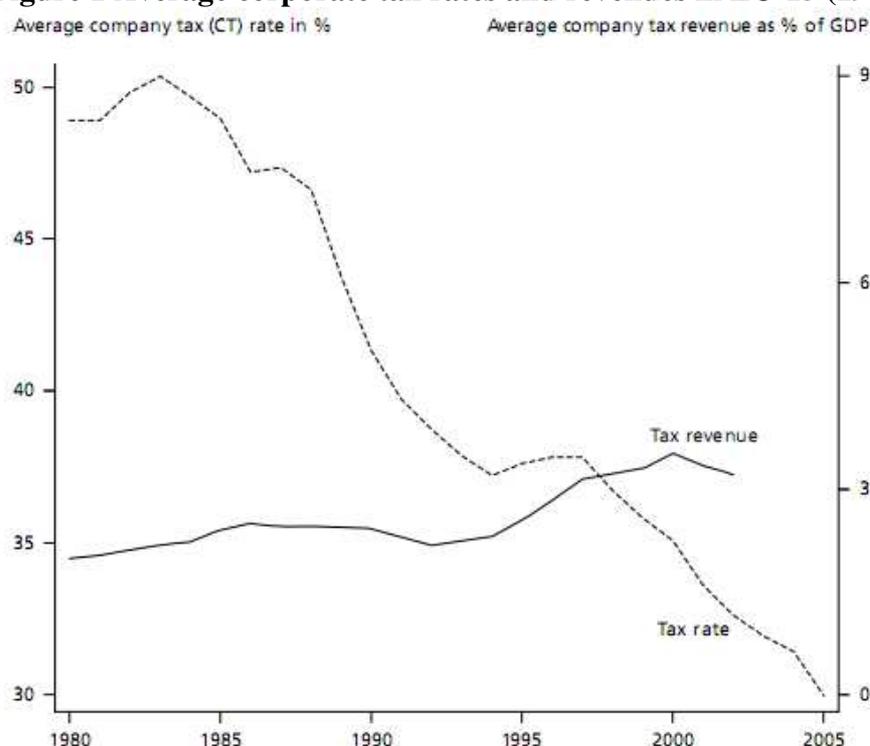
USA	7.3	7.5	12.1	19.7	27	31.4	32.8	32.4	37.4
Average	8.775	12.125	18.413	23.388	30.038	44.05	43.938	47.55	45.0375

Source: The author's own compilation according to OECD data and Tanzi, V., Schuknecht, L. (2000, p.6)

New member states are often criticised for their “tax-friendly policies” which is usually proven by lower rates as well as by total revenues mainly from taxation of companies' profits. However, Kubátová (2008) opposes that motivation for changes in tax rates in these countries is not to get competition advantage or to adapt to surrounding countries, but the effort to “fill” public budgets.

Based on the above mentioned theories we may ask whether tax decrease (which is usually a result of tax competition effect) really always means decrease of tax collection.

Figure 1 Average corporate tax rates and revenues in EU-15 (1980–2005)



Source: Ganghof, S., Genschel, P. (2007, p. 6)

The Figure 1 shows relation between amount of average corporate tax and revenues of state budget in the countries of the EU-15 in the period from 1980 to 2005, proves that it is not the case. It is apparent that in spite of significant decrease of rates there was no decrease of tax revenue, but quite the contrary—it increased, and this development may be interpreted as application of concept of Laffer curve³ in practice.

³ Laffer curve expresses dependence of tax revenue on rate of taxation (or tax rate). It proves that maximum rate of taxation does not mean maximum revenue of public budgets. When increasing rate of taxation, tax revenue only increases up to a certain point (Laffer point), and when increasing the rate of taxation further, tax revenue begins to fall. That is, if rate of taxation (tax rates) is too high, tax subjects are discouraged from increase in performance, work and savings, or they move their addresses outside the given state, which means decrease of tax revenue in the end.

It is not possible to unambiguously confirm or to disprove the usefulness or harmfulness of tax competition, either theoretically or empirically. However, it should be emphasized that tax competition is not deliberately or artificially created but it is a result of unsuccessful harmonization negotiations and it results from various types of tax systems of individual countries.

3. European Union approach to taxation and tax competition

Enlargement of the European Union and the globalization process significantly affect tax systems and fiscal policies of Member States. At the moment the European Union (EU) includes twenty-seven member states. As it proclaims, its functioning is connected to the single internal market, which is defined as area without inner borders and within this area there are four kinds of freedom ensured, i.e. free movement of goods, persons, services and capital⁴. Member states of the EU have independent tax systems and use independent tax policies. To the presented aims of tax policy of the European Union count support of harmonic development of economic activities, continuous and balanced development, increasing stability, growth of living standard and close collaboration of member states. The aim or effort of the European Union is not to unify national systems of taxes and contributions, but to ensure their mutual comparability in accordance to accepted contracts established in the European Union⁵. The result is twenty-seven tax systems and systems of taxation, whose configurations result from various economic, sociological, historical and other factors. With the growing globalization and internalization there are more and more discussions about what is more profitable – keeping tax competition or effort to reach tax harmonization.

Nowadays there are boundaries for individual types of taxes determined in the EU as follows:

- personal incomes taxes remain in the authority of national governments;
- indirect taxes—directly affecting functioning of the single market—attract a lot of attention and efforts to be harmonized;
- corporate taxes should help free movement of capital and should not cause harmful competition between individual states;
- social and pension systems should eliminate discrimination of residents of individual states and should not be an obstacle of free settling and investing in any member state of the European Union.

Current tax policy of the EU is focused on harmonization of indirect tax rates (VAT and excise taxes) that may directly affect the market. In the field of direct taxes, tax competition between individual states is noticeable in spite of effort to harmonize them. Thus functioning of the single market in the European Union is disturbed by many problems related to business activities realized across the borders of individual member states. Apart from other things, the reason is substantial dissimilarity of tax systems used in member states and related dissimilarity of effective tax burden of business units in individual member states. This mainly applies to incomes and property taxes and obligatory payments to social welfare. The existing situation is caused not only by fiscal reasons but it is caused deliberately in many

⁴ Široký (2009, p. 21).

⁵ Tax policy belongs to policies with shared authority. Member states may issue their own legislation only when there is no common European arrangement, possibly as its amendment. Tax practice is more or less a summary of factually independent tax policies of individual member states of the EU.

cases with the aim to attract foreign capital to develop business activities in the given state by favourable tax regime.

4. Tax Burden and its Measuring

Tax is an obligatory amount determined by law in advance, by which a part of nominal income is taken away from a tax subject on the non-refundable principle.

The question is what rates or values should be the tax burden comparison based on. The easiest choice is comparison of statutory tax rates as a statutory tax rate is the legally imposed rate. This comparison is often used because of its simplicity and good availability of data. It is commonly used for comparing incomes and excise taxes. However, we must pay attention to the fact that statutory tax rates may include not only so-called nominal tax rates but also temporary or permanent complementary rates or allowances and moreover, in a great number of states taxes are collected on more levels of governments. Thus their organization may vary in the countries. Therefore, statutory tax rates may not be an objective indicator for the purposes of mutual international comparison.

4.1 Implicit Tax Rates

An appropriate standard for comparison of effective taxation seems to be implicit rates, which are tax rates that consider not only size of statutory tax rates but also other aspects of tax systems determining total amount of effectively paid taxes (for example differently constructed tax base). Implicit tax rates are calculated in order to provide better information on the tax burden on an economic activity.

$$\text{Implicit tax rate (ITR)} = T / Y \times 100 \text{ [%]}$$

Where T is tax duty and Y is gross income from which tax is counted.

It is obvious that no tax rate will be consistent with ITR in case when a tax allowance is included in tax construction (non-taxable part of tax base or deductible item) or tax relief. Comparison of statutory and implicit tax rates shows tax incentives provided by authorities in individual countries; comparison of implicit tax rates across individual states provides indications whether there are significantly dissimilar tax approaches to companies with the same characteristics but located in various countries. Such data may prove whether great differences of statutory tax rates do not only hide minor differences in implicit taxation, as countries with high statutory tax rates may decrease size of tax base or soften tax enforceability.

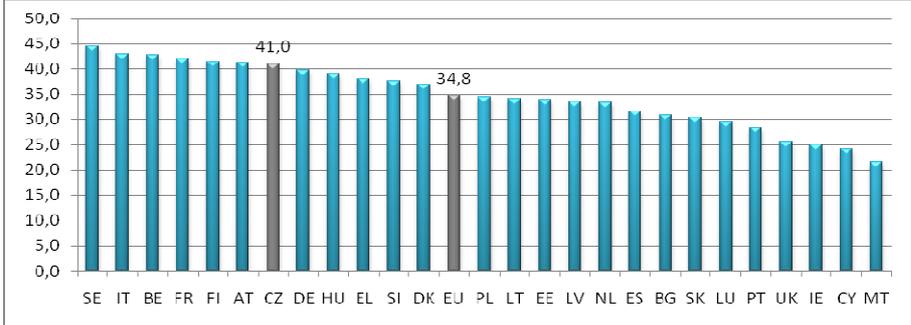
Eurostat has used implicit tax rates for evaluation of structure of a tax system since 1995. In this way, we may express impact of taxes on economic activities according to their functions (work, capital, consumption).

4.1.1 Labour Implicit Tax Rate

Labour implicit tax rate represents a proportion of taxes and statutory insurance (paid from labour incomes by employers as well as employees) to total labour costs (total volume of compensations paid to employees on the territory of the given state including possible taxes from earnings excluding tax revenues from social transfers).

$$ITR_{labour} = \text{Taxes on labour} / (\text{compensation of employees} + \text{wage bill and payroll taxes})$$

Figure 2 Labour Implicit Tax Rate in % GDP (2006)



Source: The author’s own compilation based on data from Eurostat

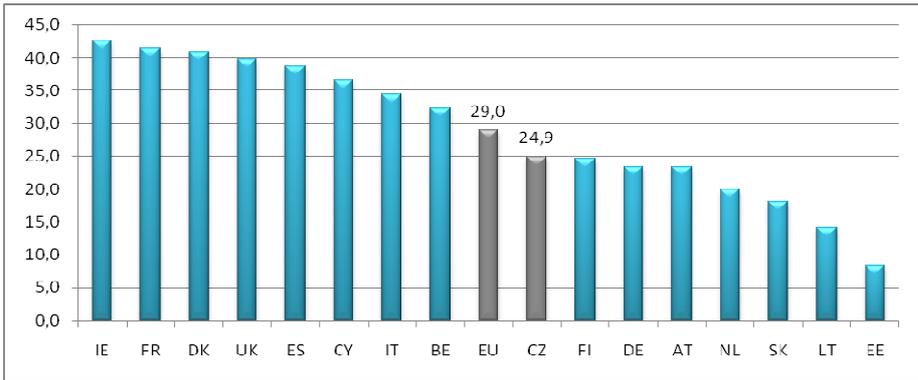
The highest labour tax burden is in Sweden, followed by Italy and Belgium. Generally, labour tax burden is steady in the European Union, and higher burden may be found especially in the countries of the original EU-15. According to the data of 2006, the Czech Republic is the seventh most expensive country of the whole European Union.

4.1.2 Capital Implicit Tax Rate

Tax environment is a significant factor for investors when deciding about allocation of their investments. Despite harmonization efforts of the European Union there is a hot tax competition in the area of these taxes regarding to high mobility of capital. The existing situation is caused not only by fiscal reasons but also by efforts to attract foreign capital by favourable tax regime. Capital implicit tax rate is calculated as proportion of collection of taxes from revenues of savings and investments of households and companies to volume of worldwide revenues from capital and enterprise of domestic tax residents that is liable to domestic taxation. When comparing values and development of capital implicit tax rates there are great differences between member states of the EU. In general terms, the (overall) ITR on capital can be defined as follows:

$$ITR_{capital} = \text{Taxes on capital income} / \text{potentially taxable capital income}$$

Figure 3 Capital Implicit Tax Rate in % GDP (2006)



Source: The author’s own compilation based on data from Eurostat

At one end there is Spain and Ireland where there was significant increase of capital implicit tax rate in the monitored period (by 18.5 per cent and 16.8 per cent respectively), at the other end there is Estonia and Slovakia where there was a great decrease in connection to introduction of equal tax (by 17.2 per cent in both countries). Estonia is by far a country with

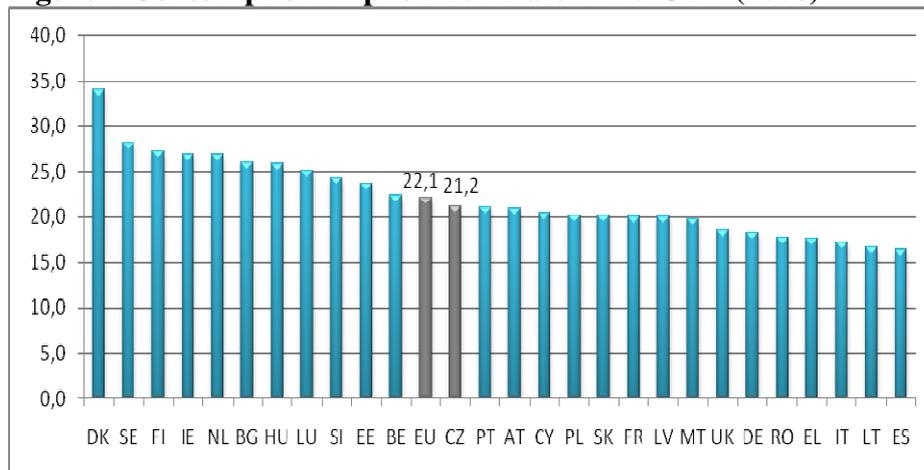
the lowest capital implicit tax rate (8.4 per cent), on the other side of the scale there is Ireland (42.5 per cent) and France (41.5 per cent).

4.1.3 Consumption Implicit Tax Rate

Taxes on consumption are defined as taxes levied on final consumption goods. Consumption implicit tax rate is calculated as proportion between total revenues from taxes from consumption (for example in the Czech Republic mainly VAT and excise taxes) and total final costs of households of consumption on the territory of the given state.

$$ITR_{consumption} = \text{ Taxes on consumption } / \text{ final consumption expenditure of households}$$

Figure 4 Consumption Implicit Tax Rate in % GDP (2006)



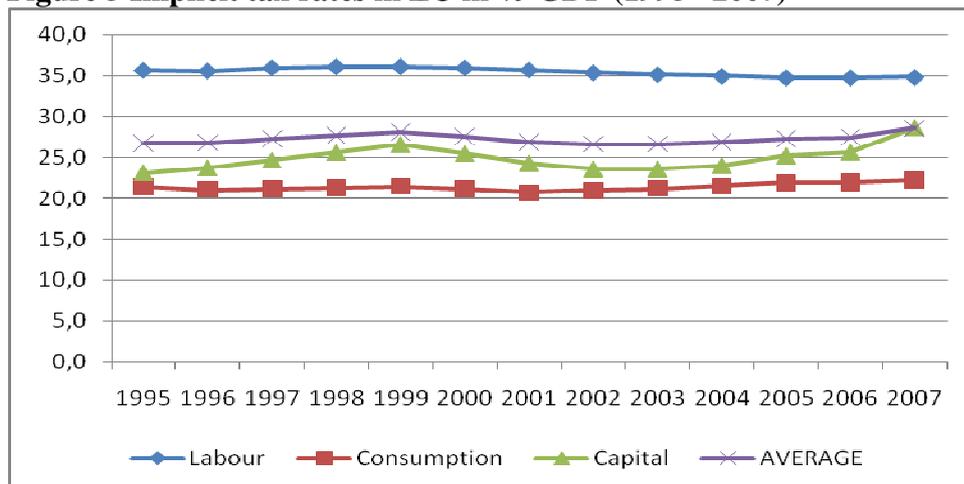
Source: The author's own compilation based on data from Eurostat

In 2006 the consumption implicit tax rate in the Czech Republic was 21.2 per cent, which is almost one per cent below the average value of the EU-27 (22.1 per cent), value of the rate in Poland was still one per cent below the rate in the Czech Republic. In the implicit consumption tax burden there are not such great differences as it applies for other types of taxation. One of the reasons is probably fact that consumption is easier to be taxed, even if the payment moral is lower.

4.1.4 Implicit Tax Rates in the EU – Summary

The last graph summarizes what current trends there are in the tax policy of the European Union. It is obvious from the graph that in the EU the labour implicit tax rate is higher than capital and consumption tax rates. Labour is taxed above average especially because it is not much mobile, compared to other production factors. The capital implicit tax rate does not fall, but it tends to rise in the long term in spite of decreasing nominal rates. The reason for this is expansion of tax base and partially the impact of fight against tax evasions. The lowest is the consumption implicit taxation when the reasons may be social reasons as well as the fact that consumption is easier to be taxed and possibility of tax evasion is lower than in case of more mobile tax bases - labour and capital.

Figure 5 Implicit tax rates in EU in % GDP (1995 –2007)



Note: calculation used arithmetic average data

Source: The author's own compilation based on data from Eurostat

4.2 Tax Quota

As already mentioned, international comparison of actual taxes does not say much with regard to different construction of taxes in individual countries. Level of tax rate is only one of the variables. Resulting values substantially affect differently constructed tax bases, from which the tax is calculated, as well as systems of exceptions and deductible items that vary in every country. As recommends Kubátová (2005, 142-50) for international comparison of tax burden we may use a tax quota. This is a macroeconomic indicator that is calculated as “proportion of tax and duty revenue and to GDP” in current prices.

$$\text{Tax quota} = \text{tax revenues} / \text{GDP} * 100 [\%]$$

It actually represents a proportion of gross domestic product that is redistributed by means of public budgets. As it uses data of really collected tax revenues to GDP, it provides information about value of total effective taxation in the given country. Depending on the “extent” of numerator (i.e. “extent” of public revenues considered), there is a simple and a compound (sometimes called overall) tax quota. Simple tax quota includes only those incomes of public budgets that are really labelled as taxes. With regard to the fact that tax revenues (quasi taxes) are in fact also incomes from the obligatory payments to social welfare, contributions to state unemployment policy and obligatory payments to health insurance system, the relevant indicator for international comparison is the compound tax quota that also includes these incomes. Compound tax quota (CTQ) is calculated as “proportion of revenue from tax, duty and payments to health insurance and social welfare systems to GDP” in current prices.

$$\text{Compound tax quota} = \text{tax revenues} + \text{quasi taxes} / \text{GDP} * 100 [\%]$$

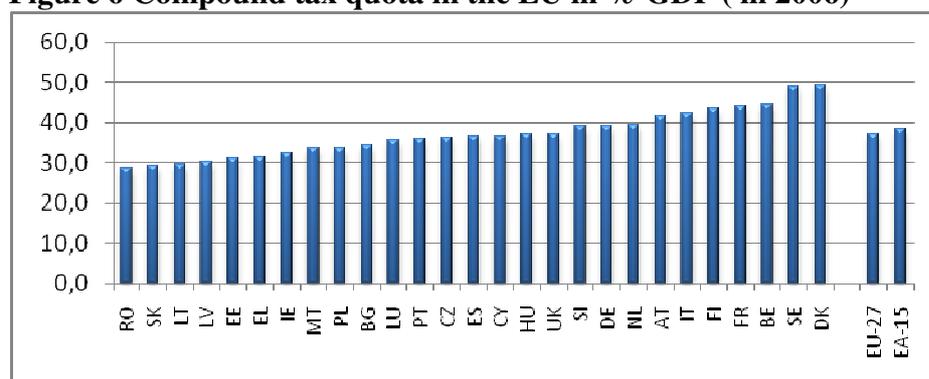
As it results from the formula, basic factors affecting value of tax quota is the amount of gross domestic product and volume of taxes collected⁶. Total effective burden is regularly monitored by Eurostat and published in the form of tax quota.

⁶ For tax quota in detail see SZAROWSKÁ (2008, pp. 168-77)

4.3 Tax Quota and Its Development

Total effective burden is regularly monitored by Eurostat and published in the form of tax quota. In 2006 compound tax quota in the European Union reached its average value of 37.1 per cent, which is higher by twelve per cent than in the US or Japan. Similar development may have been observed since the 1970s when there was an increase in the 1980s and at the beginning of the 1990s, and the main reason for this was mainly the need to cover higher and higher public expenditures. This problem of expanding state activity is described by so-called Wagner's law⁷. After the Maastricht Treaty and the Stability and Growth Pact⁸ were adopted, there were changes in fiscal policies of some countries related to the effort to accept Euro, and subsequently there was decrease of public expenditures, which was indirectly projected also by decrease of compound tax quota.

Figure 6 Compound tax quota in the EU in % GDP (in 2006)



Source: The author's own compilation according to Eurostat data

What is important is not only amount of the indicator observed but value and ratio of individual components as well. According to the structure of tax quota, i.e. according to the fact which taxes bring the highest incomes into the public budgets, member states of the European Union may be divided into three groups. The following table shows that in sixteen countries the main source of public revenues are indirect taxes, i.e. taxation of consumption. In six countries the highest revenues come from direct taxes (mainly personal and corporate incomes taxes) and in five countries the basic source of public budgets are payments for social welfare⁹.

⁷ After Adolf Wagner, a German economist of the 19th century. When incomes per capita increase in the economy, relative size of public sector also grows. The base of this statement was empirical. Wagner observed growth of public sector in many European countries, the United States and Japan in the 19th century. Forces causing these movements in proportion of public expenditures to GNP were explained in connection to political and economic factors. Wagner explained the existence of services of public sector, such as legal services, police and banking, by increasing complexity of manufacturing relations. Banking, provided by state banks, is to connect those who offer surplus funds with those who have the best opportunities to invest. Growth of public expenditures on education, recreation and culture, health and welfare was explained by Wagner with regard to their income elasticity of demand. For Wagner these services represented superior or income-elastic needs. Therefore, together with growth of real incomes in the economy (i.e. with increase of GNP) there is an increase in public expenditures on these services more than proportionally, which is explained by an increasing proportion of government expenditures to GNP.

⁸ The Stability and Growth Pact is an agreement between members of the Eurozone regarding coordination of their budget policies so as not to threaten stability of Euro or to increase inflation in the Eurozone in case of possible high deficits of state budgets. The agreement partly applies to states of the European Union that have not accepted Euro as its currency.

⁹ When we compare development in the Czech Republic with OECD countries we find, that social insurance creates a decisive share of tax revenues in almost all OECD countries. OECD publication explains the increasing

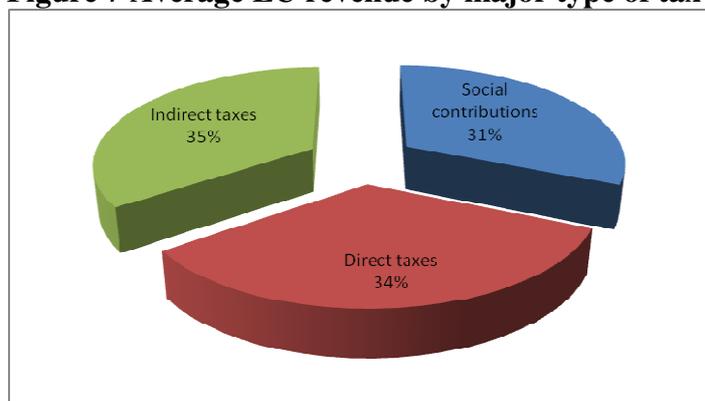
Table 2 Division of EU countries according to the main tax resource in 2006

Main Source of Tax Revenues		
<i>Indirect Taxes</i>	<i>Direct Taxes</i>	<i>Social Contributions</i>
Bulgaria, Estonia, Ireland, Italy, Cyprus, Lithuania, Latvia, Hungary, Malta, Poland, Portugal, Austria, Romania, Greece, Slovenia, Spain	Belgium, Denmark, Finland, Luxembourg, Sweden, United Kingdom	Czech Republic, France, Germany, Netherlands, Slovakia

Source: The author's compilation according to Eurostat data

Figure 7 displays the average shares of revenues raised from direct and indirect taxes and social contributions across the European Union. It also confirms a standard, generally used economic rule which prefers indirect taxes¹⁰ to direct ones. As points Široký (2009) high income taxes may discourage employees from earning more and force companies to take their profits into countries with the lowest tax rates. Therefore, many economists claim that the best taxes for the economy are those from consumption. Their level may threaten groups with low incomes but this may be compensated by special social benefits. Moreover, they are transparent¹¹.

Figure 7 Average EU revenue by major type of tax (in 2006)



Source: The author's compilation based on Eurostat data

However, individual Member States have very different structures according to the type of tax. New Member States tend to rely to a smaller extent on direct taxation. Direct taxes only account for around 20 % of total revenues in Bulgaria, Romania and Slovakia while they represent more than 60 % in Denmark. The share of indirect taxes varies from 30 % in the Czech Republic and Belgium to 56.5 % in Bulgaria. Social contributions only bring 2 % of total revenues in Denmark, but 44 % in the Czech Republic¹².

Figure 8 shows development and changes in structure of compound tax quota in Member States in years 1995 and 2006.

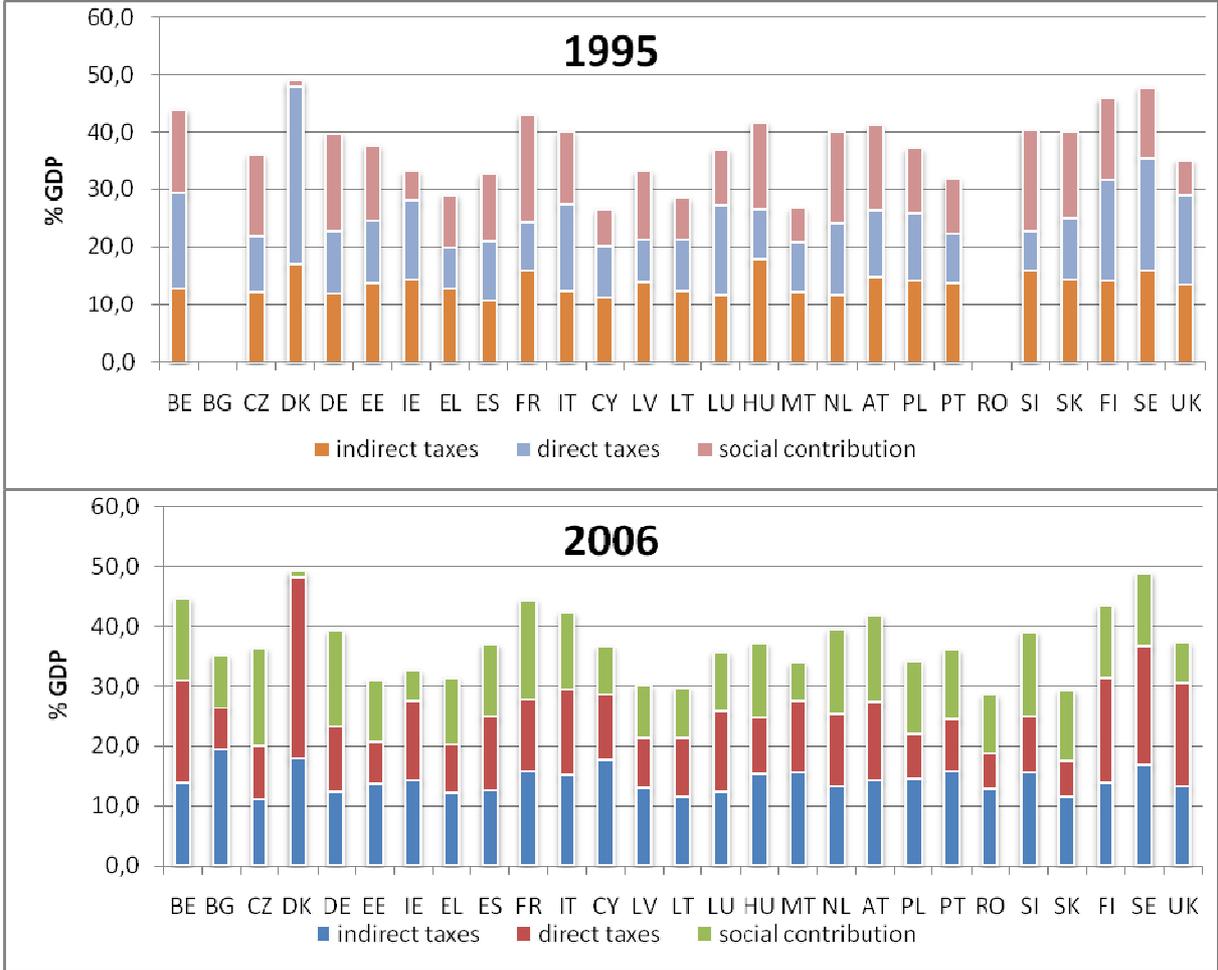
share (from 18 per cent in 1965 to 26 per cent in 2003) mainly by pressure on increase of social transfers related to increasing unemployment, aging population and greater government expenses on health service.

¹⁰ Indirect taxes are value added tax, excise tax, duty and other indirect taxes.

¹¹ Direct taxes are imposed on a concrete subject that may not transfer this tax on somebody else, e.g. income tax. Indirect taxes are also imposed on a concrete subject, but may be transferred on another one.

¹² For details see Taxation trends in the European Union (2008)

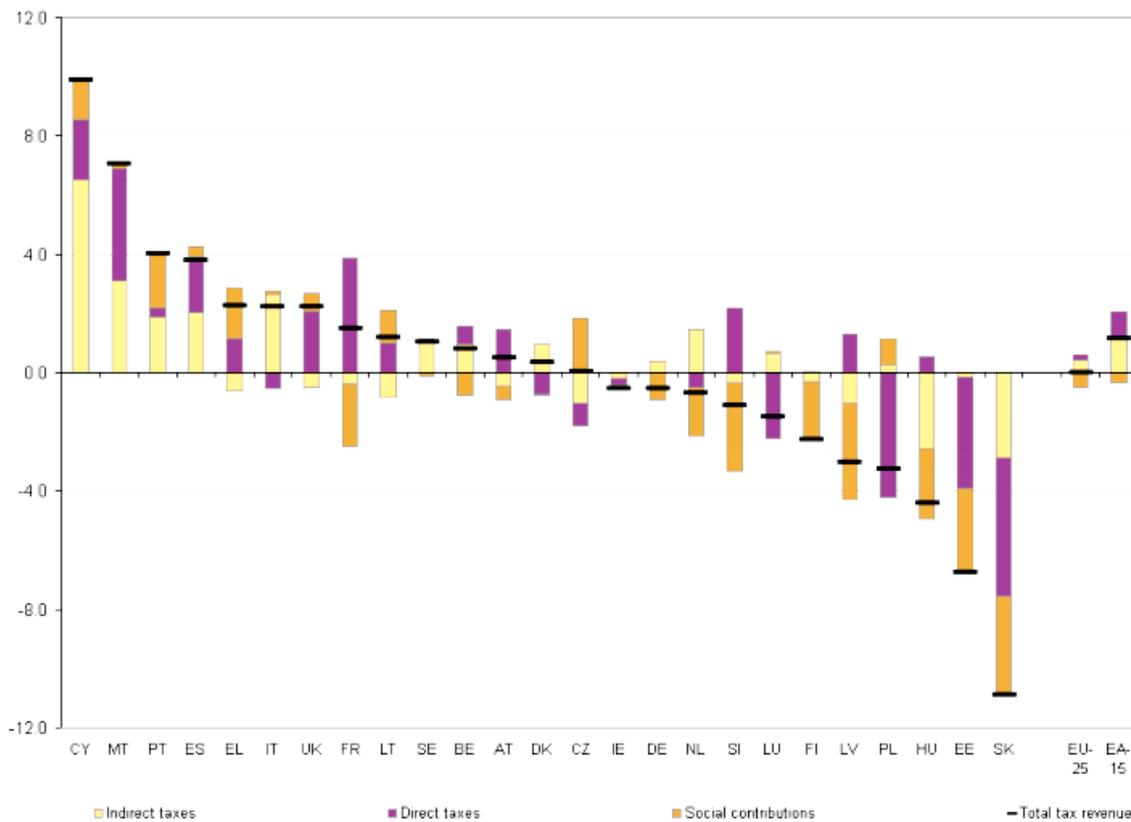
Figure 8 Components of compound tax quota in the EU in % GDP



Source: The author's compilation based on Eurostat data

Although taxes are cross-cutting tool connected to many sectors of public life and government policy (i.e. social policy, environmental policy, education, health), the main task is still to ensure sufficient revenues for financing public goods and services. Each government must choose the own tax strategy and create efficient system of taxes (so called tax mix). Globalization and other socio - economic changes are reflected in changes in the preference of the structure of tax revenues. Next figure decomposes the change in the overall tax burden into (positive or negative) changes of its three major components.

Figure 9 Evolution by major type of taxes 1995-2006, differences in % of GDP



Source: *Taxation Trends in the European Union (2008)*

The black line shows the change in the overall tax to GDP for all the countries. The figure highlights that, in the period under consideration, Member States only shifted taxation from one type of taxes to another. Examples of changes in the tax mix are the Czech Republic and Poland, which shifted the burden of taxation from taxes to social contributions, and France, Slovenia, Latvia, and the Netherlands, which did the opposite. Bulgaria and Romania, too, shifted taxation in a clear way towards indirect taxation, but this is not visible in the figure owing to the lack of data for 1995. In more recent years, there has been a lively discussion about the merits of a shift towards indirect taxes, and such a measure was taken, for instance, in Germany in 2007, when part of a VAT increase was used to finance a cut in social security contributions.

The present tax policy of the EU prefers revenue from indirect taxes (e.g. VAT and excise taxes), value of indirect taxes has continuously increased since 2001. Development of revenue from direct taxes has been fluctuating. On the other hand, the value of revenue from quasi taxes, mainly from social welfare payments, has a steady development in the countries of the European Union and it only decreases very slowly.

5. Conclusions

With growing globalization and internationalization, the level of tax burden is often discussed. In economic theory there are two basic opinions of level of tax burden and approaches to tax burden and competition and its impact on capital flows, economic activity and tax base. The first opinion prefers tax competition and „tax game“ because of positive effects on public expenditure, reducing of noneffective activities. The second opinion highlights the impact of tax competition in a negative way and prefers tax harmonization and

puts stress on negative influence of capital mobility on capital tax rates and level on public expenditure.

For comparison of tax burden, the easiest way is to use statutory tax rates but the result may be rather inaccurate. More convenient way of comparison is comparing implicit tax rates that consider not only size of statutory tax rates but also other aspects of tax systems determining total amount of effectively paid taxes. Eurostat has used implicit tax rates for evaluation of structure of a tax system since 1995. In this way, we may express impact of taxes on economic activities according to their functions (work, capital, consumption). Published data show current trends in the tax policy of the European Union. It is obvious that in the EU the labour implicit tax rate is higher than capital and consumption tax rates. Labour is taxed above average especially because it is not much mobile, compared to other production factors. The capital implicit tax rate does not fall, but it tends to rise in the long term in spite of decreasing nominal rates. The reason for this is expansion of tax base and partially the impact of fight against tax evasions. The lowest is the consumption implicit taxation when the reasons may be social reasons as well as the fact that consumption is easier to be taxed and possibility of tax evasion is lower than in case of more mobile tax bases - labour and capital.

The complex indicator providing an international comparison of tax burden is a tax quota that compares total implicit taxation in individual countries by measuring a proportion of effectively collected taxes on gross domestic product. Total effective burden is also regularly monitored and published by Eurostat. Research has proven that value of tax quota falls in time and indirect taxes prevail over the direct ones. In sixteen countries of the EU main resources of public revenues are nowadays indirect taxes, i.e. taxation of consumption. In six countries the greatest revenues come from direct taxes (especially personal and corporate income taxes) and in five countries the basic source of public budgets are payments for social welfare. In the process of decreasing taxes, thus increasing competitive advantages over the neighbouring states, the most active countries are those in the Middle and East Europe. Both trends mentioned above appear in the member state of the European Union to various extent. When assessing countries according to statistical data, we find great differences not only in tax quota but especially in its structure and construction of individual taxes.

References

- Ganghof, S., Genschel, P. 2007 Taxation and Democracy in the EU . MPIfG Discussion Paper 07/2.
- Griffith, R., Klemm, A. 2004 What Has Been the Tax Competition Experience of the Last 20 Years? The Institute for Fiscal Studies, Working Papers 04/05.
- Kubátová, K. 2008 Daňová politika nových členských zemí Evropské unie – jsou zde typické znaky? In *Sborník z mezinárodní vědecké konference Theoretical and Practical Aspects of Public Finance*. VŠE Praha.
- Kubátová, K. 2005 *Daňová teorie a politika*. Praha: ASPI, 279 p. ISBN 80-7357-205-2.
- Oates, W. E. 1973 Fiscal Federalism. - *Journal of Public Economics*, 2, 2, 188-191.
- Richter, W.F, Wellisch, D. 1996 The Provision of Local Public Goods and Factors in the Presence of Firm and Household Mobility. - *Journal of Public Economics*, 60, 1, 73-93.
- Stiglitz, J.E. 1997 *Ekonomie veřejného sektoru*. Grada Publishing, 664 p. ISBN 80-71694541.

Szarowská, I. 2008 Metodika výpočtu a vývoj daňové kvóty v České republice a Evropské unii. - *Acta Academia Karviniensia*, 1, 168-77.

Szarowská, I. 2009 Daňová konkurence a ekonomické teorie. In *Konkurence - teoretické a praktické aspekty*. Jihlava: VŠPJ, 38-46. ISBN 978-80-87035-23-8.

Široký, J. 2009 *Daně v Evropské unii*. Praha: Linde, 354 p. ISBN 978-80-7201-746-1.

Tanzi, V. 1996 Globalization, Tax Competition and the Future of Tax Systems. IMF Working Paper No. 96/141.

Tiebout, Ch. A. 1956 Pure Theory of Local Expenditures. - *The Journal of Political Economy*, 64, 5, 416-424.

Wilson, J. D. 1999 Theories of Tax Competition. - *National Tax Journal*, 52, 269-304.