

Sustainable Tax Policy beyond the Tax Ratio for the EU as core element of a “Fiscal Union”

Paper submitted for the Conference
“Toward A Genuine Economic and Monetary Union”
at the Austrian National Bank, September 10-11, 2015

Margit Schratzenstaller
Austrian Institute of Economic Research
Arsenal Objekt 20
A-1030 Vienna
Austria

Margit.schratzenstaller@wifo.ac.at

Work in progress – please do not circulate!

Abstract

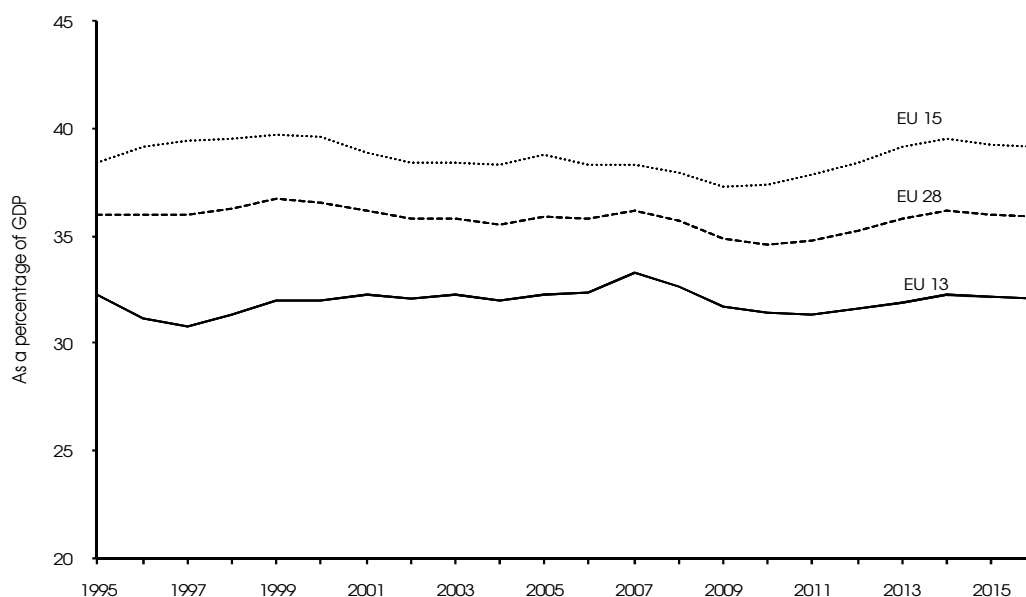
Altogether, currently tax theory and tax policy are addressing partial aspects of sustainability, but do not adopt an integrated perspective. The paper outlines the objectives of a sustainable tax policy which may contribute to the Europe 2020 strategy aiming at smart, inclusive and sustainable growth. It then identifies those areas of tax policy where the attempts to create a European Single Market and the mobility of goods, services, capital and people require some co-ordination of tax policy in the EU to close sustainability gaps in tax policy. Of particular relevance are the containment of company tax competition and profit shifting; the creation of a framework to effectively enforce environmental and sin taxes in EU member states; and options to introduce EU taxes. Thus the paper tries to bring together aspects of a EU tax policy supporting the Europe 2020 strategy and the debate about a “Fiscal Union” as suggested in the report “Towards a Genuine Economic and Monetary Union” presented by the presidents of the European institutions and others in December 2012, which remains very vague concerning the area of taxation.

Sustainable Tax Policy beyond the Tax Ratio for the EU as core element of a “Fiscal Union”

1. Introduction

Within the last two decades, the tax burden in the European Union has been rather constantly moving around substantial levels: Tax ratios range between over 35 per cent of GDP on average for the EU 28 and almost 40 per cent of GDP on average for the old member states (EU 15); in the new member states (EU 13), tax ratios reach about 33% of GDP on average (see graph 1).

Graph 1: Tax ratios in the EU, 1995 to 2016



Source: European Commission, 2015. EU 13: new member states. – 2015 and 2016: projections.

Tax ratios at such levels bear a considerable potential of taxes to contribute to the achievement of the objectives of the Europe 2020 strategy, which is aiming at smart, sustainable and inclusive growth, and thus to support sustainable development in the EU. More than that, they virtually imply the need to use tax systems not only for revenue generation, but also to pursue non-fiscal, strategic objectives. If tax policy, for example, abstains from effective taxation of activities harmful for individual health or the environment, but rather rests heavily on taxes with undesired side effects instead (e.g. high taxes on labour

incomes), additional public expenditures are needed to repair increasing unemployment or damages with respect to individual health or the environment, which again require tax increases. Therefore it seems advisable to place tax systems at the service of a tax policy aiming at increasing sustainability in its various dimensions in the first place. This includes national tax policy as well as the European/international level.

Coincidentally, together with the outbreak of the financial and economic crisis in 2007/08 the revival of a decade-old fundamental debate among economists¹⁾ could be observed (Schratzstaller, 2015A). This debate focuses on two inter-related issues: First, to develop alternative concepts to secure and improve economic, social and environmental sustainability. Second, to replace the conventional narrow approach to define and measure the welfare of an economy and its members via the steady growth of GDP by a broader approach taking into account a larger set of economic, social and ecological aspects and indicators. This recent debate is led under the catchphrase "Beyond GDP" and roots in an initiative started by European Commission, European Parliament, Club of Rome, OECD and WWF in 2007 by hosting a high-level conference titled "Beyond GDP". The "Report by the Commission on the Measurement of Economic Performance and Social Progress" (the so-called Stiglitz-Sen-Fitoussi-Report) issued in 2009 serves as the starting point for a growing number of academic and policy-oriented contributions, the latter both on the national and the supranational level, concentrating on alternative concepts for welfare and well-being for economies and societies as well as on alternative indicators to assess overall social, economic and environmental progress.²⁾

Up to now, the „Beyond GDP“-activities following the Stiglitz-Sen-Fitoussi-Report of 2009 have been focusing on the outcome of the total of (economic) policies on individual and societal well-being and welfare as well as on economic, social and ecological sustainability. Single policy areas have received far less attention. Especially the potential contribution of public finances to improve economic, social and environmental sustainability has not played a very prominent role in this recent debate. There is hardly any literature systematically addressing from an encompassing perspective options and possibilities to support sustainable development via government expenditures and revenues. This is surprising, and appears as a considerable research deficit, considering the existing substantial levels of government activity reflected in the various indicators capturing government size, as for example expenditure ratios, tax ratios, deficit or debt ratios in the EU. This paper tries to make a first step to fill this gap by providing some deliberations about the fundamentals of a sustainable tax policy beyond the tax ratio.

¹⁾ This debate was initiated by the famous critique by *Nordhaus/Tobin* (1972) on traditional measures of welfare.

²⁾ Also within the EU FP7 research project *WWWforEurope* (www.foreurope.eu) alternative welfare indicators and concepts are elaborated, see e.g. *Kettner/Köppel/Stagl* (2012) and *van den Bergh/Antal* (2014).

In fact, analogously to GDP, which often serves as the central indicator to measure a country's economic and societal success and progress, the overall tax ratio (i.e. total tax revenues in relation to GDP) is often used as the most important indicator to assess a country's tax system. As GDP, the overall tax ratio has the advantage that it is easily available, also in an international comparison and over long periods of time, and easily communicable. Analogously to GDP, however, the overall tax ratio is of rather limited value to assess a tax system in general and its contribution to sustainability in particular. The overall tax ratio does not give any indication on the social and environmental impact of a tax system. It also does not deliver any specific information on potential economic effects of a tax system, as these depend on the overall tax structure and on the concrete design of individual taxes contributing to overall tax revenues (besides, of course, the use of tax revenues). As ample empirical evidence shows, there is no clear-cut relationship between the level of the overall tax ratio and economic growth. The existing empirical results allow to conclude safely only that further tax increases will harm economic growth when the total tax burden has reached a very high level already.³⁾ With respect to fiscal sustainability, the overall tax ratio can be seen as a snapshot indicator to gauge – in comparison to public expenditures – whether the state receives sufficient funds to fulfil its tasks or whether there is a shortcoming of tax revenues which needs to be compensated by new government deficit. It does not, however, allow evaluating a tax system's contribution to fiscal sustainability in the longer run.

For the last few years, the OECD, the International Monetary Fund as well as the European Commission have been pushing the case for enhancing the growth-friendliness of taxation. The starting point of this work, which has gained new momentum under the impression of weak growth rates in the EU and the developed world in general in the aftermath of the financial and economic crisis, is the recognition of the limited usefulness of the overall tax ratio as principal yardstick and guideline for tax policy. Recent empirical analyses (see, e.g., *Arnold et al.*, 2011; *Acosta-Ormachea/Yoo*, 2012) establish a tax-and-growth-hierarchy according to which individual tax categories differ in their harmful impact on economic growth: with property-based taxes as the least harmful and taxes on labour income and profits as the most harmful tax categories, thus resulting in a "tax and growth hierarchy" (see graph 2).

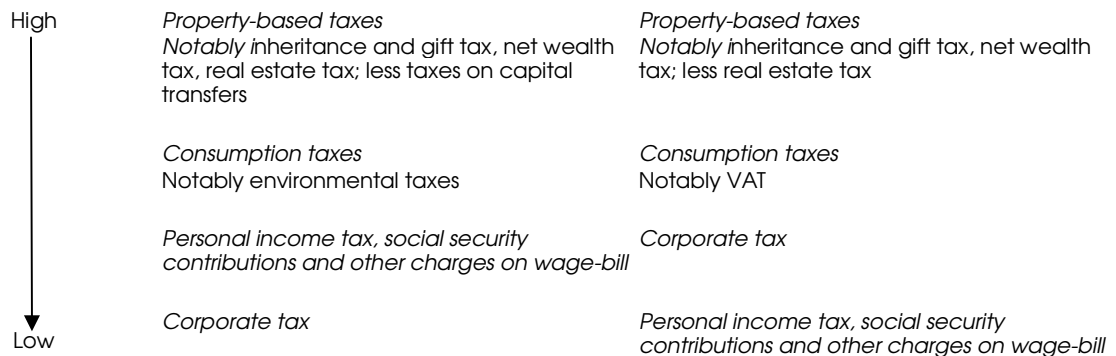
³⁾ See for recent overviews about the current state of the empirical literature *Arnold* (2008), *Myles* (2009) and *European Commission* (2010).

Graph 2: Tax and growth hierarchy

Growth-compatibility

Arnold et al. (2011)

Acosta-Ormaechea – Yoo (2012)



Source: Arnold et al. (2011), Acosta-Ormaechea – Yoo (2012), own presentation.

In this perspective, the design of tax systems should primarily attempt at minimizing potentially detrimental effects on economic growth. Ecological and social/equity considerations are not completely neglected, but appear to have lower priority in the hierarchical order of aims and objectives guiding the design of tax systems. Moreover, the (social and environmental) „quality“ of economic growth does not play any role.

The concept of green tax reforms has a wider focus, explicitly combining environmental and employment goals via the „double dividend hypothesis“ (Bovenberg, 1999): Revenue-neutral green tax reforms aim at reducing environmental damage by increasing ecotaxes, the proceeds of which are used to cut labor taxes and thus to increase employment.⁴⁾ While some of these green fiscal reform approaches pay attention to the potential regressive effects of environmental taxes⁵⁾ by foreseeing measures to mitigate undesired distributional consequences, they ignore further social aspects, as for example gender aspects of green fiscal reforms or the role of the tax system vis-à-vis increasing income and wealth inequality.

Altogether, currently tax theory and tax policy are addressing partial aspects of sustainability, but do not adopt an integrated perspective. The paper outlines the objectives of a sustainable tax policy which may contribute to the Europe 2020 strategy aiming at smart, inclusive and sustainable growth. It then identifies those areas of tax policy where the attempts to create a European Single Market and the mobility of goods, services, capital and people require some co-ordination of tax policy in the EU to close sustainability gaps in tax policy. Of particular relevance are the containment of company tax competition and profit shifting; the creation of a framework to effectively enforce environmental and sin taxes in EU member states; and options to introduce EU taxes. Thus the paper tries to bring together aspects of a EU tax policy supporting the Europe 2020 strategy and the debate about a “Fiscal Union” as suggested in the report “Towards a Genuine Economic and Monetary

⁴⁾ See, e.g., the contributions in *Ekins/Speck (eds.)* (2011).

⁵⁾ See *Kosonen* (2012) for a differentiated analysis of the distributional effects of environmental taxes.

Union” presented by the presidents of the European institutions and others in December 2012. The report, which proposes a three-staged strategy towards Fiscal Union, only very vaguely mentions taxation, in outlining stage 3 (post 2014): “This stage could also build on an increasing degree of decision-making on national budgets and an enhanced coordination of economic policies, in particular in the field of taxation and employment, building on the Member States’ National Job Plans.” (*Van Rompuy et al.*, 2012, p. 5) This paper is based on the conviction that the increasing economic integration of EU member states requires increasing tax co-ordination going beyond the current initiatives on the EU level.

2. Objectives of a sustainable tax policy

Sustainable tax policy should rest on economic, social and ecological objectives.

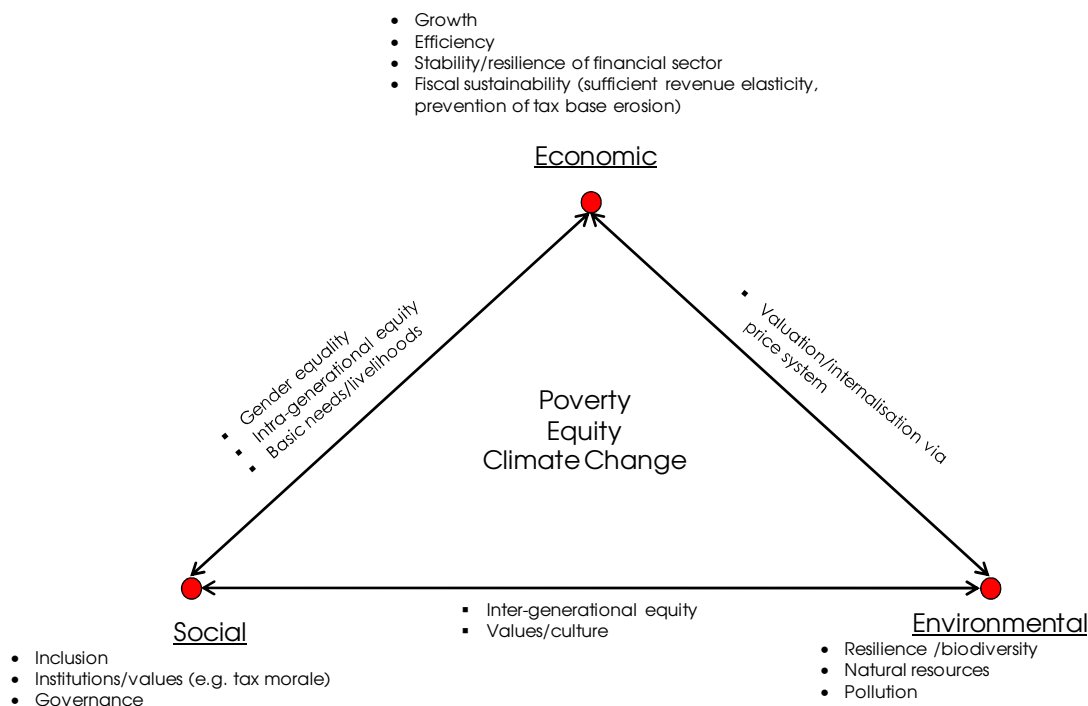
As one aspect of economic sustainability, sustainable tax policy should first of all contribute to restore and preserve long-term fiscal sustainability of public finances. Here increasing international capital mobility and, as its consequence, legal and illegal tax avoidance and evasion pose particular challenges. Also demographic change is a challenge in this respect, if it increases the share of “inactive” retired tax-payers vis-à-vis gainfully employed ones, who do not earn labour incomes, but capital incomes from increasing wealth and who hold an increasing share in overall consumption. Thus, from the perspective of fiscal sustainability, the composition of the overall tax base should allow for a long-term revenue elasticity securing sufficient tax revenues to enable governments to finance their tasks and the corresponding expenditures, and governments need to pay increasing attention to the enforcement of taxation. As another aspect of economic sustainability, sustainable tax systems should also contribute to stable and resilient financial sectors. Furthering employment and reducing current high unemployment are further import objectives of tax policy. They belong to the economic, but also to the social dimension of sustainability. So does gender equality, another feature of an economically and socially sustainable tax system.

Social sustainability of tax policy requires that income and wealth inequality are mitigated and social mobility is supported. Ecological objectives of tax systems result from climate change, the depletion of natural resources and the efforts to initiate an energy transition.

These are the central objectives of a sustainability-oriented tax system which equally aims at the social dimension (social inclusion and governance), the ecological dimension (securing of resilience/biodiversity, preservation of natural resources, prevention of climate change and reduction of pollution), and the economic dimension (growth, efficiency, stability) of sustainability⁶), and which creates a stable basis also in the long run to finance public expenditures, thus contributing to fiscal sustainability (see graph 3).

⁶) For the concept of sustainability and its three dimensions see *Munasinghe* (2010).

Graph 3: Dimensions of a sustainable tax system



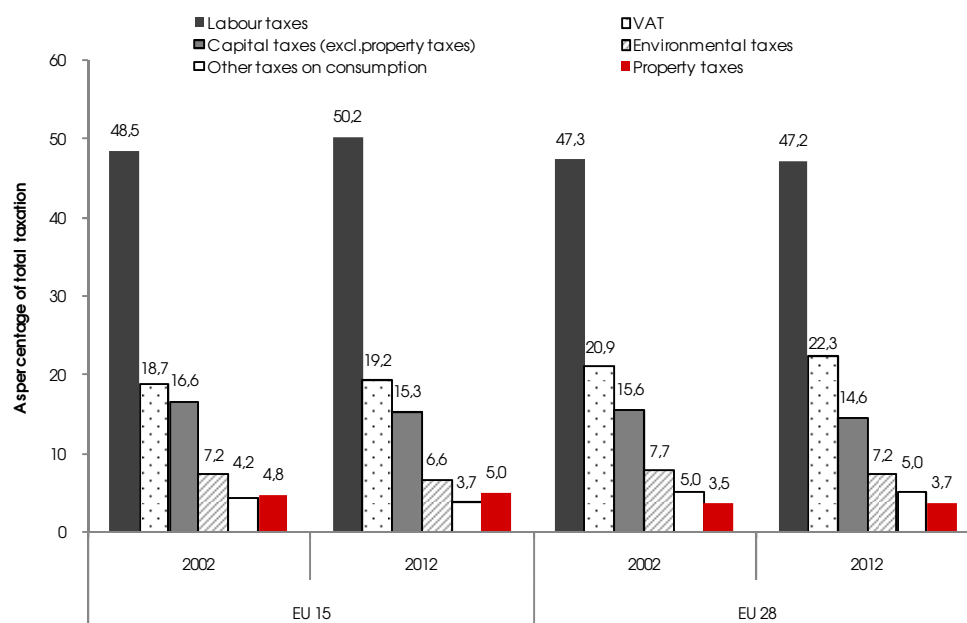
Source: *Munasinghe* (2011), adapted by author.

3. Necessity of strengthening EU-wide cooperation in tax policy as core element of a Fiscal Union

A look at tax structures and effective macroeconomic tax rates in the EU and their longer-term development conveys the impression that currently tax systems' contribution to the realisation of sustainability objectives is limited only and has not increased within the past decade. A considerable and – at least for the EU15 – increasing share of overall tax revenues stems from taxes on labour which generally negatively impact on labour supply and demand; with a share of about 50 percent in overall tax revenues on average in the EU15 and about 47 percent in the EU28 (see graph 4). Also the weight of revenues from the value added tax, with its overall regressive effect, increased. The shares of taxes on capital (with the exception of property taxes whose share in overall tax revenues slightly increased), environmental taxes and other taxes on consumption (in particular sin taxes on alcohol and tobacco consumption) show a declining trend.

Also effective macroeconomic tax rates, relating total tax revenues stemming from a specific tax base to this tax base (e.g., labour taxes to the wage sum), suggest that overall tax structures have remained rather stable during the past decade (see table 1). The most remarkable change can be observed for the effective tax rate on energy which increased considerably in the EU15 as well as in the EU28; which, however, captures only a part of environmentally relevant tax bases and taxes.

Graph 4: Taxation Structure in the EU15 and EU28, 2002 and 2012



Source: European Commission (2014C).

Table 1: Implicit macroeconomic tax rates in the EU 15 and EU 28, 2000 and 2012

	EU 15	EU 28	EU 15	EU 28
	2012		Difference 2002-2012	
	In percent		Percentage points	
Labour	36.0	34.2	+0.7	-0.5
Capital ¹	28.7	.	+0.1	.
Companies ²	19.0	.	-3.0	.
Consumption	21.7	21.6	-0.2	+0.8
Energy ³	181.3	142.3	+11.9	+17.8

Source: European Commission (2014C). Arithmetic mean. - ¹ EU 15 excluding Greece, Luxembourg, Denmark. - ² EU 15 excluding Germany, Denmark, Greece, Luxembourg. - ³ Energy taxes in € per t oil equivalent, deflated by the cumulative growth rate of the consumer price index (base year 2000).

It may be assumed that – besides a number of other economic and non-economic factors having to do with policy-making on the national level – this lack of sustainability-orientation of national tax systems may also have to do with certain restrictions national tax policies encounter in the EU, as an economic area characterized by increasing mobility of capital, goods and labour. In this case, an increasing number of unilateral measures may not be enforceable effectively, so that EU-wide cooperation needs to be strengthened: Firstly, to secure the financial basis for governments to fulfil their tasks on the national level, but also to provide European public goods. Secondly, to create the preconditions to exploit the steering potential of taxes and to effectively use them as tools for redistribution also in the future. EU-wide cooperation in tax matters may take different forms: the coordination or harmonization, respectively, of certain taxes, whose revenues go to national budgets; or the introduction of European taxes, whose revenues accrue to the EU to finance European tasks.

Many of the initiatives necessary to strengthen EU-wide cooperation have been repeatedly put on the agenda by the European Commission for many years and intensively discussed by EU member states. In some areas certain progress could be achieved in the last few years. The measures to fight tax evasion by individuals are particularly remarkable in this respect. As of 2017, an encompassing system of automatic information exchange – embedded into the adoption of automatic information exchange as OECD standard – will be implemented at EU level. In contrast to the Savings Taxation Directive valid since 2005, all member states without any exceptions will participate in the system of automatic information exchange. Moreover, the future system of automatic information exchange will include not only cross-border interest incomes, but also dividend and other capital incomes as well as capital gains.

If EU member states' tax systems as a whole, however, should be made more growth- and employment-friendly and fiscally sustainable, and if they are to contribute more effectively towards social and ecological objectives, there is far-reaching need for action in various areas of tax policy at the national and the EU level. The EU-wide co-ordination and harmonisation, respectively, of tax policy appears to be a core element of a Fiscal Union striving to contribute to a sustainable growth and development path for Europe. In particular, three areas should be of particular importance: curbing harmful tax competition and tax avoidance within company taxation by co-ordinating and harmonising company taxation; strengthening taxes with potential steering effects to internalise negative externalities by introducing EU wide minimum standards; and introducing EU taxes. In the following we will address the most important problems and options for action in each of these three fields.

4. Harmful company tax competition and company tax avoidance

Since the beginning of the 1980ies, company taxation in the EU has been characterised by intense tax competition. This tax competition manifests itself in a considerable decrease of nominal corporate tax rates, but also in decreasing effective corporate tax rates (see table 2). The survey by *Leibrecht/Hochgatterer* (2012) shows that declining corporate tax rates are a consequence of tax competition.

Table 2: Nominal and effective corporate tax rates in the EU, 2000 and 2013

	EU 15	EU 28	EU 15	EU 28
	2013		Difference 2002-2013 ¹	
	In percent		Percentage points	
Statutory corporate tax rate	27.0	23.2	-5.6	-5.8
Effective average tax rate (EATR)	24.8	21.1	-3.0	-1.9
Effective marginal tax rate (EMTR)	18.8	15.5	-3.7	-2.1
Implicit corporate tax rate ^{2,3}	19.0	.	-3.0	.
Corporate income tax as a percentage of GDP ²	2.6	2.6	-0.7	-0.3

Source: *European Commission* (2013, 2014C). Arithmetic mean. – ¹ EATR and EMTR: difference from 2005. – ² Last available data: 2012. – ³ EU 15 excluding Germany, Greece, Denmark, Luxembourg.

Whether company tax competition is beneficial, as it holds ever-growing and wasteful Leviathan governments in check, or whether it has reached a dimension with is associated with harmful effects, e.g. the under-provision of public goods or the shift of the tax burden from mobile to immobile tax bases, is still debated in the literature (see *Bénassy-Quéré/Trannoy/Wolff*, 2014).

Most recently, profit shifting by multinational firms inside and outside the EU to minimise corporate tax payments by exploiting nominal tax rate differentials or by making use of special tax regimes including “treaty shopping”⁷⁾ has been acknowledged as one of the most serious accompaniments of international/European company tax competition within tax policy, but increasingly also within academic research. Recent empirical results suggest – and are corroborated by ample anecdotal evidence (see, e.g., “LuxLeaks”) – that profit shifting is indeed taking place on a large scale. For the United States *Zucman* (2014) estimates that US-owned multinationals reduce their corporate tax payments by 20 percent via profit shifting activities. According to his estimations, tax avoidance via tax havens like Bermuda contributes to at least two third to the reduction of the effective tax rate from 30 percent to 20 percent between 1998 and 2013, which reduces tax payments not only in the US but only in those European countries where US companies’ activities are located.⁸⁾ According to an estimate by Credit Suisse, 386 OECD-based multinationals reduce their yearly tax payments by more than € 100 billion through “aggressive tax planning” (*Gratwohl*, 2013). Altogether, existing estimations corroborate the assumption that tax avoidance activities by multinational firms lead to sizeable company tax losses for EU countries, while the various estimations deliver a broad range for the magnitude of these tax losses (see also *Fuest et al.*, 2013).

It can be shown empirically that international tax rate differentials strongly influence profits reported by multinational firms.⁹⁾ Empirical evidence points towards various harmful effects of company tax competition in general and profit shifting in particular. Profit shifting may result in a distortion of competition in favour of multinational firms, which – as empirical results by *Egger/Eggert/Winner* (2010) suggest – face considerably lower effective tax rates than comparable, purely domestically-oriented firms. Thus, the benefit principle as one rationale for company taxation is violated, as multinational firms use public goods and services without contributing their fair share via taxes. According to *Huizinga/Laeven* (2006), profit shifting in the EU results in considerable reallocation of corporate tax receipts within in the EU.

⁷⁾ For a brief overview over the techniques used to avoid taxes via profit shifting see *Fuest et al.* (2013) or *Hebous* (2014).

⁸⁾ See also *Gravelle* (2015) for an overview over estimation results for corporate tax losses for the US due to profit shifting.

⁹⁾ See the meta-analysis by *Heckemeyer/Overesch* (2013), see also the recent review of analyses studying the relationship between reported profits and tax rates presented by *Gravelle* (2015) and the review in *OECD* (2013).

Besides inducing profit shifting, international tax rate differentials may distort investment decisions by multinationals. *Feld/Heckemeyer (2011)* based on a meta-study reach the conclusion that foreign direct investment is significantly influenced by (international differences in) company tax rates, which may only partially be moderated by public goods and services. According to the meta-analyses by *Heckemeyer/Overesch (2012)*, international tax rate differentials are also a significant determinant of discrete locational choices.

Finally, there is increasing econometric evidence that international tax competition induces a shift of the tax burden from mobile capital towards immobile labour incomes.¹⁰⁾ There is a general tendency in the EU of increasing nominal tax rates for VAT with its overall regressive effects. At the same time, almost all EU countries with directly progressive income tax schedules implemented some degree of dualisation in their income tax systems during the last two decades, taxing capital incomes with flat rates at moderate levels and labour and other incomes with progressive rates (*Schratzenstaller, 2015B*). Particularly taxes for top income earners have been losing in importance during the last thirty years, as *Förster/Llena-Nozal/Nafilyan (2014)* point out for the OECD countries. These long-term developments do not only erode the distributional impact of taxation, but can also be expected to have undesired consequences for employment.

Altogether company tax competition and profit shifting by multinational firms and their consequences touch various sustainability dimensions. Profit shifting endangers fiscal sustainability of tax systems. It violates fairness considerations and may undermine the general tax morale, as a group of tax-payers does not contribute adequately to financing public expenditures. A shift of the tax burden away from capital and company profits towards labour incomes may harm employment and may be perceived as undesired also for distributional reasons.

A sustainability-oriented EU tax policy first of all needs to address the problem of profit shifting by multinational firms. This includes the roll-back of tax breaks and specific tax constructions allowing multinational firms to minimise their overall tax liabilities. In the last few years, several internationally co-ordinated initiatives at the OECD/G20 level ("BEPS"¹¹⁾) as well as at the EU level were set up to take action against "aggressive tax planning". In December 2012 the European Commission published a broad action plan against tax fraud and tax evasion (see European Commission, 2012). The European Commission also issued a recommendation to member states how to deal with tax oases as well as measures against aggressive tax planning by multinational firms. In March 2015 the European Commission presented a tax transparency package, including inter alia the proposal to introduce a system of automatic

¹⁰⁾ See, e.g., *Schwarz (2007)* and *Winner (2005)*; for a review of recent literature, see *Genschel/Schwarz (2012)*.

¹¹⁾ BEPS stands for „base erosion and profit shifting“, for the most relevant information and documents see <http://www.oecd.org/ctp/beps.htm>.

exchange of information about advance cross-border tax rulings and to review the code of conduct on business taxation.

These initiatives are important first steps, but need to be followed by more far-reaching measures. These would include a system of country-by-country-reporting, which would oblige multinational firms to report profits and tax payments separately, i.e. on an unconsolidated basis, for all those countries in which they are active. A system of country-by-country-reporting would allow the identification of tax loopholes and would increase the pressure on the countries granting them to abolish these specific tax breaks. Moreover a certain harmonisation of company taxation seems inevitable. The outgoing European Commission had scaled back considerably their initiatives in the field of company tax co-ordination and had in the last few years restricted their focus on the introduction of a common consolidated corporate tax base (CCCTB), for which the new European Commission currently is planning a re-launch within their second Action Plan on Corporate Taxation to be presented before summer 2015. The system of unitary taxation, which had been at the heart of the proposals to strengthen company tax co-ordination pursued since the beginning of the 2000s (see European Commission, 2001), had not been pursued in the last few years. Within such a system of unitary taxation, taxable profits of multinational firms would be allocated to the locations in which multinational firms are active based on an apportionment formula reflecting the allocation of real activities.

Benassy-Quéré/Trannoy/Wolff (2014), following the European Commission's original proposal, regard the harmonisation of tax bases and their allocation to EU member states via an apportionment formula as sufficient to eliminate profit shifting, which they see as the most important problem. However, harmonising tax bases would leave tax rates as only competition parameter, and can thus be expected – by making effective tax burdens transparent immediately – to intensify company tax competition via further tax rate cuts. Therefore tax base harmonisation should be combined with minimum corporate tax rates, as suggested also by *Bettendorf et al.* (2010). Hereby, considering existing economic divergences between “old” and “new” member states, one uniform minimum corporate tax rate would not be an effective solution:¹²⁾ To be an effective downward barrier for “old” member states with their on average still considerably higher corporate tax rates, the minimum tax rate would have to be rather high, which would harm “new” member states which still use low corporate tax rates as a “tax rebate” to compensate for other locational disadvantages. Therefore it should be considered to introduce a rather high minimum corporate income tax rate in the old member states and a rather low one in the new member states, which reflects existing economic divergences and could be adjusted according to their development over time.

¹²⁾ See *Schatzenstaller* (2008) for the following.

5. Creating a framework for effective enforcement of steering taxes

Creating a framework for a more effective enforcement of steering taxes, i.e. environmental taxes and sin taxes on activities which are considered socially undesirable (particularly tobacco and alcohol consumption), is another rather pressing field of action for the European Commission. Such taxes are effective instruments within health or environmental policy and at the same time are considerably more growth- and employment-friendly than the taxation of labour incomes (see section 1 above). However, their effective enforcement is increasingly difficult in an integrated economic area as the EU. Possibilities of avoidance (e.g. in the form of tank tourism or by switching to airports in neighbour countries which do not levy taxes on air traffic) put tax rates under pressure and initiate national governments to abolish such steering taxes or to not introduce them in the first place (*Withana et al.*, 2014). Table 3 shows that in the EU15 average, the share of tobacco and alcohol taxes as well as of environmental taxes in total tax revenues as well as in GDP decreased between 2002 and 2012. Also in the EU28 average, environmental taxation and taxes on alcohol lost in importance, only tobacco taxes gained somewhat in weight during this period of time.

Table 3: Environmental taxes and sin taxes on alcohol and tobacco consumption in the EU, 2002/2013

	EU 15	EU 28	EU 15	EU 28
	2012		Difference 2002-2012	
	In percent		Percentage points	
<i>Tobacco taxes</i>				
As a percentage of GDP	0,66	0,91	-0,07	+0,16
As a percentage of total taxation	1,76	2,64	-0,20	+0,51
<i>Alcohol taxes</i>				
As a percentage of GDP	0,25	0,33	-0,20	-0,14
As a percentage of total taxation	0,66	0,97	-0,45	-0,33
<i>Environmental taxes</i>				
As a percentage of GDP	2,58	2,58	-0,22	-0,17
As a percentage of total taxation	6,60	7,21	-0,59	-0,51

Source: *European Commission* (2014C). Alcohol taxes: taxes on beer, wine, sparkling wine, brandy and intermediate products. France: latest available data for 2011.

First of all, minimum standards for an environmentally more effective taxation of energy should be introduced. An overhauled energy taxation directive should provide for effective minimum tax rates for fossil energy. These should be adjusted regularly to inflation to avoid real devaluation, which not only devaluates tax revenues, but also erodes steering effects in the long run. Tax rates should, as foreseen in the proposal for a new energy directive presented by the European Commission in 2011, be divided in two components: They should be based on energy content as well as on CO₂ emissions of the energy sources underlying taxation. However the new European Commission has withdrawn its proposal of 2011, because after lengthy negotiations with the European Council only a compromise could be

reached: which is considered inacceptably watered down by the European Commission, but would still not get the required consensus in the European Council.

A specific area, in which due to its particularly negative consequences for climate change urgent need for co-ordination exists, is air traffic. Possible options for taxation are minimum taxes for air tickets, a kerosene tax or the obligation to apply the regular VAT rate on kerosene to thus decrease or abolish the most important tax advantages of air traffic compared to railway traffic. Currently kerosene used in cross-border air traffic according to the EU VAT directive must be VAT exempted; many EU member states also abstain from applying VAT to kerosene used in domestic air traffic. The directive on energy taxation in its current version allows EU member states to levy a kerosene tax in domestic air transport; however, many member states do not use this option either. Intra-Community air traffic may be taxed with a kerosene tax if member states conclude corresponding bilateral treaties. At the EU level EU steps should be taken to ensure that such bilateral treaties are concluded as comprehensively as possible.

Moreover there is need for action concerning the taxation of alcohol consumption. Current minimum taxes date back to 1992 and have not been adjusted since (the minimum tax rate for wine even is zero). Here a step-wise adjustment in the form of a step-wise increase of minimum tax rates plus regular inflation adjustment is needed. Tax rates should be aligned across countries to reduce wasteful cross-border shopping, and they should more closely than currently reflect the alcohol content of different spirits (see *Crossen, 2007*). Also tobacco tax minimum rates should be further increased, including regular inflation adjustment, and country-specific tax rates should be aligned to minimise bootlegging and smuggling (see *Crossen, 2006*). Moreover, the European Commission should enforce their considerations and initiatives to simplify the existing, complex system of tax bases and tax rates and to combat tobacco tax evasion (see *European Commission, 2014B*).

6. Options for EU taxes

Within the “Fiscal Union” debate, own EU taxes until now have played a minor role only. Some authors suggest to finance a Euro Area budget, and particularly a Euro Area Unemployment Benefits Scheme, by own taxes.¹³⁾ Apart from this, the debate about introducing EU taxes to finance the EU budget has been led for quite some time.¹⁴⁾ As an alternative to harmonizing taxes based on minimum standards introduced at the national level, certain taxes could be assigned to the EU level, as so-called EU taxes. These could, within a broader reform strategy for the EU system of own resources, replace a part of the national contributions currently making up the lion’s share of EU own resources to finance the EU budget. Making more use of

¹³⁾ For a brief overview over the most important proposals see *Iara (2015)*.

¹⁴⁾ For a more detailed discussion and presentation of the case for EU taxes see *Schratzenstaller (2013)*.

such EU taxes which besides having potential steering effects are also relatively growth- and employment-friendly, could enhance leeway for national governments to cut taxes at the national level with relatively less favourable characteristics. In addition, EU taxes would have two remarkable benefits: Firstly, they would create a direct connection between EU tasks and expenditures for the provision of European public goods with European value added (e.g. infrastructure, research and development, tertiary education, climate policy, etc.) and their financing. Secondly at the EU level such tax bases and tax subjects, respectively, could be taxed, whose taxation on the national level cannot be enforced effectively (any more) due to avoidance reactions.

The financing system of the EU in its current design which has evolved over more than 60 years since the foundation of the European Coal and Steel Community (ECSC) in 1952 is characterised by a number of shortcomings rooted in the low and decreasing revenue autonomy of the EU. As the own resources of the EU consist primarily of member states' contributions paid directly from national budgets the EU budget has increasingly become the subject of political conflict, as most clearly demonstrated by the "juste retour debate". Reaching an agreement on the MFF is becoming more and more difficult, particularly with economic divergences widening by the last enlargement rounds. This carries the risk of the EU budget becoming chronically under-financed against the challenges facing the EU in the future. Such risk is witnessed by the current MFF 2007 to 2013 as well as by the current MFF 2014 to 2020, each setting expenditures to decline as a ratio of EU GNI, rather than being at least held constant as warranted by the current and future tasks of the EU.

The predominance of national contributions narrows down the focus of member states on monetary net returns from the EU budget, i.e. the relation between national contributions to the budget and monetary returns from the individual policy areas (common agricultural policy, structural and cohesion policy, research and innovation, etc.). Benefits of EU membership beyond pure financial flows related to the EU budget, however, do not play much of a role as evaluation and decision criteria of member states. This is an essential reason that particularly net contributor countries, whose gross contributions exceed transfers received from the EU budget, urge a limitation of the EU budget's volume. Moreover it furthers the tendency of member states to support the preservation of those expenditure categories promising to maximise individual country-specific transfers received from the EU budget, instead of pushing an expenditure structure from which a maximal benefit for the EU as a whole (European value added) may be expected. In this context it should be recalled that the financial resources at the disposal of the EU also serve to finance various "European public goods", i.e. goods or activities with positive cross-border external effects and with European value added, respectively. In particular this concerns expenditures in the areas of research and innovation, education, transport infrastructure, and climate/energy policy,

decided upon at the EU level. Securing fiscal equivalence would require assigning to the EU also the taxes necessary to finance these expenditures.

Moreover, the lack of tax autonomy at the EU level runs counter to the long-term trend of deeper integration. Despite an increase in negative cross-border externalities (e.g. environmental damage) caused by ever closer economic integration of member states policy refrains from using taxes at the European level to influence economic agents' behaviour, thus foregoing potential benefits of a rather powerful market-based policy instrument. In general, the current revenue system hardly contributes to or supports EU policies.

Table 4 contains key features and potential revenues of the candidates included in the European Commission's latest documents on the operation of the system of own resources and options for its reform. Altogether the potential revenues of the various candidates may contribute to a considerable extent to financing the EU budget.

Table 4: Potential EU taxes

Tax base (tax)	Key features	Potential revenues per year	In % of EU expenditures per year ¹⁾
Financial transactions (Financial Transaction Tax – FTT)	0.1% tax rate on transactions of bonds and shares, 0.01% tax rate on transactions of derivatives 0.1% tax rate on transactions of bonds, shares and foreign currency, 0.01% tax rate on transactions of derivatives	€ 20 billion (by 2020) € 50 billion (by 2020)	15 36
Sum of profit and remuneration of financial institutions (Financial Activities Tax – FAT)	5% tax rate on sum of profit and remuneration of financial institutions according to the addition-method FAT applied at source no fully harmonized tax centrally collected at EU level, but revenue-sharing between member states and EU	€ 24,6 billion (2009)	18
Charge related to air transport (Departure Tax or Flight Duty Tax)	tax on passengers flying from an EU airport, differentiated according to distance and class of travel (Departure Tax) tax on flights (Flight Duty Tax) decentralized or centralized collection possible	€ 20 billion (by 2020)	15
Consumption (EU Value Added Tax – VAT)	1% tax rate on goods and services subject to standard tax rate decentralized collection and transfer to EU	€ 20,9 billion to € 50,4 billion (2009)	15
Energy consumption CO ₂ emissions (EU Energy Levy, EU CO ₂ Levy)	Single EU tax rate on quantities of energy products released for consumption based on their energy content Minimum rate of CO ₂ -related taxation defined in revised ETD Decentralized or centralized collection possible	No estimates available	-
Profits of incorporated firms (EU Corporate Income Tax – CIT)	Less than 2% tax rate on national corporate income tax base decentralized collection and transfer to EU	€ 15 billion	11

Source: Schratzenstaller (2013). – ¹ Expenditures per year calculated as average of total expenditures for the period 2014 to 2020.

A first evaluation of these taxes according to various criteria mostly provided by the theory of fiscal federalism gives rough indications for the selection of candidates for EU taxes (see table 5). Of course, this qualitative and rather superficial assessment does not allow for a possible fine-tuning of the different criteria, but only distinguishes between "rather useful" or

"rather less useful" as EU tax. For further considerations on the actual design of an own resources system which is based also on EU taxes as genuine own resources, the analysis of course needs to be refined. It would not only have to put weights on the evaluation criteria and try to quantify the various impact dimensions, but would also have to consider administrative costs and the question at which level (national level or EU level) revenues would be collected. None of the taxes briefly discussed below is deemed an "optimal" EU tax, since all of them miss one or more of the criteria defined above. Which of the taxes will actually be selected along these criteria, and the weight to be attributed to each of them, is a political decision in the end.

Table 5: Evaluation of options for EU taxes

	Regional attribution	negative cross-border externalities	mobility of tax base	short-term volatility	long-term yield (revenue elasticity)	visibility	equity of gross burden at national level
Financial Transaction Tax	+	+	+	-	+	-	-
Financial Activities Tax	+	+	+	-	+	-	-
Departure/Flight Duty Tax	-	+	+	+	+	+	-
Value Added Tax	-	-	-	-	+	+	?
Energy Levy/ CO ₂ Levy	-	+	-	+	+	+	?
Corporate Income Tax	+	-	+	-	+	-	-

Source: Schratzenstaller (2013). - ... + speaks rather in favour of being used as an EU tax. ... - speaks rather against being used as an EU tax.

According to the criteria applied here, charges on air transport would qualify best as EU taxes. They may internalise negative cross-border externalities (in this case climate-damaging emissions) and thereby reduce air traffic. Assigning these taxes to the EU would rein in the possibility of tax avoidance caused by tax rate differentials between member states. Their visibility for citizens as well as short- and long-term revenue stability and tax yield are further arguments in favour of assigning them to the EU level. In particular the tax avoidance to be expected speaks in favour of earmarking charges related to air transport entirely for the EU: a uniform tax rate should be fixed at the level of the EU and all revenues be channelled into the EU budget.

Main arguments in favour of an FTT to be assigned to the EU as own tax are the impossibility of a regional attribution of such a tax, and its prospective long-term yield. Moreover, unilateral implementation would be next to impossible, and considering the far-reaching integration of the European financial market, the FTT may also internalize negative cross-border externalities. In contrast to an EU CIT or VAT, differing national tax bases would not be an issue. In favour of a partially centralised CIT may be argued that the growing disconnection between value added and corporate location on the one hand, and profit and its taxation

on the other, undermines the possibility of regional attribution of the tax. Moreover, it can be expected that corporate tax competition in the EU will intensify further due to the high mobility of the tax base. The CIT is also characterised by a high yield in the longer term. Taxes on energy consumption have the advantage of low short-term volatility and a high long-term elasticity. Moreover they can internalize cross-border externalities and are highly visible to citizens. The VAT appears as least suitable candidate. Only its long-term revenue elasticity and high visibility for citizens speak in its favour.

Altogether the most straightforward option for an own EU tax is the FTT which as a new tax has the additional advantage that national revenues would not be affected, which would be the case for charges on air transport and energy taxes which exist at least in some member states already. Thus it can be expected that choosing the FTT as EU tax will meet with less political resistance than options which imply redirecting national revenues to the EU budget. From an administrative point of view, the FTT has the further advantage that there are no nationally differing tax bases that would need to be harmonised beforehand. It could cover a substantial share of total EU expenditures. If the aim is to extend the contribution of EU taxes even further, charges related to air transport would be another readily available solution, considering also that only few member states levy such charges at all and that they are exposed to permanent criticism as they are regarded as severe competitive disadvantage when implemented unilaterally at the national level. The same holds for a CO₂ tax which some member states have introduced rather recently.

7. Conclusions and outlook

There are basically two fundamental reasons that achieving progress in taxation matters at EU level is a lengthy and cumbersome process. First of all, the EU's competencies in taxation matters anchored in the EU treaties are rather limited. An immediate competence exists for indirect taxes only, to avoid distortions of competition in the EU single market. Initiatives concerning direct taxes have to be justified specifically based on potential distortions of competition, thus the EU's mandate in the area of direct taxation is an indirect one only.

Secondly, however, not even these limited competencies are fully exploited at EU level, because taxation is one of the few remaining areas in which unanimous decisions are required. It is obvious that unanimity within a growing number of EU member states characterised by persisting substantial socio-economic and –cultural heterogeneity in an area which is so sensitive and touches upon genuine and deeply-rooted national interests is ever harder to achieve. On the one hand it is understandable that many member states insist on the application of the unanimity principle, because tax policy belongs to the fundamental sovereign rights of nation states. On the other hand, however, this sovereign right, which is so intensely defended, de facto does not exist anymore regarding numerous areas of taxation.

Therefore strengthening EU-wide cooperation in taxation matters may allow, if international integration makes the exertion of national sovereign rights impossible or at least increasingly difficult, regaining room for manoeuvre. The new European Commission therefore should put their initiative to introduce qualified majority voting at least in certain tax areas, which they pursued in the negotiations about the Lisbon Treaty (see *European Commission, 2003*), as a priority on their agenda again.

Moreover the yearly indicator-based screening of EU member states' tax systems by the European Commission as one element of the European Semester (see *European Commission, 2014A*) should be designed in a more sustainability-oriented way. Environmental and distributional aspects should be assigned the same weight as the growth- and employment-oriented objectives currently dominating. Currently, the predominant line of argumentation by the European Commission when recommending shifts of the tax burden away from labour taxes towards environmental taxes, recurrent immovable property taxes and VAT is that such shifts would increase tax systems' growth-friendliness (see *Garnier et al., 2014*). While this line of reasoning is supported by empirical evidence (see also section 1), the focus on growth aspects as over-riding objective is too narrow from a broad sustainability perspective. It firstly neglects undesired impacts on other sustainability dimensions (e.g. the regressive effect of the VAT). Secondly, while according to empirical studies environmental taxes as well as property taxes indeed are relatively growth-friendly compared to direct taxes on profits and labour incomes, their value in themselves (as important instruments within environmental or distribution policy) and thus their potential contributions to other sustainability dimensions than just the dimension of economic growth should be emphasized more strongly.

Overall European Commission as well as EU member states themselves should see themselves more as the pioneers of a tax policy actively contributing to a growth and development path based on economic dynamics, but also social inclusiveness and environmental sustainability – also in a global context. Multilateral problems like international tax flight or climate change can only be solved by multilateral approaches, in which the EU plays an active and pioneering role as the world-wide largest integrated economic area. If the EU countries managed to speak with one voice in tax matters, instead of letting country-specific national interests dominate over a common position particularly vis-à-vis third countries outside the EU, these could be more easily convinced (if need be also by means of economic pressure) to cooperate.

References

- Acosta-Ormaechea, S., Yoo, J. (2010), *Tax Composition and Growth: A Broad Cross-Country Perspective*, International Monetary Fund, Working Paper, (WP/12/257).
<http://www.imf.org/external/pubs/ft/wp/2012/wp12257.pdf>.
- Arnold, J. (2008), "Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries", OECD Economics Department Working Paper, No. 643,
- Arnold, J. M., Brys, B., Heady, C., Johansson, Å., Schweltnus, C., Vartia, L. (2011), "Tax Policy for Economic Recovery and Growth", *The Economic Journal*, 121(550), pp. 59-80.
- Bénassy-Quéré, A., Trannoy, A., Wolff, G. (2014), *Tax Harmonisation in Europe: Moving Forward*, VOXEU.
- Bettendorf, L., Devereux, M., van der Horst, A., Loretz, S., de Mooij, R. (2010), *Corporate Tax Harmonization in the EU*, *Economic Policy*, 25, pp. 537-590.
- Bovenberg, A. L. (1999), *Green Tax Reforms and the Double Dividend: An Updated Reader's Guide*, *International Tax and Public Finance* 6(3), pp. 421-443.
- Cnossen, S. (2006), *Tobacco Taxation in the European Union*, CESifo Working Paper, No. 1718.
- Cnossen, S. (2007), *Alcohol Taxation and Regulation in the European Union*, *International Tax and Public Finance*, 14(??), pp. 699-732.
- Egger, P., Eggert, W., Winner H. (2010), *Saving Taxes Through Foreign Plant Ownership*, *Journal of International Economics*, 81(1), pp. 99-108.
- Ekins, P., Speck S. (2011), (eds.), *Environmental Tax Reform (ETR). A Policy for Green Growth*, New York: Oxford University Press.
- European Commission (2001), *Towards an Internal Market without tax obstacles - A Strategy for Providing Companies with a Consolidated Corporate Tax Base for Their EU-wide Activities*, COM(2001)582, Brussels.
- European Commission (2003), *A Constitution for the Union*, COM(2003)548 final, Brussels.
- European Commission (2010), *Public Finances in EMU 2010*, Brussels.
- European Commission (2011), *Proposal for a Council Directive Amending Directive 2003/96/EC Restructuring the Community Framework for the Taxation of Energy Products and Electricity*, COM(2011) 169/3, COM(2011) 169/3, Brussels.
- European Commission (2012), *An Action Plan to Strengthen the Fight Against Tax Fraud and Tax Evasion*, COM(2012) 722 final, Brussels.
- European Commission, *Effective Levels of Company Taxation within an Enlarged EU*, project conducted by ZEW, Mannheim, 2013.
- European Commission (2014A), *Tax Reforms in EU Member States 2014 – Tax Policy Challenges for Economic Growth and Fiscal Sustainability*, *European Economy*, Nr. 6/2014.
- European Commission (2014B), *Study on the Measuring and Reducing of Administrative Costs for Economic Operators and Tax Authorities and Obtaining in Parallel a Higher Level of Compliance and Security in Imposing Excise Duties on Tobacco Products*, Final Report, Brussels.
- European Commission (2014C), *Taxation Trends in the European Union*, Brussels, 2014.
- Feld, L.P., Heckemeyer (2011), J.H., *FDI and Taxation: A Meta-Study*, in: *Journal of Economic Surveys*, 25(2), pp. 233-272.
- Förster, M., Llana-Nozal, A., Nafilyan, V. (2014), *Trends in Top Incomes and their Taxation in OECD Countries*, OECD Social, Employment and Migration Working Paper, N. 159.
- Fuest, C., Spengel, Ch., Finke, K., Heckemeyer, J., Nusser, H. (2013), *Profit Shifting and „Aggressive“ Tax Planning by Multinational Firms: Issues and Options for Reform*, in: *World Tax Journal*, 5(3), pp. 307-323.

- Garnier, G., György, E., Heineken, K., Mathé, M., Puglisi, L., Ruà, S., Skonieczna, A., Van Mierlo, A. (2014), *A Wind of Change? Reforms of Tax Systems Since the Launch of Europe 2020*, European Commission Taxation Paper, No. 49-2014.
- Genschel, Ph., Schwarz, P. (2012), *Tax Competition and Fiscal Democracy*, TranState Working Paper, No. 161.
- Gratwohl, N. (2013), *Konzerne sparen Milliarden: Die Welt der Steueroptimierer*, Neue Zürcher Zeitung, October 22nd, 2013, <http://www.nzz.ch/aktuell/wirtschaft/wirtschaftsnachrichten/die-welt-der-steueroptimierer-1.18171355>.
- Gravelle, J.G. (2015), *Tax Havens. International Tax Avoidance and Evasion*, Congressional Research Service Report, No. 7-5700.
- Hebous, S. (2014), *Money at the Docks of Tax Havens: A Guide*, FinanzArchiv, 70(3), pp. 458-485.
- Heckemeyer, J., Overesch, M. (2013), *Multinationals' Profit Response to Tax Differentials: Effect Size and Shifting Channels*, ZEW Discussion Paper, No. 13-045.
- Heckemeyer, J., Overesch, M. (2012), *Auswirkungen der Besteuerung auf Entscheidungen international tätiger Unternehmen*, Die Betriebswirtschaft, 72(6), pp. 451-472.
- Huizinga, H., Laeven, L. (2006), *International Profit Shifting Within Multinationals: A Multi-Country Perspective*, European Commission Economic Papers, No. 260.
- Iara, A. (2015), *Revenue for EMU: A Contribution to the Debate on Fiscal Union*, European Commission Taxation Paper, No. 54-2015.
- Kettner, C., Köppl, A., Stagl, S. (2012), *List of well-being indicators*, WWWforEurope Working Papers, No. 2.
- Kosonen, K. (2012), *Regressivity of Environmental Taxation: Myth or Reality?*, European Commission Taxation Papers Working Paper, No. 32-2012.
- Leibrecht, M., Hochgatterer, C. (2012), *Tax Competition as a Cause of Falling Corporate Income Tax Rates*, Journal of Economic Surveys, 26(4), pp. 616-648.
- Munasinghe, M. (2011), *Addressing Sustainable Development and Climate Change Together Using Sustainomics*, Wiley Interdisciplinary Reviews: Climate Change, 2(1), pp. 7-18.
- Myles, G. (2009), *Economic Growth and the Role of Taxation – Aggregate Data*, OECD Economics Department Working Paper (ECO/WKP(2009)714).
- Nordhaus, W., Tobin, J. (1972), *Is Growth Obsolete?* In: Nordhaus, W., Tobin, J. (eds.) *Economic Research: Retrospect and Prospect*, Volume 5, 1972, , pp. 1-80.
- OECD (2013), *Addressing Base Erosion and Profit Shifting*, Paris: OECD.
- Schratzenstaller, M. (2008), *Company Taxation in the European Union – Current Developments and Implications for the Coordination Debate*, in: Lacina, L., Fidrmuc, J., Rusek, A. (eds.), *The Economic Performance of the European Union. Issues, Trends and Policies*, Basingstoke: Palgrave Macmillan.
- Schratzenstaller, M. (2013), *The EU Own Resources System – Reform Needs and Options*, Intereconomics, 48(5), pp. 303-313.
- Schratzenstaller, M. (2015A), *Sustainable Tax Policy – Concepts and Indicators beyond the Tax Ratio*, in: *Revue de l' OFCE*, forthcoming.
- Schratzenstaller, M. (2015B), *The Austrian Tax Reform 2016*, WIFO Bulletin, forthcoming.
- Schwarz, P. (2007), *Does Capital Mobility Reduce the Corporate-Labor Tax Ratio? Public Choice*, 130(3), pp. 363-380.
- Stiglitz, J., Sen, A., Fitoussi, J.-P. (2009), *Report by the Commission on the Measurement of Economic Performance and Social Progress*.

Van den Bergh, J., Antal, M., (2014), Evaluating Alternatives to GDP as Measures of Social Welfare/Progress, WWWforEurope Working Papers, No. 56.

Van Rompuy, H., et al. (2012), Towards a Genuine Economic and Monetary Union, Brussels, 2012.

Winner, H. (2005), Has Tax Competition Emerged in OECD Countries? Evidence from Panel Data, *International Tax and Public Finance*, 12(5), pp. 667-687.

Withana, S., ten Brink, P., Illes, A., Nanni, S., Watkins, E. (2014), Environmental Tax Reform in Europe: Opportunities for the Future, London: Institute for European Environmental Policy.

Zucman, G. (2014), Taxing Across Borders: Tracking Personal Wealth and Corporate Profits, *Journal of Economic Perspectives*, 28(4), pp. 121-148.