50 years of EU corporate income tax harmonization initiatives: is Enhanced Cooperation the solution?

Vrijburg, H.; Albregtse D.A., Kavelaars P.

50 years of EU corporate income tax harmonization initiatives: Is Enhanced Cooperation the solution?

Hendrik Vrijburg

H. Vrijburg MSc is researcher at the Tinbergen Institute of the Erasmus University Rotterdam

1. Introduction: Corporate income tax harmonization within the EU

In 50 years the member states have failed to come to an agreement on the future of corporate taxation within the EU. As the political landscape is becoming ever more complicated, cooperation between a subgroup of countries is a potentially interesting option for the future. Therefore, this paper reviews the literature on corporate income tax harmonization from the perspective of the EU with a focus on the prospects for an enhanced cooperation agreement (ECA) between a subset of countries instead of all 27 EU member states.

Based on the literature I conclude that it is unlikely that enhanced cooperation on corporate taxation will result in substantial welfare improvements within the EU. Three arguments can be listed. First, cooperation agreements between all member states yield a small average welfare gain at maximum. Second, weaker forms of cooperation, including enhanced cooperation, yield even smaller welfare gains. Third, an ECA introduces new political dynamics into the EU political arena. It creates the possibility of self-selection into coalitions after which new vested interests are created without yielding substantial welfare gains for the EU as a whole. It seems wiser to first solve the arbitrage opportunities within countries before considering cross-country harmonization.

Before discussing the literature leading to these conclusions let me first stress the relevance of the topic. The corporate income tax is an important source of revenue for the member states of the EU constituting between 5 and 15% of total tax revenues.[1] Competition between member states of order to attract profits and real investments is expected to erode corporate income tax revenues in the long run. This concern fueled the discussion on the need for corporate income tax harmonization in the EU from the 1950s onwards. However, economists have never agreed.

Already in the 1990s, the relevant arguments in the harmonization debate feature predominantly in the literature. First of all, corporate income tax systems differ widely within the EU.[2] These differences in corporate income tax regimes distort investment and financing decisions by companies, leading to economic waste in terms of forgone profitable investments and resources spend on activities that are unproductive from a social point of view. Furthermore, competition between governments is expected to erode corporate tax revenues. Based on these concerns, some leading authors expect that tax harmonization is inevitable.[3] [4] On the other hand, the advantages of tax diversity

[1] Based on 2007 OECD data on total government. Norway with the highest revenue (26 %) is excluded due to massive oil revenues.

[2] See Eurostat, 2009, *Taxation trends in the European Union*, Office for Official Publication of the European Communities, Luxembourg.

[3] A. L. Bovenberg and V. Tanzi, 1990, *Is There a Need for Harmonizing Capital Income Taxes within EC countries?* In H. Siebert (ed.), *Reforming Capital Income Taxation in a Global Economy*, *New York: Elsevier*.

[4] H. W. Sinn, 1990, *Tax Harmonization and Tax Competition in Europe*, European Economic Review, 34, 489-504.

should not be underestimated; difference in corporate income taxes signal heterogeneous preferences for optimal tax levels across the EU.[5] Furthermore, competition might be needed to discipline politicians.[6] Finally, decentralized policy making provides opportunities for governments to learn from each other, an argument that is often ignored in the literature.[7] In the 20 years that followed these publications, the arguments have not fundamentally changed. In contrast, our knowledge concerning the strength of the arguments has.[8] [9]

The literature on tax harmonization is vast and the present review is therefore not complete.[10] However, the paper extends the existing literature with a discussion of enhanced cooperation in corporate income taxation. I will focus my discussion solely on the corporate income tax instruments. A large number of interesting topics are therefore excluded. For example, I do not touch upon the issue of spillovers in public goods, personal taxes on capital, labor mobility or consumption tax competition and I do not address the question whether capital income should be taxed at all.

In the remainder of this paper, I will first briefly review the EU history on cooperation initiatives in corporate income taxation. Second, I explain why the classical tax competition model with all its extensions does not find an unambiguous welfare gain. Finally, I will discuss the option of enhanced cooperation within the EU. The final section concludes by combining these theoretical insights into a policy recommendation.

2. A brief history of coordination initiatives within the EU

Corporate income tax harmonization within the EU comes with a long history.[11] The first milestones are the reports by Neumark in 1962, Segré in 1966 and van den Tempel in 1970. All three reports concluded that, some degree of harmonization of the corporate income tax legislation is desirable. Neumark stressed the need to alleviate double taxation of the return on equity by introducing a split-rate system; Segré urged the removal of taxes that work against an integrated capital market; and van den Tempel concluded that the EU should adopt a classical corporate income tax system instead of an imputation system or split rate system for reasons of simplicity. In the aftermath of each of the reports the European Commission (EC) experienced that harmonization initiatives would be politically difficult due to the unanimity requirement for tax policy decisions and an expected outflow of profits towards tax havens. The 1975 Draft directive corporate income taxation by the EC reflects these concerns. The directive

[5] S. Cnossen, 1990, *On the Direction of Tax Harmonization in the European Community*. In H. Siebert (ed.), *Reforming Capital Income Taxation in a Global Economy*, New York: Elsevier.

[6] P. Salin, 1990, *Is there a Need for Harmonizing Capital Income Taxes within EC Countries? A Comment.* In H. Siebert (ed.), *Reforming Capital Income Taxation in a Global Economy,* New York: Elsevier.

[7] A. L. Bovenberg and V. Tanzi, 1990, *Is There a Need for Harmonizing Capital Income Taxes within EC countries?* In H. Siebert (ed.), *Reforming Capital Income Taxation in a Global Economy*, *New York: Elsevier*.

[8] G. Nicodeme, 2006, *Corporate Tax Competition and Coordination in the European Union: What do we know? Where do we stand?* MPRA Working Paper, no 107.

[9] R. Griffith, J. Hines and P. B. Sørensen, 2008, *International capital taxation*, Forthcoming in the *Mirrlees Review: Reforming the Tax System for the 21st Century*, to be published by the *Institute for Fiscal Studies*.

[10] Excellent review papers on the tax competition literature are: J. D. Wilson, 1999, *Theories of Tax Competition,* National Tax Journal, 52, 269-304, G. R. Zodrow, 2003, *Tax Competition and Tax Coordination in the European Union,* International Tax and Public Finance, 10, 651-671, J. D. Wilson and D. E. Wildasin, 2004, *Capital tax competition: bane or boon?* Journal of Public Economics, 88, 1065-1091, and G. Nicodeme, 2006, *Corporate Tax Competition and Coordination in the European Union: What do we know? Where do we stand?* MPRA Working Paper, no 107.

[11] A. Easson, 1992, *Harmonization of Direct Taxation in the European Community: From Neumark to Ruding,* Canadian Tax Journal, 40, 600-638.

proposed an imputation system for the corporate income tax such that foreign capital owners are refunded. Furthermore, the report proposes a restricted range for statutory tax rates between 45-55 percent and a harmonized dividend withholding tax at 25 percent.

The more recent harmonization proposals start in 1992 with the Ruding committee. This committee concluded that community action is necessary given large economic distortions due to differences in corporate income tax systems in the EU. However, national sovereignty should be taken into account at least until the EMU is completely finished.[12] The committee proposed a number of policy directions. It proposed a lower bound on the corporate income taxes around 30% and maximum around 40%. Furthermore, tax base harmonization should be achieved and harmful tax practices, like discriminating withholding taxes, should be abandoned.

Only the final recommendation has been implemented in the EU as of 2010 with the agreement by the EU member states on a Code of Conduct on business taxation in 1998. The code stipulates that countries should not discriminate between industries in their tax laws. Specifically, they agreed not to discriminate between residents and non-residents; not to grant tax advantages to firms without substantial real economic activity within the borders of the country; not to depart from international standards in the definition of profit; and to apply transparent administrative procedures in enforcing taxation.[13] A total of 66 "harmful" tax measures are identified and should be removed before 2008.

The Bolkenstein report in 2001[14] constitutes the present view on corporate tax harmonization by the EC. In general, the report calls for a uniform set of rules regarding the definition of corporate taxable income across countries and postpones the initiatives on rate harmonization. Substantial welfare gains are expected from the former, while the latter is deemed unachievable in the medium term. The proposal of a Common Consolidated Corporate Tax Base (CCCTB) originates from this report and will be discussed later. Several subsequent reports have studied the proposals for base harmonization. Important is the conclusion from the 2004 report *Economic effects of tax cooperation in an enlarged European Union*[15] which suggests that a full cooperation between all member states is unlikely to materialize; enhanced cooperation between a subset of countries is the most likely route towards tax cooperation.

The above survey highlights the political struggles on this topic since the 1960s. Harmonization initiatives have become less ambitious over time and are negotiated amongst an increasing number of member states (6 in 1960, 27 presently). These political struggles signal a number of fundamental underlying dynamics that are unfavorable for future policy coordination. An enhanced cooperation agreement, discussed in Section 4, might be the only way out. Section 3 will first discuss the economic theory behind tax harmonization.

[12] European Commission, 1992, Communication to the Committee of independent Experts on Company Taxation ('Ruding Report'), Brussels.

[13] W. Eggert and A. Haufler, 2006, Company-Tax Coordination cum Tax-Rate Competition in the European Union, *FinanzArchiv: Public Finance Analysis*, 62, 579-601.

[14] European Commission, 2001, *Company taxation in the internal market*, Commission Staff Working Paper COM(2001) 582.

[15] Copenhagen Economics, 2004, *Economic effects of tax cooperation in an enlarged European Union*, Study prepared for the European Commission.

3. Full cooperation between all countries unfeasible

3.1. Introduction

Ever since tax competition has been formalized in economic models has the study of tax harmonization been part of formal economic analyses, a conclusion has not been reached though. This confusion in the theoretical literature signals the inability to cooperate by politicians. Therefore, it is important to understand the forces at work.

3.2. Full cooperation in the classical tax competition models

For a tax coordination agreement between countries to be unambiguously welfare improving a number of restrictive assumptions need to be imposed. First of all, a common gain (surplus) from cooperation must exist. In tax competition models, governments deciding on their tax rates unilaterally, choose rates that are to low from a global welfare perspective due to the existence of tax spillovers. Individual governments do not take these spillovers into account when making their individual policy decisions.[16] By cooperating, tax spillovers will be internalized into the policy decisions and global welfare is increased: the surplus from cooperation. Related to corporate income taxation, the cross-country mobility of the tax base (profits and capital) facilitates the spillover: a higher tax burden in one country expands the tax base in other countries, implying a positive tax spillover. Second, countries must be symmetric in all respects. Symmetry implies both that the spillovers are equally large for all countries involved and it ensures that the inhabitants of these countries have identical objectives: tastes are aligned. Third, governments must be benevolent and have no commitment problems. The government acts in the interest of its citizens and will not fool them either now or in the future. Under these assumptions, the citizens of all countries gain equally from a cooperation agreement, a grand coalition of all countries can be established without problems. The classical papers obey the above assumptions.[17]

3.3. Full cooperation in an extended model

In the remainder of this section, I present arguments to illustrate that cooperation need not be welfare improving for all countries involved when the assumptions listed above are generalized.

Let me start with two arguments that suppress the common gain from cooperation. First, ceteris paribus, an endogenous savings decision by individuals results in an aggregate cross country tax base that is elastic in the average tax burden.[18] [19] When cooperation results in higher taxes, savings and investment will be reduced such that a ceiling on tax revenues exists. Second, cross-ownership of shares by investors causes a negative tax spillover: governments have an incentive to impose higher taxes to export part of their

---

[16] Tax competition models usually exclude non-distortionary taxes from the analysis. The literature itself does not provide a thorough motivation for this, although observations from actual practice confirm the widespread use of distortionary taxes while a head tax is available in principle. See for a discussion J. K. Breuckner, 2004, *Fiscal Decentralization with Distortionary Taxation: Tiebout vs. Tax Competition*, International Tax and Public Finance, 11, 133-153, and J. Slemrod and J. D. Wilson, 2009, *Tax competition with parasitic tax havens*, Journal of Public Economics, 93, 1261-1270.

[17] See a.o., G. R. Zodrow and P. Mieszkowsky, 1986, *Pigou, Tiebout, Property Taxation, and the Underprovision of Local Public Goods*, Journal of Urban Economics, 19, 356-370, J. D. Wilson, 1986, *A Theory of Interregional Tax Competition*, Journal of Urban Economics, 19, 296-315 and W. H. Hoyt, 1991, *Property Taxation, Nash Equilibrium, and Market Power*, Journal of Urban Economics, 34, 123-131.

[18] I. W. H. Parry, 2003, *How large are the welfare costs of tax competition?* Journal of Urban Economics, 54, 39-60.

[19] S. Bucovetsky and J. D. Wilson, 1991, *Tax competition with two tax instruments*, Regional Science and Urban Economics, 21, 333-350.

tax burden abroad. This negative tax spillover counter-acts the positive tax spillover in the classical tax competition model: unilateral tax policies are less inefficient.[20]
On the other hand, new benefits from cooperation arise if the model is extended with heterogeneous citizens and a government, controlled by the median voter, that redistributes income towards the poor using distortionary taxes on labor and internationally mobile capital. Tax coordination reduces the excess burden on the use of these taxes and results in more redistribution.[21]
Asymmetries between countries lead to disagreement on the optimal common policy: each country has an unique optimal tax policy. For example, differences in the preference for public policy (including redistribution) implies that countries unilaterally prefer different tax levels. These differences in cross-country tax levels result in an inefficient allocation of resources across countries. In this case, harmonization of rates does not only yield a common gain in terms of increased economic efficiency or more public goods; it also imposes an undesirable uniformity upon the parties that join the cooperative agreement. The net common gain from cooperation is ambiguous as a result.[22]
In general, asymmetries in endowments between countries create both a potential gain from cooperation, in terms of economic efficiency, and vested interests that are hard to overcome. For example, differences in population size introduces an asymmetry in the relative size of the tax spillover. The tax spillover is relatively small for large countries and large for small countries. Unilateral optimal tax rates are therefore lower in small countries compared to large countries. Welfare is the highest in the small countries due to a massive, relative to its size, inflow of capital. From a global perspective, the tax differential creates an inefficient over-investment in the smaller country. Harmonization overcomes this inefficiency and allows for a first-best public good supply. But very small countries might lose from tax cooperation agreements as harmonization is followed by a massive outflow of capital. The asymmetry has the potential to create a vested interest that breaks down the negotiation or requires the use of side payments to convince the unwilling party.[23]
Similarly, vested interests are created through differences in capital endowments resulting in asymmetric capital positions: “rich” countries will invest in the “poor” countries until marginal products are equalized. Capital importing “poor” countries have an incentive to export part of their tax bill towards foreign capital owners by manipulating their terms of trade, the interest rate, by imposing a high tax.[24] Related are differences caused by agglomeration rents. A country that possesses agglomeration rents will charge a relative high tax rate as these rents can be taxed at low economic cost: public goods provision is relatively cheap. On the other hand, a country without agglomeration

[20] H. Huizinga and S.B. Nielsen, 1997, *Capital income and profit taxation with foreign ownership of firms*, Journal of International Economics, 42, 149-165.
[21] See a.o., H. W. Sinn, 1990, *Tax Harmonization and Tax Competition in Europe*, European Economic Review, 34, 489-504, P. B. Sørensen, 2000, *The case for International Tax Co-ordination Reconsidered*, Economic Policy, 15, 431-472 and P. B. Sørensen, 2004, *International tax coordination: regionalism versus globalism*, Journal of Public Economics, 88, 1187-1214.
[22] J. K. Breuckner, 2004, *Fiscal Decentralization with Distortionary Taxation: Tiebout vs. Tax Competition*, International Tax and Public Finance, 11, 133-153.
[23] See a.o., S. Bucovetsky, 1991, *Asymmetric Tax Competition*, Journal of Urban Economics, 30, 167-181, J. D. Wilson, 1991, *Tax Competition with Interregional Differences in Factor Endowments*, Regional Science and Urban Economics, 25, 423-451 and R. Kanbur and M. Keen, 1993, *Jeux Sans Frontier: Tax Competition and Tax Coordination When Countries Differ in Size*, American Economic Review, 83, 877-892.
[24] See a.o., S. Peralta and T. van Ypersele, 2005, *Factor endowments and welfare levels in an asymmetric tax competition game*, Journal of Urban Economics, 57 (2), 258-274 and S. Peralta and T. van Ypersele, 2006, *Coordination of capital taxation among asymmetric countries*, Regional Science and Urban Economics, 36, 708-726.

rents will charge a relative low rate to attract some economic activity from the "core" country. In the end, both countries might gain from tax competition due to this asymmetry in endowments, such that both are unwilling to cooperate.[25]

Finally, gains from cooperation are unsure in case of government failure. For example, when the government does not exclusively care about the interest of its citizens, but cares about its own, rent-seeking by a Leviathan government,[26] some degree of tax competition is desirable to "tame the Leviathan."[27] Without the disciplining force of tax base flight the government can freely extract resources from the citizens for its own benefit. From a related argument, tax competition might help the government in solving a commitment problem regarding the future taxation of investments and savings.[28] This argument follows when assuming that it is difficult to relocate investments in response to tax changes. Governments have an incentive to set low taxes first and raise them after the investment is made. Expecting this, citizens will under-invest if the government cannot convince them that it will not raise the taxes. The fear of capital flight prevents the increase in tax rates in the future and provides therefore an effective commitment mechanism for the government. Tax coordination removes this disciplining mechanism and might lead to welfare losses. Finally, government failure is expected to be more likely the larger the distance to the voter (leading to a loss of information on preferences). Higher levels of government are therefore more likely to impose inefficient policies.[29]

3.4. Current EU policy: constraining competition between all countries

The above studies focus on a full harmonization of tax policy. But, following the recent publications by the EC, such a full harmonization of all components of the corporate income tax in all EU member states is unlikely in the short run. Instead the EC tries to constrain competition between members by eliminating harmful tax practices and introducing a harmonized corporate income tax base. Around both issues a theoretical literature has evolved. Eggert and Haufler present an excellent overview.[30] I will summarize the main lessons.

With respect to constraining harmful tax practices, it remains to be questioned whether it is wise to do so from an efficiency argument. The basic insight is that from a second-best argument, restricting the freedom of agents need not imply a welfare improvement.[31] Ramsey-principles imply that an efficient tax system levies higher tax rates on immobile tax bases compared to the more mobile tax bases. Once this is

---

[25] R. Baldwin and P. Krugman, 2004, *Agglomeration, Integration and Tax Harmonization*, European Economic Review, 48, 1-23.

[26] J. Edwards and M. Keen, 1996, *Tax competition and Leviathan*, European Economic Review, 40, 113-134.

[27] Interestingly, various papers assume a revenue maximizing government. This is a special case of both a Leviathan government and a welfare maximizing government. See for a discussion: E. Janeba and M. Smart, 2003, *Is targeted Tax Competition less Harmful than its Remedies?* International Tax and Public Finance, 10, 259-280.

[28] See P. Kehoe, 1989, *Policy cooperation among benevolent governments may be undesirable*, Review of Economic Studies, 59, 289-296 and P. Conconi, C. Perroni, and R. Riezman, 2008, *Is partial tax harmonization desirable?*, Journal of Public Economics, 92, 254-267.

[29] A. Dhillon, C. Perroni and K. A. Scharf, 1999, *Implementing tax coordination*, Journal of Public Economics, 72, 243-268.

[30] W. Eggert and A. Haufler, 2006, *Company-Tax Coordination cum Tax-Rate Competition in the European Union*, FinanzArchiv: Public Finance Analysis, 62, 579-601.

[31] In the presence of existing distortions, policies that in isolation would increase efficiency can decrease it, and vice versa. See H. S. Rosen and T. Gayer, 2008, *Public Finance*, New York: McGraw-Hill Irwin, page 341.

prohibited, the (non-cooperative) tax system becomes less efficient by definition.[32] However, when the aggregate cross-country tax base is elastic a restriction on the use of tax instruments might raise revenues when the restriction expands the aggregate tax base for the countries involved.[33]

With respect to a complete cross-country harmonization of the rules determining taxable income, the CCCTB, two steps can be identified. First, a common definition of taxable income must be decided upon. Most likely, this will imply a broadening of the domestic tax base for some countries, and vice-versa. To determine the change in welfare, the optimal response by the government in the remaining tax instruments is crucial. Generally, the statutory tax rate and the definition of taxable income within a country are substitutes for raising revenue: a country that broadens its tax base will therefore most likely lower its statutory rate.[34] Or more popular: competition is intensified on the remaining instruments which suppresses the welfare gains from cooperation.

Second, implementing the CCCTB requires replacing separate accounting with formula apportionment. From the literature is not clear whether replacing separate accounting with formula apportionment is welfare enhancing.[35] In case of SA, accounts terminate at the border and multinationals use transfer pricing and financial policies to minimize their EU (world) wide tax bill. Besides this, investment decisions are distorted if marginal tax rates differ across countries. In case of formula apportionment, an aggregate EU wide tax base is divided between countries using a pre-determined formula depending on a combination of capital investments, employment and sales. Profit-shifting and investment distortions due to cross-country differences in taxation are prohibited. However, the multinationals recognize that their investments will modify the formula for dividing the EU wide tax base, hence multinationals over-invest in low tax countries: shifting paper profits is replaced with a new distortion on investment decisions. Tax competition can even be intensified as a result. Furthermore, formula apportionment implies cross-country loss off-set which causes a net tax revenue loss for governments in the EU because losses can be off-set directly instead of over time.[36]

3.5. Simulation studies

The wide range of arguments summarized above provides a confusing picture on the aggregate welfare effect of corporate income tax harmonization. Therefore, simulation analyses have been conducted with an increasing degree of institutional detail. First, when using a model close to the classical tax competition model, the welfare gain of

[32] M. Keen, 2001, *Preferential Regimes Can Make Tax Competition Less Harmful*, National Tax Journal, 54, 757-62 and S. Bucovetsky and A. Haufler, 2007, *Preferential tax Regimes with Asymmetric Countries*, National Tax Journal, 60, 789-795.

[33] E. Janeba and M. Smart, 2003, *Is targeted Tax Competition less Harmful than its Remedies?* International Tax and Public Finance, 10, 259-280.

[34] See for a discussion a.o. A. Haufler and G. Schjelderup, 2000, *Corporate tax systems and cross country profit shifting*, Oxford Economic Papers, 52, 306-325, and M. Devereux, B. Lockwood and M. Redoano, 2008, *De countries compete over corporate tax rates?* Journal of Public Economics, 92, 1210-1235, and L. Bettendorf and H. Vrijburg, 2010, *Asymmetric Corporate Tax Competition with Two Tax Instruments*, IIPF Conference Working Paper, Uppsala, Sweden.

[35] R. H. Gordon and J. D. Wilson, 1986, *An examination of multijurisdictional corporate income taxation under formula apportionment*, Econometrica, 43, 1357-1373 and S. B. Nielsen, P. Raimondos-Møller and G. Schjelderup, 2001, *Tax spillovers under separate accounting and formula apportionment*, EPRU Working Paper Series 01-07, University of Copenhagen.

[36] Devereux M. and S. Loretz, 2008, *The Effects of EU Formula Apportionment on Corporate Tax Revenues*, Fiscal Studies, 29, 1-33.

coordinated capital income taxes is estimated in the range of 2-10 % of tax revenue.[37] These estimates are, however, sensitive to the underlying parameters which are hard to quantify for these stylized models.[38]

In a more refined model including multiple tax distortions[39] and a welfare maximizing government that intends to redistribute income towards the poor, the welfare gain from fully harmonized capital income taxes equals 1.42 % of GDP.[40] When lump-sum taxes are introduced, such that cooperation only implies more redistribution, the welfare gain from cooperation declines until 0.94 % of GDP. In a more realistic setting with regions that differ in size and preference for redistribution (calibrated on Northern Europe, Continental Europe, UK and the US), the welfare gain from coordination declines even further: 0.32-0.10 % of GDP.

However, the model underlying these results still lacks country specific institutional detail. In an attempt to provide a more accurate estimate of the surplus from cooperation, various scholars have recently developed models that contain a large number of EU and/or OECD member countries and more institutional detail.[41] This increased realism allows for profit-shifting by transfer pricing and financial policies. However, the increased institutional detail comes at a cost: we need to assume that government policy is exogenous. It seems impossible to simulate a simultaneous strategic game between large numbers of countries. Furthermore, the models exclude all redistributive motives and decisions regarding the supply of public goods. The common gain from cooperation is therefore solely an improved allocation of resources.

From these papers, the complete harmonization of both rates and the definition of taxable income would generate a welfare gain in the range 0-0.2 % of GDP, exclusive the reduction in compliance costs which is not modeled.[42] The aggregate efficiency gain is small[43] due to differences in personal capital and labor taxes across countries, and an elastic aggregate EU wide capital stock. Compared to full harmonization, the welfare gain of only a tax base harmonization is even smaller: max 0.05% of GDP.[44]

---

[37] D. E. Wildasin, 1989, *Interjurisdictional Capital Mobility: Fiscal Externality and a Corrective Subsidy*, Journal of Urban Economics, 25, 193-212 and I. W. H. Parry, 2003, *How large are the welfare costs of tax competition?* Journal of Urban Economics, 54, 39-60.

[38] Important parameters are the elasticity of substitution between public and private goods, the weight attached to wasteful spending by a Leviathan government, the elasticity of the (aggregate) tax base and the number of countries.

[39] For example: endogenous saving and labor supply decisions by households, cross-country ownership of assets, capital endowment differences, flows of capital towards the "rest of the world".

[40] P. B. Sørensen, 2000, *The case for International Tax Co-ordination Reconsidered*, Economic Policy, 15, 431-472, and P. B. Sørensen, 2004, *International tax coordination: regionalism versus globalism*, Journal of Public Economics, 88, 1187-1214.

[41] See L. Bettendorf, J. Gorter and A. van der Horst, 2006, *Who benefits from tax competition in the European Union*, CPB Discussion Paper, *no.* 125, P. B. Sørensen, 2004, *Company Tax Reform in the European Union*, International Tax and Public Finance, 11, 91-115 and J. Brøchner, J. Jensen, P. Svensson and P. B. Sørensen, 2006, *The dilemmas of tax coordination in the enlarged European Union*, CESIfo Working Paper, no. 1859.

[42] No consensus estimate of compliance costs exists. Recent estimates suggest compliance costs between 2-4 % of corporate income tax revenue, see J. Brøchner, J. Jensen, P. Svensson and P. B. Sørensen, 2006, *The dilemmas of tax coordination in the enlarged European Union*, CESIfo Working Paper, no. 1859, page 21.

[43] Admittedly, smallness is not objectively established in this context. Estimated welfare effects of previous and anticipated EU action are all in the range of 0.5 – 1.9 % of GDP, see G. Nicodeme, 2006, *Corporate Tax Competition and Coordination in the European Union: What do we know? Where do we stand?* MPRA Working Paper, no 107.

[44] J. Brøchner, J. Jensen, Svensson P. and P. B. Sørensen, 2006, *The dilemmas of tax coordination in the enlarged European Union*, CESIfo Working Paper, no. 1859.

Besides being relatively small, the aggregate welfare gain is asymmetrically distributed across countries, where some actually lose. Cooperation re-divides EU wide GDP instead of creating substantial new income; this creates winners and losers. The papers find that the countries that gain from harmonization in terms of tax revenue, lose in terms of welfare. This because GDP is negatively correlated with the average tax burden. Countries that are forced to broaden their tax base obtain more tax revenue but lose in terms of welfare, as the latter follows GDP.
This insight carries over to the final class of simulation studies that analyze the welfare effects of introducing the CCCTB.[45] In general, the welfare effects of introducing the CCCTB combined with harmonized rates in the EU are comparable to the previous studies: max 0.15 % of GDP. However, when the statutory rate is not harmonized the average welfare gain drops: max 0.12 % of GDP. Finally, when the common consolidated tax base is not compulsory but optional for large EU multinationals the welfare gain almost vanishes: max 0.02 % of GDP. When corporate income or labor income taxes, instead of lump-sum taxes, are used to finance the drop in tax revenues the welfare gains are even lower. The intuition behind these findings comes from two arguments. First, when only the tax base is harmonized, existent differences in statutory corporate income taxes and personal income taxes remain. Second, present distortions from separate accounting are replaced by new ones due to formula apportionment. The choice of formula is important in determining the winners and losers from this reform. In accordance with the previous studies, countries that are forced to broaden their tax base gain tax revenue but lose welfare and vice versa.

3.6. Summarizing

Once the assumptions of the classical tax competition models are relaxed, tax harmonization is not unambiguously welfare improving for all countries. The applied general equilibrium models with the highest degree of institutional detail predict small aggregate welfare gains from the current EU proposals. However, the studies ignore a number of important arguments: redistributional motives or rent-seeking by the government and endogenous optimal policy responses in the remaining tax instruments. The latter implies that the models only provide short run predictions. Furthermore, the welfare gains are asymmetrically distributed such that not every country gains from cooperation.
When side payments are available this problem might be solved.[46] The surplus can be shared such that every country is better off compared to the pre-coalition equilibrium. However, side payments are not always politically achievable. Would the Germans and French be prepared to bail out the Irish or Dutch for reforming their competitive tax systems? Therefore, studying the alternative option of an enhanced cooperation between a subset of countries is interesting.

---

[45] See L. Bettendorf, A. van der Horst, and H. Rojas-Romagosa, 2007, *Will Corporate Tax Consolidation improve Efficiency in the EU?* Tinbergen Institute Discussion Paper, no. 07-076/2, M. Devereux and S. Loretz, 2008, *The Effects of EU Formula Apportionment on Corporate Tax Revenues*, Fiscal Studies, 29, 1-33, and L. Bettendorf, M. Devereux, A. van der Horst and R. A. de Mooij, 2009, *Corporate tax harmonization in the EU*, Economic Policy, forthcoming.
[46] M. C. Kemp and H. J. Wan, 1976, *An Elementary Proposition Concerning the Formation of Customs Unions*, Journal of International Economics, 6, 95-97.

4. Enhanced Cooperation in the European Union

4.1. Introduction

This section discusses the expected welfare effects of an enhanced cooperation agreement (ECA) between a subset of countries. First, I introduce the legal framework for introducing ECAs in the EU. Second, I discuss how coalitions are formed and what complications arise from a general perspective. Third, I focus on ECAs in stylized capital taxation models. Finally, simulation studies on the welfare effects of ECAs are discussed.

4.2. Legal framework

An ECA is defined as cooperation between a subgroup of countries on a particular government policy while the remaining countries decide upon this policy autonomously. ECAs are institutionalized within the EU by the treaties of Amsterdam (1997) and Nice (2003) and modified by the treaty of Lisbon which is effective since 2009. An ECA must comply with a number of restrictions which are described in the Treaty of the European Union (TEU) and the Treaty of the Functioning of the European Union (TFEU).[47] First, the ECA can only be initiated as a mechanism of last resort (Article 20 TEU). That is, only if a coalition of all EU member countries cannot be expected to be formed within a reasonable time span. Second, the minimum threshold for the number of participating member states is nine (Article 20 TEU).[48] Third, the ECA is open for participation to all member states at all time against the entry restrictions imposed by the members of the ECA (Article 20 TEU, Article 328 TFEU). Fourth, the ECA must be formed such that a maximum number of member states are willing to participate (Article 328 TFEU). Fifth, the ECA must reinforce the process on integration within the EU and protect its interests (Article 20 TEU, Article 326 TFEU). So, the ECA is not allowed to undermine the single market, free trade and fair competition, etc. Sixth, all EU member states are allowed to participate in the discussions concerning the ECA common policy, but only the participating member states take part in the voting (Article 20 TEU, Article 330 TFEU). Seventh, the voting procedure is the unanimity rule unless stipulated otherwise by the members of the ECA (Article 333 TFEU). Finally, the creation of an ECA requires a qualified majority in the council (Article 329 TFEU).[49]

4.3. ECA formation: some general lessons

Let me start with some important lessons from the literature on coalition formation. To form a coalition, the participating countries must agree on three, interrelated, issues. First, they must decide on the common policy to be implemented. This common policy defines the gains from cooperation. Second, they must decide on a sharing rule: a transfer scheme that stipulates how to divide the gains from cooperation. Third, the countries must agree on the coalition partners. Each partner to the coalition will bring its own preferences and endowments; this influences the payoff for the other members. It follows that in case of asymmetries between countries, a grand coalition between all countries need not be the outcome of a coalition formation process. This holds even

---

[47] Treaty of the European Union, 2010, *Consolidated versions of the treaty on European Union and the treaty on the functioning of the European Union*, Official Journal of the European Union, C 83.

[48] The treaties of Amsterdam and Nice stipulated a minimum of eight member states, the treaty of Lisbon modified this into 1/3 of the members states of the EU.

[49] In case the ECA concerns the common foreign and security policy unanimity is required (Article 330 TFEU). The treaty of Amsterdam stipulated that unanimity was required to approve any ECA. This implied a veto for every country such that an ECA was very hard to implement.

when side-payments are available.[50] It might be impossible to devise a sharing rule that assigns to each country a payoff that is at least as high as the payoff from its best deviation strategy. When this occurs, the grand coalition is unstable as at least one country will be interested in opting out of the coalition. This finding stresses the relevance of studying the welfare implications of enhanced cooperation.

Two general questions arise. First, when will an ECA be welfare improving for both the participating countries and the outsider countries? A coalition is welfare improving for all countries when spillovers within the coalition are of the same sign as the spillovers between the coalition and the outsider countries.[51] For this case, the change in policy by the coalition members, which internalizes within-coalition spillovers, is to the benefit of outsider countries.

Second, is an ECA a worthwhile policy direction when the gains from cooperation are uncertain? This question is answered by Bordignon and Brusco[52] who find that an ECA might be a useful in-between step when there are large policy asymmetries between countries initially, the gains from cooperation are unsure, and adjusting the domestic policy to the ECA standard is costly. Countries with comparable initial policies can, by forming an ECA, reap the benefits of a level playing field at relative low cost. When in the future the gains from coordination turn out to be relative large, outsiders can decide to join in: the ECA serves as a pilot group.

However, caution is required. The creation of a pilot group will establish new vested interests. The literature labels this the status quo bias. The choice of common policy by the ECA might influence a future global standard and therefore both welfare and the entry decision by outsider countries.[53] After establishing the ECA, the initial ECA members might be reluctant to accept new-comers. The benefits from expanding the coalition must be traded off against changes in both the common policy and the sharing rule demanded by the new-comer. The ECA therefore has the potential of creating a status quo which influences future developments. It remains unsure whether the EU rules on ECA formation exclude such a status quo bias. After establishing the ECA, outsiders cannot be deterred entry. But the initial members will anticipate this and might choose their policy such that a re-negotiation is necessary from the perspective of new-comers before they are willing to enter.

4.4. Applied to the tax competition literature

The general arguments above can be supplemented by arguments more specific to the tax competition literature. Let me start with ECAs in the classical tax competition model.[54] Cooperation between a subset of countries is unambiguously welfare improving for both insiders and outsiders if the tax rates of the outsider countries and the union are strategic complements.[55] This conclusion reflects the general lessons above; the

---

[50] J. B. Burbidge, J. A. DePater, G. M. Myers, and A. Sengupta, 1997, *A Coalition-Formation Approach to Equilibrium Federations and Trading Blocs*, The American Economic Review, 87, 940-956. Burbidge et al. define side payments as an equal share in the common gains from cooperation. Every coalition partner receives its initial, before coalition, payoff plus an equal share in the common gain.

[51] P. Beadry, P. Cahuc and H. Kempf, 2000, *Is it Harmful to Allow Partial Cooperation* Scandinavian Journal of Economics, 102, 1-21.

[52] M. Bordignon and S. Brusco, 2006, *On enhanced cooperation*, Journal of Public Economics, 90, 2063-2090.

[53] A. Alesina, I. Angeloni and F. Etro, 2005, *International Unions*, American Economic Review, 95, 602-615.

[54] K. A. Konrad and G. Schjelderup, 1999, *Fortress Building in Global Tax Competition*, Journal of Urban Economics, 46, 156-167, and S. Bucovetsky, 2009, *An index of capital tax competition*, International Tax and Public Finance, 16, 727-752.

[55] Strategic complementarity: when confronted with a tax rate increase in a neighboring country the home government increases its own rate. In case of strategic substitutes the opposite holds.

classical tax competition model is characterized by positive tax spillovers within the union and between the union and the outsider countries. The assumption on the strategic complementarity by governments is crucial, if this does not hold welfare losses appear for either insiders or outsiders.[56]

In line with the previous section, a number of qualifications on the expected welfare gain from an ECA in corporate income taxation can be identified. First, what about the necessary common gain from cooperation? In this respect, especially the elastic aggregate tax base for the coalition should be stressed. An increased level of taxation within the coalition will lead to an outflow of profits and capital to the remaining countries.[57] Ceteris paribus, the gain from cooperation will be smaller in case of an ECA compared to a full cooperation between all countries.

Similar arguments hold in case the ECA decides to implement the CCCTB. For instance, at least in the short run, inward profit shifting from the rest of the world might increase the aggregate tax base after implementation of the CCCTB.[58] Total profit shifting between the partial union and the outsider country depends on the difference between the statutory tax rate of the outsider country and the effective tax rate in the coalition. After formula apportionment is introduced, multinationals will re-allocate investment towards the low tax coalition countries. This causes the effective tax rate of the coalition to be lower than the average pre-harmonization statutory tax rates of the countries that form the coalition: the incentive to shift profit out of the coalition decreases. This is all under the assumption that countries have not changed their statutory rates after the implementation of the CCCTB. However, in the long run the gain might disappear when statutory rates are adjusted. Even worse, when multinationals can still use a financing detour in an un-active affiliate in a low tax country, profits will be shifted out of the coalition if the average tax rate is raised after the coalition is formed.[59] Furthermore, coalition members might be reluctant to enforce the tax code as the revenues from enforcement must be shared among all coalition partners.[60] However, to the contrary, this reluctance to enforce the tax code might be welfare improving when the desire by multinationals to shift more profits leads intermediaries to demand a higher price for their services.[61]

Second, what does asymmetry imply for the welfare gains of an ECA? In general, the conclusions from the full cooperation literature carry over. Winners and losers from cooperation might arise as interests are not aligned. The formation of coalitions is difficult as every potential coalition member has a unique optimal deviation strategy and it might be impossible to find a sharing rule that overbids all these optimal deviation payoffs.[62]

---

[56] R. A. de Mooij, and H. Vrijburg, 2010, *Enhanced Cooperation in an Asymmetric Model of Tax Competition*, CESIfo Working Paper no. 2915.

[57] I. W. H. Parry, 2003, *How large are the welfare costs of tax competition?* Journal of Urban Economics, 54, 39-60.

[58] N. Riedel and M. Runkel, 2007, *Company tax reform with a water's edge*, Journal of Public Economics, 91, 1533-1554.

[59] M. Gerard, 2007, *Reforming the Taxation of Multijurisdictional Enterprises in Europe*, CESIfo Economic Studies, 53, 329-361.

[60] J. Becker and C. Fuest, 2007, *Tax Enforcement and Tax Havens under Formula Apportionment*, FiFo-CPE Discussion Paper No. 08-8, Köln.

[61] This argument depends crucially on the assumed supply function of intermediaries, which is claimed to be positively sloped, see J. Slemrod and J. D. Wilson, 2009, *Tax competition with parasitic tax havens*, Journal of Public Economics, 93, 1261-1270.

[62] J. B. Burbidge, J. A. DePater, G. M. Myers, and A. Sengupta, 1997, *A Coalition-Formation Approach to Equilibrium Federations and Trading Blocs*, The American Economic Review, 87, 940-956.

Asymmetries make certain coalitions more likely compared to others. For example, countries with similar policies are more likely to form a coalition as the costs of cooperation are relatively small.[63] As a second example, a coalition between larger countries yields larger common gains from cooperation compared to a coalition between small countries. Three arguments explain this result. First, the spillovers internalized by a coalition of small countries are relatively small compared to the spillovers internalized by larger countries. Second, the aggregate tax base of a coalition between small countries is found to be relatively elastic compared to the aggregate tax base of a coalition between larger countries. Third, in the model considered, the outsider in case of a coalition of small countries is more likely to reduce its tax rate in response to an increase in the tax rate by the coalition members (strategic substitutes) compared to the outsider in case of a coalition of large countries.[64]

This final argument highlights the relevance of the optimal tax responses, which leads us to the issue of government behavior. How do governments change their optimal tax policies? This question becomes crucial when studying enhanced cooperation. The policy change by the outsiders determines the common gain for the insiders and vice versa.

In the standard tax competition model, the government maximizes welfare and easily commits to future policies. Due to symmetry between countries, tax rates are in general strategic complements. When symmetry is not imposed, tax rates need not be strategic complements though. A tax policy change in a neighboring country provides two opposing incentives to the home government. First, tax revenues are increased due to an inward flow of profits or capital.[65] This gives a welfare maximizing government the incentive to lower its tax rate to redistribute part of this increased tax revenue towards private consumption. Second, the broader tax base and the capital imported reduce the marginal cost of funds; it becomes cheaper to raise additional tax revenue. This latter argument gives an incentive to raise the tax rate. The former argument is more likely to dominate when the demand for public goods is inelastic and original tax policy is far from the top of the Laffer curve for the respective country. The second condition indicates that public goods where not heavily undersupplied in the country initially.[66]

Empirical evidence supports the assumption of strategic complementarity,[67] but only provides evidence on the average strategic reaction by the average country on the short run. Data limitations prevent sophisticated estimation of strategic responses between different types of countries in case of major policy reforms such as the implementation of an ECA with CCCTB within the EU. It can therefore not be excluded that particular countries will act as a strategic substitute on the long run when confronted with such a major policy shock. The welfare gain for the cooperating countries will be lower than expected as a result.

Furthermore, the literature is silent on the welfare effects of enhanced cooperation when governments are of the Leviathan type. The creation of an ECA by leviathan governments might be rewarding for both insiders and outsiders if leviathan

---

[63] Alesina A., Angeloni I. and F. Etro, 2005, "International Unions," *American Economic Review*, 95, 602-615 and Bordignon M. and S. Brusco, 2006, "On enhanced cooperation," *Journal of Public Economics*, 90, 2063-2090.

[64] R. A. de Mooij and H. Vrijburg, 2010, "Enhanced Cooperation in an Asymmetric Model of Tax Competition," *CESIfo Working Paper,* no. 2915.

[65] On the margin, private consumption is unchanged.

[66] R. A. de Mooij and H. Vrijburg, 2010, "Enhanced Cooperation in an Asymmetric Model of Tax Competition," *CESIfo Working Paper,* no. 2915.

[67] Devereux M., Lockwood B. and M. Redoano, 2008, "De countries compete over corporate tax rates?" *Journal of Public Economics*, 92, 1210-1235.

governments are more likely to act complementary in a strategic game compared to benevolent governments.

On the positive side, an ECA can be an attractive policy direction when the government has commitment problems. In this case, the government is unable to impose the welfare maximizing policy under full cooperation as consumers make an inefficient savings decision when expecting the government to raise taxes in the future. Full competition on the other hand might result in tax rates that are to low from a global welfare perspective. The ECA is a comfortable in-between choice.[68]

Finally, as mentioned before, the literature does not cover an analysis including sophisticated expectations by the insiders regarding the strategic actions of outsiders now and in the future. De Mooij and Vrijburg consider the case where the ECA acts as a Stackelberg leader with respect to the strategic tax setting of outsiders. These expectations enhance welfare in case of strategic complementarity. However, in case of strategic substitutes, outsiders might lose due to the creation of the ECA.[69]

4.5. Simulation studies with computable general equilibrium models

Various simulation studies confirm the reservations with respect to the welfare effects of an ECA listed above. In a model with symmetric countries, an ECA between some of these countries yields a welfare gain of 0.10 % of GDP compared to the 0.94% of GDP mentioned above for full harmonization.[70] Furthermore, when the model is calibrated on a more realistic setting with an ECA between EU member countries and the US as an outsider, the welfare gains are between 0.16-0.19 % of GDP depending on the strategic change in tax policy by the US. Four additional results are noteworthy. First, the outsider country, the US, gains from EU cooperation (0.20 % of GDP). Second, the US responds by increasing its capital taxes when confronted with an increase in capital taxation in the EU: strategic complementarity. Third, within the coalition especially the countries with a strong preference for redistribution experience a large welfare gain. However, no country loses from cooperating in this setting. Fourth, when the aggregate capital stock is more elastic, the gains from forming an ECA deteriorate.

In a model with more institutional detail, the aggregate welfare gain from ECA is even smaller: 0.05 % of GDP compared to 0.2 % of GDP under full harmonization.[71] Again winners and losers occur due the absence of a large common gain from cooperation. Instead, the ECA exports some of the efficiency gain abroad and re-divides pre-cooperation GDP.

Finally, the welfare effects of an ECA within the EU that imposes a CCCTB are close to zero on average for both insiders and outsiders.[72] There is hardly a net common gain from cooperation. This holds for a number of different coalitions. Cooperation therefore results in a redistribution of economic activity, creating winners and losers. When the losers decide to opt out the ECA, there is nothing left for the winners. It must be stressed though, that the above studies only measure the efficiency gain from an improved allocation of resources, the expected reduction in compliance costs is excluded.

---

[68] P. Conconi, C. Perroni, and R. Riezman, 2008, *Is partial tax harmonization desirable?*, Journal of Public Economics, 92, 254-267.

[69] R. A. de Mooij, and H. Vrijburg, 2010, *Enhanced Cooperation in an Asymmetric Model of Tax Competition*, CESIfo Working Paper, no. 2915.

[70] P. B. Sørensen, 2000, *The case for International Tax Co-ordination Reconsidered*, Economic Policy, 15, 431-472 and P. B. Sørensen, 2004, *International tax coordination: regionalism versus globalism*, Journal of Public Economics, 88, 1187-1214.

[71] J. Brøchner, J. Jensen, P. Svensson and P. B. Sørensen, 2006, *The dilemmas of tax coordination in the enlarged European Union*, CESIfo Working Paper, no. 1859.

[72] L. Bettendorf, A. van der Horst, R. A. de Mooij, and H. Vrijburg, 2009, *Corporate Tax Consolidation and Enhanced Cooperation in the European Union*, CPB Discussion Paper, no. 132.

4.6. Summary

The above discussion leads to the conclusion that, compared to the cooperation across all countries, enhanced cooperation leads to marginal welfare gains. The main argument for this result is that the efficiency gains from a partial harmonization of tax rates (either a subset of rates, a subset of countries, or a combination) are small. Besides this, the welfare gains suggested by the simulation studies are uncertain as a number of important arguments (for example: compliance costs and redistribution) are excluded from the simulation analyses. Furthermore, strategic behavior by governments might introduce a status quo bias for future policy coordination and welfare losses for countries outside the coalition.

5. Conclusions and policy recommendations

From the 1960s onward the EU has been trying to harmonize part of the corporate income tax legislation. Over time the number of opposing views has increased with the entrance of new member states and proposals have become less ambitious. In general, harmonization initiatives are unsuccessful until today. In order to circumvent the opposing views on the optimal corporate tax system, the option of enhanced cooperation between a subset of countries, instead of all 27 member states, is suggested as a potential way out. This paper provides a review of the tax harmonization literature with a special focus on enhanced cooperation in corporate taxation.

Based on this review of the literature, I conclude that the expected welfare gains from an enhanced cooperation agreement with CCCTB between a subset of countries are expected to be small and uncertain. Furthermore, some questionable side effects might appear that have not been analyzed thoroughly yet. The arguments can be summarized as follows.

First, full harmonization of corporate taxes in general, and the EU wide introduction of the CCCTB in particular, come with small efficiency gains that are asymmetrically distributed across countries.[73] Countries that are forced to broaden their tax base will obtain additional tax revenue but experience a reduction in GDP. The latter implies that welfare is reduced. The opposite holds for countries that are forced to shrink their tax base. These asymmetric expected welfare gains that are relatively small on average, combined with the large number of countries negotiating and the difficulty to design perfect side-payments, leads to the expectation that it will be hard to reach an agreement in the near future. Even stronger, it might be impossible to design a rule for sharing the gains from cooperation such that every country prefers cooperation above the current situation.

Second, for smaller coalitions the welfare gains are expected to be even smaller. Part of the common gain from cooperation is “exported” to the outsiders. Most strikingly, the simulations suggest hardly a common (efficiency) gain from cooperation. Cooperation without a common gain seems a useless exercise.

However, the welfare analyses leave out two potential sources for a common gain from cooperation. On the one hand, a common gain might be achieved via a more efficient supply of public goods, including redistribution. However, preferences for public goods are likely to come with asymmetries in the preference for public goods. The latter calls for diversified tax policy which reduces the gains from cooperation. On the other hand,

[73] R. Griffith, J. Hines and P. B. Sørensen, 2008, *International capital taxation*, forthcoming in the *Mirrlees Review: Reforming the Tax System for the 21st Century*, to be published by the Institute for Fiscal Studies.

compliance costs are expected to be reduced, a consensus estimate on the size of these gains is missing from the empirical literature.

Furthermore, three arguments call for caution when pursuing enhanced cooperation in corporate income taxes. First, the simulation analyses exclude strategic behavior on account of the insiders. A subgroup of countries might try to sub-track some surplus from the remaining countries by choosing their common policy strategically. In doing so, a status-quo bias emerges that frustrates future cooperation initiatives. Especially in case the average efficiency gains from cooperation are small one should be suspicious if an agreement between a subgroup of countries comes through. Second, the potential for strategic substitutes between the tax rates of the insiders and outsiders might well be under estimated. The existence of strategic substitutes erodes part of the common gains from cooperation. Third, while the above argument suggests a well-functioning government that is capable of implementing the necessary policy, this need not at all be the case: "… there is no hope that a coordinated process of harmonization between people who do not aim at good tax structures at the national level could bring about a good harmonized tax structure."[74]

The above conclusions follow from the analyses by economists, in the end, politicians must decide on the complete story. I advice politicians to focus on the domestic inefficiencies and inconsistencies in corporate income tax policies first.[75] European action might help to ensure that all 27 countries agree on the desired future direction of corporate income taxation.[76] Maybe this approach leads to a future corporate tax system that is less differs and therefore more easy to harmonize. Only then can full cross-country harmonization be considered.

---

[74] P. Salin, 1990, *Is there a Need for Harmonizing Capital Income Taxes within EC Countries? A Comment*, in H. Siebert (ed.), *Reforming Capital Income Taxation in a Global Economy*, New York: Elsevier.

[75] See also S. Cnossen, 1996, *Company Taxes in the European Union: Criteria and Options for Reform*, Fiscal Studies, 17, 67-97, and S. Cnossen, 2003, *How Much Tax Coordination in the European Union?* International Tax and Public Finance, 10, 625-649.

[76] Competitive conditions are likely to lead to the adoption of a corporate income tax system similar to a Comprehensive Business Income Tax instead of the preferred Allowance for Corporate Equity system, see M. Devereux and R. A. de Mooij, 2010, *An applied analysis of ACE and CBIT reform in the EU*, International Tax and Public Finance, forthcoming.