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Determinants of Corporate Income Tax Revenues of European Union Member States

Summary of PhD dissertation

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1. Reasons for undertaking the research subject

All EU countries (hereinafter: Member States) tax income earned by corporations. However, the budget revenues from corporate income tax (hereinafter: CIT)¹ vary both among them in comparison to their national GDPs and over time. Therefore, the question arises on the factors, which shape those receipts.

There are several practical reasons supporting the need to answer the question of CIT revenue determinants among the Member States. Below I indicate three of them, which are the most important.

Firstly, several EU countries are running huge government debts. For example as for 2012 Ireland, Portugal, Italy and Greece had public debts exceeding their annual GDPs, which deteriorates economic stability of those states. Government revenues, including those from CIT, contribute to lesser indebtedness of countries. To assure sustainable budget receipts from that tax, it is crucial to understand how the CIT revenues are shaped and which factors influence them most.

Secondly, the EU seeks to develop internal market among the Member States. One of the main tools, which foster the creation of the common market is coordinated on the EU level economic policy of the countries. The economic policy as such is realized via a mix of two policies - monetary and fiscal. The EU has already made substantial advancements with respect to the common monetary policy. Based on the Treaty on European Union the monetary union has been introduced. 18 Member States participate in the Euro area. At the same time fiscal policy is still led autonomously by each country. CIT is a part of that fiscal policy. Diverging CIT systems across the Member States hamper the development of the internal EU market. Thus, there is a scope for improvement, inter alia by harmonization of CIT. However, decisions in tax matters taken on the EU level require unanimity and each single Member State may veto the developments. Therefore, ways to reach the consensus need to be found. Good understanding of CIT revenue determinants, should contribute to that discussion.

Thirdly, there is lack of coordination of monetary and fiscal policies both in the EU and even in the Eurozone. Members of the euro area do not conduct their monetary policy independently. The policy is shifted up to the EU level and is led operationally by European Central Bank. On the other hand fiscal policy remains generally on the national levels. Such

¹ Under CIT I understand a tax imposed on income of corporations (according to the Eurostat classification: "Taxes on capital, of which on capital and business income of corporations").

situation reduces the possibilities of reactions to imbalances in particular economies. Without the instrument of fiscal policy – including also CIT – it is not possible to lead effective economic policy. The *policy-mix* tool is not available. As a partial remedy to this situation harmonization of tax systems is proposed. The European Commission intends to introduce in the EU a unified method of calculation of the legal tax base for CIT purposes (i.e. so called Common Consolidated Corporate Tax Base or CCCTB). In the view of the proposed CIT harmonization CIT revenue determinants should be well understood by policymakers to take appropriate decisions in this respect.

The theoretic reason for exploration of CIT revenue determinants in the EU is also fundamental and interesting. Moreover, thorough cognition of CIT revenue determinants should contribute to better understanding of fiscal policy instruments.

2. Main objectives of the dissertation

My research objective was to identify and estimate the importance of particular key CIT revenues determinants. In my analysis I focused on the Member States. That requirement results directly from the mentioned above reasons for undertaking the research subject.

3. General and supporting hypotheses

The general hypothesis of the dissertation is as follows:

CIT revenues of EU countries are determined both by the CIT laws and factors beyond the CIT legislative regulations of the Member States, whereas the latter factors jointly exert greater impact on CIT revenues than the CIT laws.

The general hypothesis includes supporting hypotheses, which reflect the relation between the respective factors and the amount of CIT revenues collected by the Member States.

The general hypothesis focuses on two sets of determinants. This division is reflected in supporting hypotheses.

The determinants within the scope of CIT laws of the Member States are covered by the following supporting hypotheses:

1. *the broader the legal tax base established for CIT purposes the higher the CIT revenues of the Member States and*
2. *the higher the level of the statutory CIT rate the higher the CIT revenues of the Member States.*

The determinants beyond the CIT legislative regulations of the Member States are covered by the following supporting hypotheses:

1. *the higher corporate profitability the higher the CIT revenues of the Member States,*
2. *the smaller the size of the shadow economy and the lesser intensity of tax evasion and tax avoidance practices the higher the CIT revenues of the Member States,*
3. *the higher the degree of globalization the higher the CIT revenues of the Member States and*
4. *the higher the level of PIT rates the higher the CIT revenues of the Member States.*

In addition I sought to answer the research questions, which contribute to the proper verification of the supporting hypotheses and general hypothesis indicated above².

4. Research methods

For the purpose of identification and assessment of importance of factors influencing CIT revenues I considered:

1. character of economies of various Member States,
2. general macroeconomic relations,
3. relevant literature and
4. results produced by an econometric model.

Most importantly, the qualitative research is supplemented by empirical calculations made on macroeconomic data. Such complex analysis enables robust verification of the general and supporting hypotheses. More details on the approach taken are given in the description of the structure of dissertation in the following section.

5. Structure of the dissertation

In the first section of the dissertation I highlight the challenges of the fiscal policy in the EU. I discuss the existing inconsistency of fiscal and monetary policies and relevant consequences. I compare the role of the EU budget with state budgets of Member States. Finally, I analyze the available literature focused on CIT revenue determinants and find the research gap. I form the hypotheses as well as research questions and indicate the research methods.

² Those research questions are not included in this short summary.

Since the major concern of the dissertation are CIT revenues, in the following section I discuss the theoretical background of that tax. This contributes to better understanding of CIT and concurrently also gives notion of the government receipts from this source. I present the place of CIT in the taxation system and analyze the basic CIT features. Moreover, I discuss the capacity of CIT to generate budget revenues and incidence of CIT from theoretical point of view. In this section and in the following ones I verify the research questions.

The dissertation focuses on a particular territory. Therefore, in the third section I present functioning of CIT in the EU. I show shortly the developments in this respect in the European community and introduce the ideas on CIT harmonization as well as analyze their potential outcomes. This work sheds the light on the role of CIT in the Member States' economies.

In section four I research in a qualitative manner the key determinants of CIT revenues. The findings are supported by the analysis of relevant literature focusing on CIT and public finance in general. I also calculate the correlation of particular factors with receipts from CIT. Based on that I assess the importance of each determinant influencing CIT revenues and draw conclusions. If necessary, I characterize Member States or their groups with respect to particular features excreting impact on CIT receipts. Finally, I verify the supporting hypotheses qualitatively.

In the fifth section I analyze the factors influencing CIT revenues quantitatively. I build a panel regression model for all Member States for the period 1995 – 2011. In the model I introduce CIT revenue-to-GDP ratio as a dependent variable. Such approach assures comparability of various EU economies. Particular CIT revenue determinants are used as independent variables. The basic shape of the model is as follows:

$$Y_{it} = \alpha + \beta_1 CIT\ Rate_{it} + \beta_2 GDP\ growth_{it} + \beta_3 Shadow\ Economy_{it} + \beta_4 Globalization_{it} + \beta_5 PIT\ Rate_{it} + \varepsilon_{it}$$

Y is the $\frac{Corporate\ Tax\ Revenue}{GDP}$. The indexes i and t denote data for particular Member States in certain years, respectively.

I consider also the outcomes produced by the econometric model and compare them with the results of qualitative analysis performed in the previous stage of my research. I verify the supporting hypotheses both qualitatively and quantitatively.

Finally, in the sixth section I conclude the findings and summarize the arguments supporting the general hypothesis. Based on my estimations I draw conclusions for fiscal policymakers and in particular for prospects of harmonization of CIT in the EU.

6. Conclusions

The key conclusion from the research is that CIT revenues of EU countries are determined both by the CIT laws and factors beyond the CIT legislative regulations of the Member States, whereas the latter factors jointly exert greater impact on CIT revenues than the CIT laws. Thus, the general hypothesis is fully confirmed.

The research provides for important finding, which could be used in real economy. In particular more central for the maintenance of CIT revenues in Member States are factors that are not connected with CIT laws rather than determinants within the CIT laws. Consequently, politicians should pay more attention to those determinants, which seem to be often undervalued during the discussions on receipts from CIT. Such findings are especially vital on the eve of harmonization of CIT in the EU.

As already mentioned in the first point on the reasons for undertaking the research subject, the good understanding of CIT revenue determinants could contribute to the development of the common EU market. Moreover, the findings of the research should help to reduce government debts of the Member States and improve the general economic stability of EU countries. Finally, the area this research should be beneficial in is the general development of EU common fiscal policy.