Abstract. The interdependence between countries and the importance of the economic links between them has reached an extend unprecedented in history. In the context of globalization, the mobility of production factors may get pressure on governments to reduce taxes in order to remain attractive. In this way, differences between European Union member states will be intensifying, increasing national suzerainty limit controversies in direct tax domain and, especially, in corporate income taxes domain. It is acute the necessity of the coordination in tax domain in European Union, but it must not be neglected the fact that social preferences of each state imposes on independents in creating of national tax policy.

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REL Code: 8K.
1. Necessity of corporate tax base coordination

The world economy globalization, the progress of trade liberalization and capital flow extent have made easier the movement of goods, services, labour and capital beyond the natural borders. In consequence, the taxpayers have more possibilities to avoid the high taxation in a certain country by moving the taxation to countries with lower fiscal rates, so that the opportunities of economic development move from one country to another.

If there is a mobile capital or if the taxation rate is different from one country to another, the multinational companies may use a complete set of fiscal optimising strategies (the profit transfer to the areas with low taxes, or setting some financial departments in fiscal paradises to finance the investments by credit lines within the group). These types of tax non-payment strategies generate income losses in the countries with high fiscal level and disadvantage the small and medium size companies that enter in competition on the same market.

The analysis of corporate income tax level proves that the tax could determine a different impulse to investments in European Union member states.

Nominal taxation rates are not a complete indicator of burden tax, so we will analyse the adjusted statutory tax rate and the implicit tax rate.

The adjusted statutory tax includes supplementary corporate income tax rate, introduced fervently by public local authorities, besides statutory tax announced by authorities for taxation of some activity.

As a rule, this supplementary taxes could be deducted from tax base. For example, as from 2007, the public local authorities include the maximum 1.5% rate of a municipal surcharge. France applies a statutory tax rate of 33.5%, but large companies (they have a turnover over 7,630,000 euro and a taxable profit over 2,289,000 euro) are subjected to an additional surcharge of 3.3%. All companies with a turnover over 400,000 euro pay an annual minimum lump-sum tax between 1300 euro and 110,000 euro (when the turnover is over 500,000,000 euro). In Hungary, from 2006, a “solidarity surtax” of 4% and a local business tax of 2% are levied on the most of the resident companies. In Italy, public local authorities include a supplementary corporate income tax rate of minimum 3.9% and maximum 4.9%, depending on company’s location.

The implicit tax rate measures the effective tax burden level of varied type of economical income or activities. An accurately measurement of corporate tax level must considered that the economical final effect of burden tax may be often transmitted from some contributors to others in interaction of supply and demand. An eloquent example is in following: companies increase the sale price like a reply at corporate income tax increasing. The impact determination
of these phenomena concerning tax level is difficult, but it realises, in part, through implicit tax rate.

The implicit tax rate is the percentage ratio between aggregate taxes and potential tax base. The evolution of this indicator is difficult for interpretation, especially in situations when it is not possible to make a clear distinction of varied tax influences.

In keeping with European Commission methodology, the implicit tax rate on corporate income is determined by following formula:

\[
\text{The implicit tax rate on corporate income} = \frac{\text{Taxes on corporate income}}{\text{(net operating surplus of non-financial and financial corporations} + \text{interest received by non-financial and financial corporations} - \text{interest paid by non-financial and financial corporations} + \text{rents on land received by non-financial and financial corporations} - \text{rents on paid by non-financial and financial corporations} + \text{dividends paid by non-financial and financial corporations} + \text{dividends received by general government} + \text{dividends received by rest of world} + \text{dividends received by households, self-employed and non-profit institutions} + \text{insurance property income attributed to policyholders received by non-financial and financial corporations})} \times 100
\]

In Figure 1 it is presented the situation of the adjusted statutory tax rate and the implicit tax rate on corporate income.

We observe that in Cyprus or Estonia, the statutory tax rate on corporate income is reduced, but the effective tax burden level on companies is raised and in Belgium or Greece we remark an opposite situation: the statutory tax rate on corporate income is raised, but the effective tax burden level on companies is reduced.

So, statutory tax rates could not offer complete information about the tax burden on corporations. This drawback could be eliminated about determining of effective tax rate. In speciality literature there are determined the effective marginal tax rate (EMTR) and the effective average tax rate (EATR). The methodology used for determining of the two rates has been created by Devereux M.P. in 1999 and by Griffith R., in 2003, respectively. The approach of these economists is consideration of a supplementary hypothetical investment localised either in home state or in other states.

Investment decisions are affected by both rates, but in a different mode. In this way the effective average tax rates orientate the decision on the selected emplacement for investment and the investment level is more influenced by the effective marginal tax rate.

The effective marginal tax rate offers the possibility of tax effect measurement on the investment impulse. It is the rate which is applied to the
marginal investment of the project, presenting the effect of taxes on an investment with a minimum post-tax rate of profit.

The measurement of the corporate income tax effect on the investment capital level is realised about cost of capital, defined like a benefit rate required by companies owners before of tax. The percentage difference between the cost of capital and real post-tax rate of return asked by company is the effective marginal tax rate.

The basic idea is that companies will invest until the point when the marginal result of the capital is equal with the cost of capital. For a solicited post-tax rate of return, a restrictive fiscal system generates a large cost of capital.

Using notes of authors (Devereux M.P. and Griffith R.), the calculation formula of the effective marginal tax rate is following:

\[ EMTR = \left( \frac{\tilde{p} - r}{\tilde{p}} \right) \]

where:
\( \tilde{p} \) is the cost of capital for a marginal investment;
\( r \) is the discount rate.

or

\[ EMTR = \left[ \frac{c - (r + \delta)}{c} \right] / c = \left[ \frac{(1 - A)}{(1 - \tau A)} \right] x \tau \]

where:
\( c \) is the cost of capital;
\( r \) is the discount rate;
\( \tau \) is the tax rate;
\( \delta \) is the economic depreciation;
\( A \) is the allowance.

This expression shows that the relation between the statutory tax rate and the effective marginal tax rate depends as A. When the value of A is equal with 1, this shows the non-distortion of corporate income tax. As much the A is smaller, so much the corporate income tax will have a stronger effect on the investment. If the A is equal with 0, then the effective marginal tax rate will be equal will the statutory tax rate.

The effective average tax rate is the percentage difference between the net present value of a profitable investment project in the absence of the tax and the net present value of the same investment project in the presence of the tax. In both cases, the hypothetical investment has been realised in one period and it generates benefits in next period. Other hypothesis used in determining of the effective average tax rate is following: fiscal system remains unchanged on life duration of investment project.
The calculation formula of effective average tax rate is following:

\[ \text{EATR} = \frac{R^* - R}{p/(1 + r)} \]

\[ R^* = \frac{(p - r)/(1 + r)}{1 + r} \]

\[ R = \frac{(1 + \delta)(1 - \tau) + (r + \delta)(1 - A)}{1 + r} \]

where:
- \( R^* \) is the present value in the absence of the tax;
- \( R \) is the net present value in the presence of the tax;
- \( p \) is the pre-tax profit.

Analysing the evolution of the effective marginal tax rate and the effective average tax rate in 1982-2005, at an estimate inflation rate of 3.5%, Devereux and Sørensen attained the following conclusions:

- The effective marginal tax rate level remained fairly stable over the 1990s (26% in 1982 and 25.5% in 1999) and it decreased in the next period (21% in 2005);
- The effective average tax rate level decreased from 34.5% in 1982 to 29% in 2005.

For 2007, de Mooij R. and Devereux M.P. attained the conclusions that in all European Union member states, with exception of Belgium, the value of the effective marginal tax rate is positive, varying from 15% in Malta to 0.25% in Estonia (see Figure 2).

In this context, the introduction of a harmonization tax system on corporate income could contribute to the decrease of the distortions generated by differences between countries concerning the allocation of investments and tax bases, as well to realise the fiscal neutrality between national investments and European investments.

2. Description of the Common Consolidated Tax Base System

Common Consolidated Tax Base (CCBT) is a system based on which multinational companies would determine their consolidated volume of taxable incomes.

The actual actions dedicated to building such a system started on the occasion of the ECOFIN Council in September 2004, when the vast majority of the Member States accepted the utility of such progress towards creating a
common taxation base and decided to establish a working group containing of experts representing the Member States and presided by the European Commission, in order to examine in detail the possible solutions. According to the objectives proposed in 2004, the activity of this group (the Common Consolidated Corporate Tax Base Working Group - CCCTB WG) had to be substantiated into a law proposal at the end of 2008; however, this objective has not yet been achieved.

The regulation concerning the common consolidated corporate tax base will be applied to companies that pay corporate income taxes in the European Union Member States (that will be specified in an annex to the regulation that will be annually modified) organised into groups, but that carry out their business according to a sole group strategy. The details related to the definition of the group are not yet finalized due to the fact that the group is facing difficulties in establishing a shareholding threshold meant to prove (by ownership relations) the connections between the companies that are part of the group.

However, the existence of complex ownership relations between resident companies of the European Union and companies outside the Union requires that the status of the respective groups be clarified. There are a few more sensitive combinations, the treatment of which has to be differentiated:

- **several companies controlled by an entity outside the Community.** In this case it would be desirable that the system be applied to them because, otherwise, the application of the CCCTB could be avoided by the companies in the EU by the mere transfer of the entity that controls them outside the Community;
- **a parent company residing in the Community and having a subsidiary in a third country that controls, in its turn, a company residing in the Community.** In this case, the entities having their residence in the Community should be subjected to the CCCTB if the shareholding thresholds are sufficiently large as to be defined as legal property, but the consolidation of the tax base with the exclusion of the intermediary entity might create technical difficulties.

Such corporations may choose the CCCTB-based taxation system. This option will be accomplished by the notification of the competent authorities with at least three months before the beginning of the fiscal. It will be valid for five years and it will be automatically renewed for three-year periods in the absence of an official notification from the corporations, and the consolidation shall be made for the incomes and costs of all the members of a group of companies.
3. Difficulties in implementing the CCCTB system

The problems for which suitable solutions are not yet found are related to the accounting rules that should be used for the definition of the consolidated base. The debates of the working group frequently involved the idea of using the International Financial Reporting Standards (IFRS). In addition to the fact that they are recognised at the international level, they have the advantage of allowing taxpayers to adjust to them quite easily – starting with 1 January 2005 – at the level of the Community, a Regulation is applied that requests the companies listed in the regulated capital market to draw up their consolidated balance sheets in compliance with the IFRS requests. A number of studies proved the fact that these standards may offer solutions that can be taken over into the rules of drawing up the consolidated base, and can also lead to a decrease in the rates of taxation, which would increase the attractiveness of the whole European Union as location for investments.

In the opinion of the officials from Brussels, it may be difficult to use these standards because in many countries, in the case of the local companies, their usage is not allowed and not all the standards are compatible with the taxation requirements. For this reason, the decision was made to start from the accounting rules generally accepted in all the member countries, which will undergo certain changes in order to meet the rules established for the CCCTB. Other debates held at the level of the working group, in relation to the implementation of the CCCTB, were related to:

- **Fixed assets and depreciation.** The assets that meet the requirements may be depreciated either individually, which requires an estimation of the service life of each and every asset when it is purchased (in compliance with the common norms applicable in the EU), and an individual depreciation during their service life, either in one or in several categories with a common established service life. The Commission’s opinion is that the development of the grouping method within the CCCTB implies considerable advantages;

- **Deductions for provisions.** Provisions may generally be fiscally non-deductible, completed by a list of fiscally deductible exceptions, or may generally be fiscally deductible, completed by a list of fiscally non-deductible exceptions. In the Commission’s opinion, the fiscally deductible provisions must be defined and completed by a list of fiscally non-deductible exceptions;

- **General methodology.** For the calculation of the taxation bases for a company, one can start from the comparison between the opening balance sheet with the ending balance sheets or from the profit and loss account of the company. In the first case it is necessary to prepare a model of “fiscal balance” according to commonly defined norms that should also include the profit and
loss account. In the second case, only the profit and loss account commonly agreed in the CCCTB legislation is necessary; the information related to the balance can be checked by comparison with the financial accounts. The Commission considers that a fiscal balance is not necessary and that such a balance represents an additional administrative burden;

- **Local taxes.** In certain Member States there are local taxes on business. They may be deductible from the consolidated base and thus included into the distribution mechanism or maintained at the national level and deducted only from the respective part of the consolidated base that due to the respective Member State. In the Commission’s opinion, in general, it is preferable to establish a set of norms as vast as possible, in order to avoid national “derogations” or additional taxes as much as possible. However, as additional analysis of all their consequences is necessary, because the “distribution” of the deductions for the local taxes at the EU level but the “non-distribution” of the national taxes at the level of the common base might generate inconsistency;

- **External incomes.** The external/foreign incomes of a company can be totally excluded from the consolidated tax base or can be incorporated into it. In the last situation it is necessary to have a method of including them into the consolidation and distribution mechanism. This issue has been raised due to the fact that the various methods of avoiding double taxation currently used by the Member States according to the national legislation, as well as the bilateral agreements with third countries should be taken into account. The Commission believes that it is preferable to define a method that should incorporate external incomes into the consolidated tax base and that should be completed, where necessary, by some form of exemption in order to avoid double taxation;

- **Intra-group transactions.** Avoiding problems related to transfer prices represents an important advantage of consolidation. However, there are several methods of eliminating intra-group transactions by consolidating the base. Transfer prices can be ignored, recognised at the level of costs or recognised at the price established under full competition conditions. Each method presents advantages and disadvantages, that is why the Commission must decide which is preferable or whether each group may be allowed to choose.

But the problem that generated most of the debates is represented by the distribution formula, among the entitled Member States, of the consolidated revenue determined through the decided tax base. It is necessary that this formula by transparent and simple, and not to involve compliance costs and excessive administration, to decrease the possibility of corporations to transfer allocation factors from one site to another, and not to generate distortions at the level of the business environment in the European Union.
4. Conclusions

Recent trends towards a common European tax policy for the general corporate taxation aim at preventing the negative effects of tax competition, especially those of the national tax base “migration”, by moving corporate main offices in countries with more advantageous systems of taxation.

The idea of harmonising corporate taxation constitutes one of the most important debate topics on the agenda of the European Commission for the moment, and also within specialists’ theoretical approaches. The vast range of such approaches is particularly relevant for the complexity of the problems that hindering the formula, even if it is only at a theoretical level separated from the policy feasibility issues, and from widely shared solutions.

The European Committee’s proposal to adopt measures to charge the capital companies’ incomes according to a consolidated fiscal base for activities performed within the European Union has many supporters, attracted by the possibilities provided by a more concise taxation system and a better business planning that may result when applying such formula, both and many opposes, who affirm that the corporate income tax must be a decision of national government.

Legend:
1 – Cyprus, 2 – Estonia, 3 – Denmark, 4 – Sweden, 5 – Italy, 6 – United Kingdom, 7 – Czech Republic, 8 – Austria, 9 – Finland, 10 – France, 11 – Portugal, 12 – Belgium, 13 – Slovenia, 14 – Poland, 15 – Slovakia, 16 – Greece, 17 – Hungary, 18 – Netherlands, 19 – Latvia, 20 – Lithuania, 21 – Ireland.

Note: For Bulgaria, Germany, Luxembourg, Malta and Romania, there are no informations; the represented data form the figure are referring to the situation from 2007, excepting Greece, Hungary, Poland and Portugal for which information is from 2006.

Figure 1. Comparative presentation of the adjusted statutory tax rate and the implicit tax rate on corporate income
Legend:

Figure 2. The effective marginal tax rate level in EU member states in 2007

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