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**Research Report**

## Shifting priorities in EU tax policies: A stock-taking exercise over three decades

IMK Study, No. 55

**Provided in Cooperation with:**

Macroeconomic Policy Institute (IMK) at the Hans Boeckler Foundation

*Suggested Citation:* Godar, Sarah; Truger, Achim (2017) : Shifting priorities in EU tax policies: A stock-taking exercise over three decades, IMK Study, No. 55, Hans-Böckler-Stiftung, Institut für Makroökonomie und Konjunkturforschung (IMK), Düsseldorf, <https://nbn-resolving.de/urn:nbn:de:101:1-201707123557>

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# STUDY

Nr. 55 • May 2017 • Hans-Böckler-Stiftung

# SHIFTING PRIORITIES IN EU TAX POLICIES

## A stock-taking exercise over three decades

Sarah Godar<sup>1</sup>; Achim Truger<sup>2</sup>

### Abstract

Budgetary pressures and the debate on increasing inequality caused by the global financial and economic crisis have also revived public and scholarly interest in tax policies. While some international coordination attempts aim at a more effective enforcement of existing tax laws, a number of individual country reforms have also changed the national tax structures in EU member states. The study provides a summary of tax policy trends in the EU and gives a rough overview of tax reforms in the areas of income and corporate taxes, wealth-related taxes and consumption taxes since the 1980s with an emphasis on new developments since 2008. In some aspects, recent tax policy choices deviate from the trends of the last decades which were characterized by declining top tax rates and tax privileges for capital income. Still, one cannot speak of a progressive turn of tax policy in the EU. The tax burden increased also for low and middle income groups, in some cases in the form of surcharges on the income tax, but in the majority of member states in the form of increased consumption taxes. Equity considerations might have played a role in recent reforms, and a contribution by high income groups might have been regarded as unavoidable. However, governments have refrained from substantial redistributive reforms, the more so as top tax rate increases were temporary in many cases whereas VAT increases were not.

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# Shifting priorities in EU tax policies

A stock-taking exercise over three decades

Version: 06 February 2017

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## **Introduction**

Almost a decade after the outbreak of the global financial and economic crisis, European economies and societies are still shaped by economic uncertainty and social disparities. The rise of unemployment and poverty has not only put into question the EU's promise of prosperity, but also challenged conventional economic policy concepts. Budgetary pressures and the debate on increasing inequality have also revived public and scholarly interest in tax policies. International initiatives such as the automatic exchange of financial account information and the initiative against base erosion and profit shifting (BEPS) by the OECD will go down in tax history. While these international coordination attempts aim at a more effective enforcement of existing tax laws, a number of individual country reforms have also changed the national tax structures in EU member states. In some aspects, recent tax policy choices deviate from the trends of the last decades which were characterized by declining top tax rates and tax privileges for capital income. The following summary of tax policy trends in the EU provides a rough overview of tax reforms in the areas of income and corporate taxes, wealth-related taxes and consumption taxes since the 1980s with an emphasis on new developments since 2008. Part A introduces the main criteria used to assess tax systems and the changing priorities over time. The following sections B to F are dedicated to the analysis and discussion of changing tax indicators in the relevant areas of taxation over time. Section G briefly draws some conclusions for tax policy.

### **A. Traditional standards of tax justice under pressure**

What characterises a good tax system? Even though there is probably no objective answer to this question, the literature on public economics suggests several functions a tax system should fulfil and offers a range of criteria which can be applied to evaluate taxation policies.

Obviously, the first function of the tax system is to raise public revenues. While the optimal size of the public sector is often subject to debate, the fact that public institutions exist and assume important functions in society has been broadly unquestioned until today. Musgrave and Musgrave (1989) point out that, because of market failures, there is a need to divide total resource use between private and public goods. In an ideal case this fundamental decision is left to democratic decision-making and the vote is expected to approximate an efficient solution (Ibid., p. 9). To the extent that the need for a public sector is socially accepted its funding becomes a technical necessity.

### **A.1. The Allocation Function**

One requirement emphasised in the taxation literature is that taxes should distort the efficient allocation of resources in the economy in the least possible way.

Believing that peoples' preferences are best reflected in market outcomes and that with the help of the invisible hand conflicting interests can be compromised, this implies that taxes should interfere with the individual's decision making process as least as possible.

For example, in the case of a consumption tax, the relative prices observed by consumers and producers differ, because for consumers the after-tax prices are relevant whereas the producers take decisions with respect to the pre-tax price. "In equilibrium, the equality of marginal rates of substitution is not sustained, and this condition cannot be a Pareto optimum. The price system does not coordinate the agents' decisions efficiently because it sends different signals to different agents." (Salanié 2011, p. 15) The consequence will be an inefficient allocation of resources with respect to the Pareto criterion. Therefore, in addition to the fact that a tax reduces the economic agents' income, it leads to an excess burden (or deadweight loss) of taxation as the change in relative prices (e.g. of consumption relative to leisure) provokes a behavioural adjustment by the economic agent. Even if the revenues from the tax were distributed in order to compensate for the economic agents' income loss, the reduction in social welfare due to the excess burden would persist. But "without lump sum taxes, the government can only tax economic transactions. In doing so, it influences the decisions of private agents, which leads to inefficiencies. The optimal taxation problem can then be stated in simple terms: given the tax revenue that the government has decided to collect, how should it choose the rates of the various taxes to maximize social welfare?" (Salanié 2011, p. 64). The idea that the excess burden of taxation should be minimised is thus a key issue in optimal tax theory, but it must be weighed against other goals of taxation.

Acknowledging that the market forces do not always produce optimal results, the allocation function becomes more complicated. For example, certain environmental taxes aim explicitly at 'distorting' market outcomes, because the consumption of certain goods is assumed to create negative external effects such as pollution in the case of car-driving. "In an economy afflicted by market failure, prices do not serve their allocative function well, and since taxes change prices, it can be hoped that a proper set of taxes will restore the correct price incentives." (Ibid., p. 153). However, correcting market failures exclusively via price incentives can conflict with distributional aims as low-income households tend to be affected more heavily, in relative terms, by consumption related taxes.

Other requirements for a good tax structure that are related to its efficiency are low

administration and compliance costs. Furthermore Musgrave and Musgrave (1989, p. 216) suggest that taxes should be understandable to the taxpayers and permit fair and non-arbitrary administration.

## **A.2. The Distribution Function**

Besides raising revenues in a preferably efficient way, the tax structure should guarantee a fair distribution of the tax burden and can also be used to correct for an unequal distribution of endowments and incomes. As noted by Musgrave and Musgrave (p. 10), “even if all factor prices, including wages or other returns to personal services were determined competitively, the resulting pattern of distribution might not be acceptable. It typically involves a substantial degree of inequality, especially in the distribution of capital income; and though views on distributive justice differ, most would agree that some adjustments are required (...).”

Not surprisingly, the applied concepts of equity are a “major point of controversy in the budget debate” (Ibid., p. 9). One key concept is the ability-to-pay principle. With respect to the distribution of the tax burden usually two dimensions of ability to pay are discussed: horizontal and vertical equity.

The criterion of horizontal equity implies that tax payers with the same ability to pay should be treated equally by the tax system. The ability to pay can be measured in terms of income, wealth, and expenditure. According to the Haig-Simons definition “income is the money value of the net increase in an individual’s power to consume during a period” (Rosen & Gayer 2008, p. 382), i.e. also increasing savings are included to determine the ability to pay, as they represent an increase in potential consumption. However, in practice, the comprehensive income approach was not applied in its pure form because potential income from some types of assets is difficult to measure, as for example “imputed income from assets of various sorts, such as housing and other consumer durables, and insurance policies; accrued capital gains on financial and personal assets” (Boadway 2004, p. 3). Recently, many European countries moved further away from the comprehensive income approach by making capital income of individuals subject to a separate tax schedule with one single tax rate while labour income (such as wages and pensions) continues to be taxed progressively.

An influential approach to assess the criterion of vertical equity is the sacrifice approach. As Prest (1960, pp. 115) subsumes, the basic idea is that a tax system should impose the same sacrifice on the taxpayers whose individual utility is reduced by the tax. As utility is not measurable, income is usually taken as a proxy. For example a lump-sum tax may represent a more serious burden for a low-income than for a high-income earner.

However, an important point is that the marginal utility curve as a function of income is usually assumed to be downward sloping, i.e. the utility of income increases with decreasing rates. This would justify a progressive tax structure if everyone was “required to forgo the same fraction of his total utility” (Ibid., p. 116). Other approaches imply that “the number of units of utility extracted from each taxpayer should be exactly the same” or that the “total sacrifice for the community” (Ibid.) should be minimized. While the second approach does not automatically recommend progressivity, the third approach implies that the after-tax income should be distributed in an absolutely equal way because only then, “the marginal sacrifice is the same for everyone” (Ibid.). Accordingly, due to the diversity of sacrifice approaches no overall conclusion can be drawn for the desirability of progressivity, so that an additional value judgement is required (Prest 1960, p. 117). However, in the past it used to be widely accepted that some degree of progressivity was clearly socially desired in rich industrialised countries.

The Benefit Theory is another influential approach to the issue of equity. According to Musgrave and Musgrave (1989, p. 220), it suggests that individuals should be taxed “in line with their demand for public services”. This can justify regressive or progressive tax structures depending on who benefits most from public spending (Prest 1960, p. 118). But as Prest points out, these individual preferences are hard to identify which is one of the main reasons why public goods are provided by the public sector and not by private business. Still, the benefit principle can be applied in the form of fees or user charges for certain types of public expenditures.

The recent trend of abandoning the comprehensive income approach and taxing capital income at preferential rates in combination with declining top tax rates might reflect a shift in political preferences away from progressive taxation. But as this development is usually justified by efficiency arguments, one might also say that the allocation function of taxation is taking precedence over the distribution function in public debates.

### **A.3. The Stabilisation Function**

In the short run the built-in flexibility of the tax system can serve as an automatic stabiliser to the economy: “Built-in flexibility is helpful in that it cushions the amplitude of fluctuations in economic activity.” (Musgrave & Musgrave 1989, p. 527). A built-in change on the revenue side (as opposed to a discretionary change) describes the fact that at given levels of tax rates, tax revenues increase when private incomes increase. On the expenditure side the amount

spent on unemployment benefits increases when unemployment rises. Musgrave & Musgrave (p. 524) specify that built-in changes are changes that are endogenous to the economic development whereas discretionary measures such as tax rate cuts or tax base broadening reforms can be regarded as exogenous shocks to the economic system. The fact that unemployment benefits increase in times of recession can to some extent mitigate the decline of demand from the private sector. (Ibid., p. 524) Conversely rising tax payments during the boom phase can dampen private expenditures and prevent an overheating of the economy. As pointed out by Musgrave & Musgrave, especially the corporate income tax can fulfil the function of an automatic stabiliser because corporate profits tend to fluctuate more sharply than does GDP. However, the idea of built-in flexibility implies that discretionary measures are kept constant which means that additional revenues are not spent during the economic expansion or that the stabilising expenditures are not cut as a response to the recession.

Beyond the built-in flexibility, a more controversial issue is whether discretionary measures should be applied to correct for a lack of aggregate demand. Musgrave and Musgrave argue that “in any period, the level of expenditures may be insufficient to secure full employment of labor and other resources. For various reasons, including the fact that wages and prices tend to be downward rigid, there is no ready mechanism by which such employment will restore itself automatically. Expansionary measures to raise aggregate demand are then needed. At other times, expenditures may exceed the available output under conditions of high employment and thus may cause inflation. In such situations restrictive measures are needed to reduce demand.” (Ibid., p. 12)

While they argue that stabilisation policy can “hardly forgo the use of fiscal measures, and especially not when it comes to major swings in economic conditions” (p. 531) they also acknowledge that other schools of thought highlight monetary policy as the preferred stabilisation tool and argue that fiscal policy should be limited to guaranteeing the described built-in changes.

#### **A.4. Identifying Priorities?**

The presented fiscal functions provide rough criteria for evaluating a given tax structure and for discussing suggested reforms. However, as some of the requirements may conflict with each other their relative importance is always subject to intense debate. Besides the need to assess the empirical relevance of potential theoretical trade-offs, usually additional value judgements are required to identify a preferred tax structure.

Over the last decades, it seems that the stabilisation function of fiscal policy has been



downgraded in public economics which may also explain why Salanié completely leaves it to the field of macroeconomics: “The study of stabilization can be found in any good macroeconomic textbook, so we will set that function aside and focus on the first two functions.” (2011, p. 8). But recently, the great recession has brought it back on the table.

The distribution function of fiscal policy was increasingly interpreted as an obstacle to efficient tax design rather than a goal by itself. “Attention appears to be shifting from the traditional concern with relative income positions, with the overall state of equality, and with excessive income at the top scale, to adequacy of income at the lower end. Thus, the current discussion emphasizes prevention of poverty, setting what is considered a tolerable cut-off line of floor at the lower end rather than putting a ceiling at the top, as was once a major concern.” (Musgrave & Musgrave 1989, p. 11). This reformulation of the distribution function also suited the spreading of ‘Trickle down’ economics which contributed to delegitimizing active redistribution policies from the top to the bottom of the income distribution.

This shift of priorities was reflected in European tax policies of the last decades and coincided with rising income inequality in the EU, not only in terms of market incomes, but also in terms of disposable incomes. According to Fredriksen (2012, p. 8), disposable incomes of the top income decile have increased substantially faster than that of the remaining population since the 1980s. Between the mid-1980s and 2008, real disposable incomes of the top decile have increased by 2.23 per cent, whereas those of the fifth income decile increased by 1.28 per cent and those of the lowest income decile by 0.87 per cent, only (Fredriksen 2012, p. 10). The years of economic stagnation after the financial crisis seem to have slowed down the rise of top incomes in relation to the fifth income decile. The share of the top income decile declined from 24.5 per cent in 2008 to 24.1 in 2015 while that of the fifth decile increased from 8.1 per cent to 8.2 per cent. However, the lowest income decile was left behind even further, its share declined from 3 per cent in 2008 to 2.8 per cent in 2015. In the same period, the Gini coefficient of equalized disposable income for the EU-27 has increased from 30.9 to 31 indicating a slight increase of overall income inequality even after 2008 (EC 2016d).

Recently, the neglect of relative income positions has been challenged by the works of Atkinson et al. (2011), Piketty and Zucman (2014) who have redirected the attention towards rising top income shares and thereby inspired new debates on income inequality. In parallel, the abrupt rise of poverty in the EU, as consequence of the economic crisis, has renewed political interest in distribution policies. As shown below, this shift of discourse is, to some extent, reflected in changing tax policy trends since 2008.

## **B. Top income tax rates**

### **B.1. Development of top income tax rates since the 1980s**

On average, taxes on personal income used to be the most important source of revenues for EU-15 countries accounting for about 30 per cent of total tax revenues in the 1980s. Since then, their relative importance declined but has increased again since 2005 and particularly after the economic crisis. In the EU-15, their contribution to total tax revenues was close to the old level in 2014 (OECD 2016a). In the East European member states, however, their importance remained relatively low between 10 and 17 per cent (EC 2016a).

For distributional issues, the development of personal income tax systems is very important because they are traditionally designed in a progressive way reflecting the idea that high-income earners should contribute relatively more to the financing of public budgets. Furthermore, progressive income taxation is all the more important as it compensates for the regressive effects of consumption taxes. According to the comprehensive income approach, both capital and labour income should be subject to the personal income tax. However, in a growing number of countries, certain types of capital income are taxed separately while in most EU countries a progressive income tax still applies for employment and self-employment income. As the dispersion of labour income is the main determinant of interpersonal income inequality<sup>1</sup> (OECD 2011, p. 238) the personal income tax provides an important redistributive tool.

In order to evaluate how progressive an income tax system actually is, the different tax rates, tax brackets and allowances all have to be considered. The tax rates of the lower income brackets also influence the average tax rate of the high-income tax payers as for example the top tax rate applies only to the share of income above the defined threshold. Nevertheless top statutory tax rates can be used to detect broad international trends and they can serve as a proxy for the intended redistributive effects of personal income tax systems.

With respect to the top statutory personal income tax rates, in 2016 the highest rate applied in Sweden (57.0 per cent), followed by Portugal (56.5 per cent), and Denmark (55.8 per cent). In contrast, Bulgaria taxed personal income at a flat rate of 10 per cent which is the lowest statutory rate for top incomes among EU countries. The EU average was 39 per cent in 2016

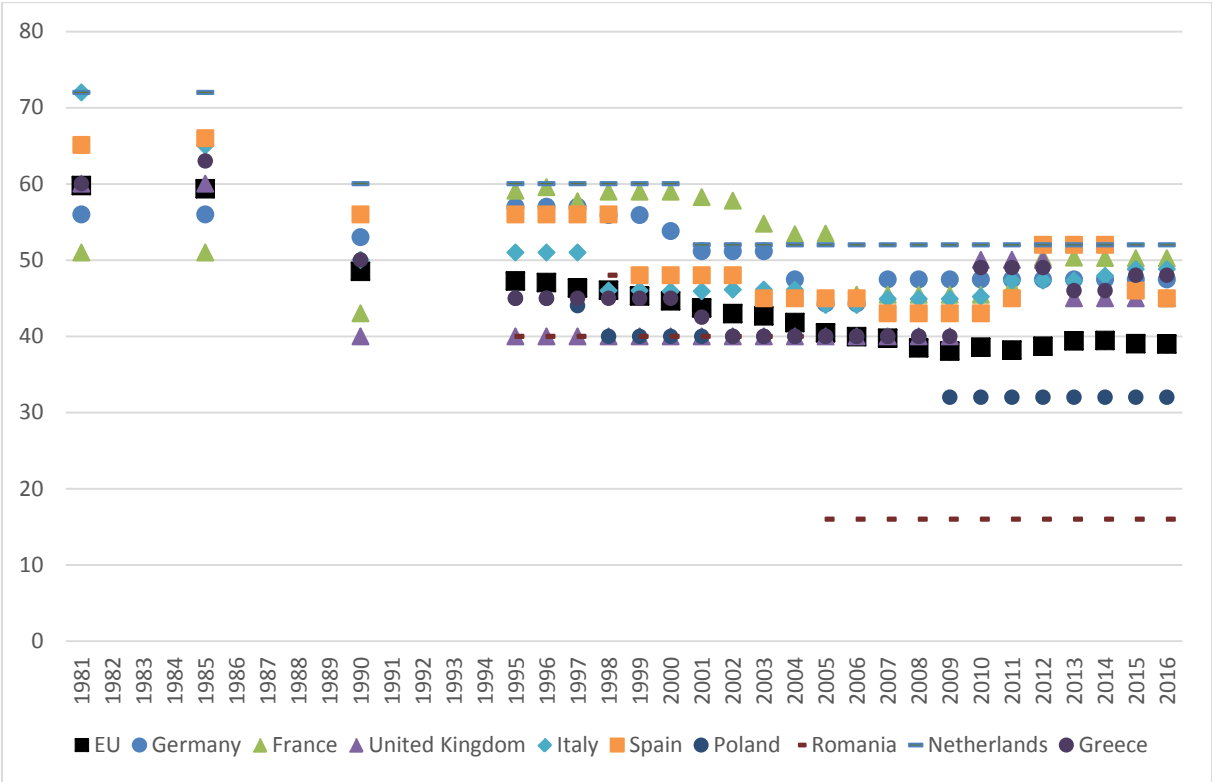
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<sup>1</sup> “In all OECD countries under review, wages and self-employment income are the main determinants of inequality levels in disposable income of the working-age population.” (OECD 2011, p. 238)

(EC 2016a).<sup>2</sup>

Personal top income tax rates have declined continuously since the beginning of the 1980s. Historical tables since 1981 are available only at the central governments’ level. The central government tax rates tend to be lower than the combined rates as they exclude sub-central government taxes. In some cases, such as Sweden and Denmark, the difference between the central government top tax rate and the combined marginal top tax rate amounted to more than 30 percentage points in 2016. In contrast, in Germany there are no separate income taxes at the sub-central level. Therefore, the central government top tax rates are less suitable for comparing actual tax levels across countries but clearly illustrate the declining trend in top tax rates since 1981. In the EU-15, the central government top tax rate amounted to 59.8 per cent in 1981. This contrasts with an average top tax rate of 39 in the EU-28 (50.2 in EU-15) in 2016 (figure 1).

Figure 1: Top personal income tax rates, 1981-2015



\* TAX RATES FROM 1981-1990 ARE AT CENTRAL GOVERNMENT LEVEL AND EU-15 ONLY;  
 Source: European Commission (2016a), OECD (2016b)

<sup>2</sup> Considering the “all-in” marginal tax rate by the OECD Tax Database which includes also the employee social security contributions, Portugal had the highest marginal rate of 61.3 per cent followed by Slovenia (61.1 per cent) and Belgium (58.4 per cent). The lowest “all-in” marginal tax rate applied in Estonia (21.3 per cent). The corresponding average for 21 EU countries was 47.8 per cent in 2015, and 51.5 in EU-15 (Ibid.).

## **B.2. Has the crisis broken the downward trend?**

It seems that the downward trend has come to an end in recent years as the EU average stopped decreasing since 2008 and even increased slightly.

This development was mainly driven by (temporary) surcharges that were levied on top of income taxes in the wake of the debt crisis. In Greece, Ireland, Luxembourg, Portugal and Spain, these surcharges had a progressive rate structure. Even though some of these measures were extended over the initially planned time horizons due to persistent public deficits, it would be misleading to speak of a general change in attitude towards progressive taxation. The few countries increasing top tax rates as permanent measures were France, Luxembourg, Spain and the United Kingdom. In the latter, however, the top tax rate was again slightly reduced in 2014. In addition, the crisis-ridden countries such as Greece, Ireland, Portugal and Spain, also introduced income tax surcharges for the lower income groups which indicates that revenue considerations played a predominant role rather than distributional concerns.

Still, it is remarkable that against a background of constrained budgets, governments did not refrain from raising taxes on top incomes which implies breaking a taboo of the previous decades.

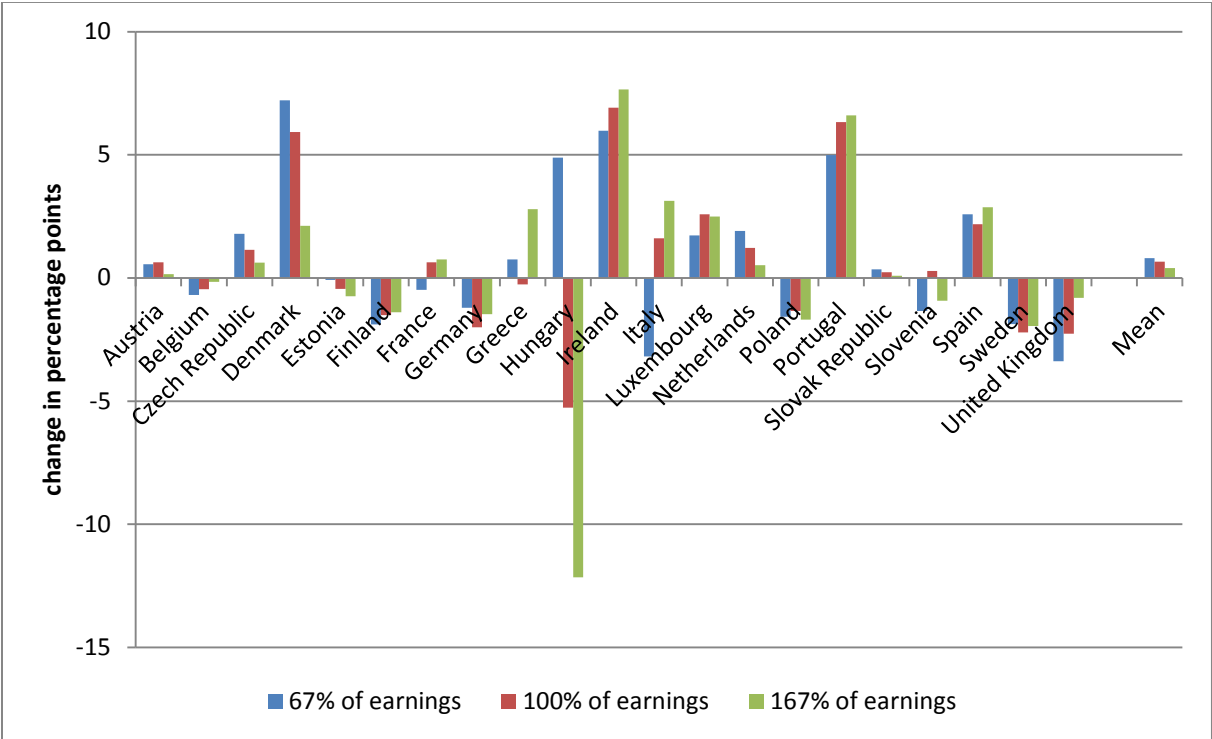
Temporary surcharges levied on top incomes were adopted for example in Austria, where a progressive solidarity charge was levied on special annual payments such as holiday pay and Christmas bonuses which are usually taxed at a low proportionate rate. In addition, in 2016 an additional temporary top tax rate of 55 per cent was introduced for incomes above one million Euro. The Czech Republic introduced a surcharge of seven per cent on top incomes between 2013 and 2015. In addition to the new top marginal tax rate in France, a solidarity contribution of three to four per cent was introduced for top incomes between EUR 250.000 and 500.000. In Greece, a surcharge was levied on incomes over EUR 60.000, and Italy introduced a special charge on top incomes, as well. In 2012, Slovakia abandoned its flat tax regime, and Slovenia levied a temporary top tax rate of 50 per cent from 2013 to 2015. In contrast, the Romanian flat tax regime has remained in place since 2005 and no changes have been applied in Poland since the reduction of the upper tax rate from 40 to 32 per cent in 2009. (European Commission 2009-2016)

## **B.3. Tax burden increased also for lower income groups**

An increased contribution by high income earners was accompanied by tax raising measures also for lower income groups. Especially in those countries suffering from strong budgetary pressures, such as Ireland, Portugal and Spain, significant surcharges were levied on all

income groups. This is reflected in increased average tax rates for low, medium and high income groups. In France and Italy, the average tax rate increased for high and medium income earners but was reduced for low income earners. Striking cases are the Czech Republic, Denmark, and Hungary where the tax burden increased the most for low-income tax payers. The extreme changes in Hungary reflect the introduction of the flat tax system. In Germany, Sweden, and the United Kingdom, the tax-free amount was increased, and Finland lowered tax rates on all income groups, which led to a reduced tax burden across income groups. (European Commission 2009-2015). On average, the tax burden increased slightly for all income groups in the European Union (figure 2).

Figure 2: Change in average tax rate on different income groups, 2008-2015



Source: OECD (2016c), own calculation

## **C. Taxation of capital income of individuals**

### **C.1. Dualisation of the income tax**

In many EU countries, certain types of capital income of individuals (such as interests, dividends and capital gains) are excluded from progressive income taxation (e.g. Austria, Belgium, Germany, Greece, Italy, Luxembourg, the Netherlands, Sweden).

For example, in the case of Germany, this implies that the maximum tax burden on interest income and capital gains is 26.4 per cent as opposed to a top statutory personal income tax rate of 47.5 per cent paid on employment (or self-employment) income. In Italy, interest income and capital gains are taxed at a maximum rate of 26 per cent whereas the top statutory personal income tax rate amounts to 48.9 per cent (table 1).

The relative tax relief on capital income implies a deviation from the comprehensive income approach which stands for the idea that everyone should be taxed according to his/her ability to pay (see for example Rosen & Gayer 2008, p. 382). Wealthy households tend to benefit more from tax advantages for capital income because capital income contributes a higher share to their overall income (Schlenker & Schmid 2013, p. 8). The favourable treatment of capital gains might especially privilege top executives if their remuneration (e.g. in the form of shares) is taxed as capital gains rather than employment income (Matthews 2011, p. 29).

As Schratzenstaller (2004, p. 23) points out, since the early 1980s many West European countries have reformed their taxation of capital income moving away from the comprehensive income approach towards dualisation of the income tax. While the shift in taxation methods towards a preferential treatment of capital income is an important issue in the West European countries where the degree of progressivity in income taxation is relatively high, many East European countries such as the Czech Republic, Estonia, Hungary, and Slovakia anyway adopted generally less progressive tax systems so that the top tax rates for employment income and capital income were equally low in 2015 (between 10 and 25 per cent).

In contrast, certain types of interests are still taxed progressively under the comprehensive income approach in Denmark, France, Ireland, and the United Kingdom (EC 2016c, Deloitte 2016). Capital gains are most frequently taxed at a rate lower than the individual marginal tax rate. Additionally, manifold tax reliefs apply for different types of capital gains. Capital gains of individuals from the sale of shares remain untaxed for example in Belgium, the Czech Republic, Luxembourg, and Slovakia (table 1).

Table 1: Maximum tax burden on employment and capital income, 2016

	<i>top tax rate on employment income</i>	<i>maximum tax rate on interests*</i>	<i>maximum tax rate on capital gains from movable property**</i>
<b>Austria</b>	50	27.5	27.5
<b>Belgium</b>	53.7	27	0
<b>Bulgaria</b>	10	0	10
<b>Croatia</b>	47.2	0	12
<b>Cyprus</b>	35	0	30
<b>Czech Republic</b>	22	15	0
<b>Denmark</b>	56.2	56.2	42
<b>Estonia</b>	20	20	20
<b>Finland</b>	51.6	30	33
<b>France</b>	50.2	50.2	50.2
<b>Germany</b>	47.48	26.4	26.4
<b>Greece</b>	48	15	15
<b>Hungary</b>	15	15	15
<b>Ireland</b>	48	48	33
<b>Italy</b>	48.8	26	26
<b>Latvia</b>	23	15	15
<b>Lithuania</b>	15	15	15
<b>Luxembourg</b>	43.6	n/a	0
<b>Malta</b>	35	15	35
<b>Netherlands</b>	52	30	30
<b>Poland</b>	32	19	32
<b>Portugal</b>	56.5	28	28
<b>Romania</b>	16	16	16
<b>Slovakia</b>	25	19	0
<b>Slovenia</b>	50	0	25
<b>Spain</b>	45	23	23
<b>Sweden</b>	57.1	30	30
<b>United Kingdom</b>	45	45	20
<b>EU-28</b>	<b>37</b>	<b>18</b>	<b>18</b>

\* INTERESTS ON CORPORATE AND GOVERNMENT BONDS

\*\* HIGHER RATES MAY BE APPLICABLE FOR SHORT-TERM CAPITAL GAINS (SPECULATION TAX);

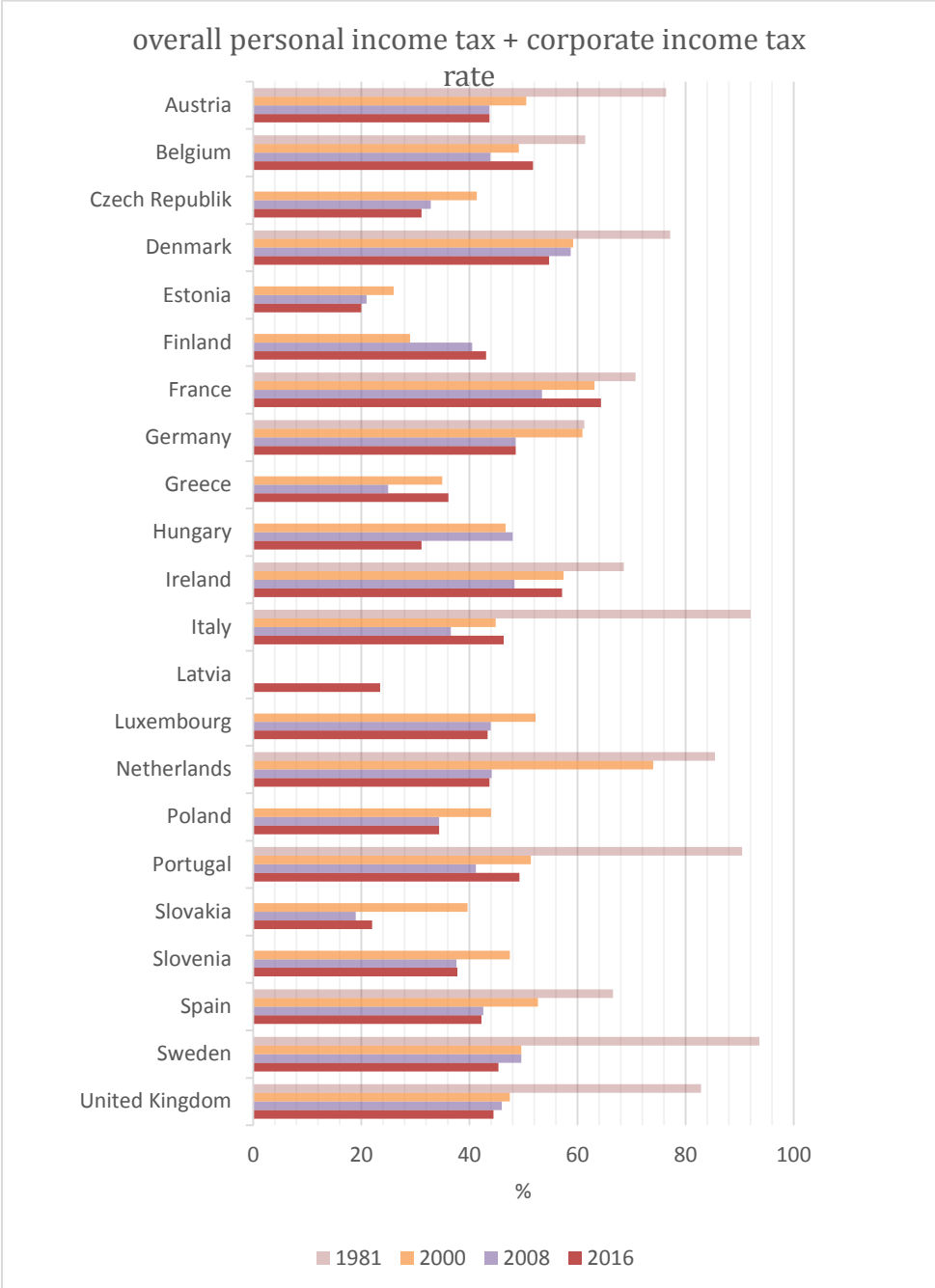
Sources: EC (2016c), Deloitte (2016), KPMG (2016)

With respect to the taxation of dividends on an individual level, one has to keep in mind that usually dividends are already taxed in the form of profits on the corporate level. With the aim of avoiding double taxation, different imputation systems or tax relief systems (e.g. reducing the tax base or tax rate on the personal level) exist and complicate international comparisons. Many European countries have switched from imputation systems to modified classical or shareholder relief systems that tax income from dividends at preferential rates as compared to employment income (Brys et al. 2011, p. 6).

Since 1981, the maximum overall tax burden on dividends has declined significantly (figure

3), a fact that can be explained by declining corporate income tax rates, and declining top personal income tax rates in combination with increasing efforts to avoid double taxation.

Figure 3: Maximum tax burden on dividend income, 1981-2016



Source: OECD (2016b)



## **C.2. Tax increases after the crisis**

It has frequently been argued that it was impossible to increase capital income taxes, because the high mobility of capital would allow capital owners to evade income taxes, anyway. However, it seems that in the face of increased budgetary pressure, policy makers have attached less importance to this argument. In several countries, tax rates on capital income have been increased since 2008. For example, Austria increased the tax rates on interests and capital gains from 25 to 27.5 per cent, Belgium increased the tax rates on interest and dividends from 15 to 27 per cent and has recently introduced a 33 per cent tax on short-term capital gains. Croatia introduced a capital gains tax of 12 per cent in 2016. Also, Finland increased the tax rate on capital income from 28 to 30 per cent and introduced a slight progression with an additional rate of 34 per cent for capital gains. In Ireland, tax rates on capital gains were increased in two steps from 20 to 33 per cent. Italy increased the tax rates on capital incomes to 26 per cent, Portugal to 28 per cent, and Spain introduced two progressive rates of 19 and 21 and 23 per cent<sup>3</sup>. Since 2013, France has re-integrated capital income into the progressive income tax scheme, even though certain exemptions apply. This recent tendency of increased capital income taxation is also reflected in the increased maximum tax burden on dividend income in Belgium, Finland, France, Greece, Ireland, Italy, Portugal, and Slovakia since 2008. However, in most cases, taxes remain below their 2000 levels and clearly below their 1981 levels (figure 3).

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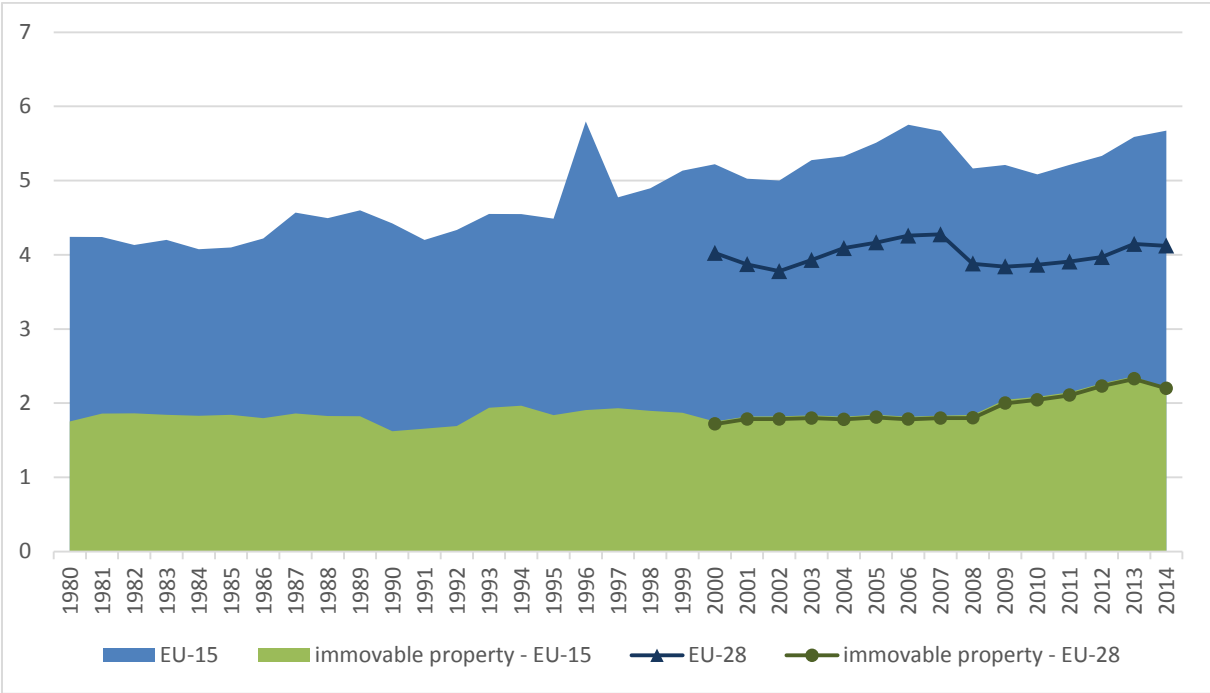
<sup>3</sup> From 2011 to 2013 three rates of 21, 25, and 27 per cent applied.

# D. Taxes on Property

## D.1. Trends in EU Countries

On average, the revenues from property taxes have increased slightly in EU-15 countries from 1.4 per cent of GDP in 1980 to 1.8 per cent in 2014. To a large extent, this increase occurred after 2008. The share of property taxes in total taxation has increased more continuously over the last decades, dropped in 2007 but has recovered since then (figure 4).

Figure 4: Property taxes as % of total taxation



Source: OECD (2016), EC (2016a)

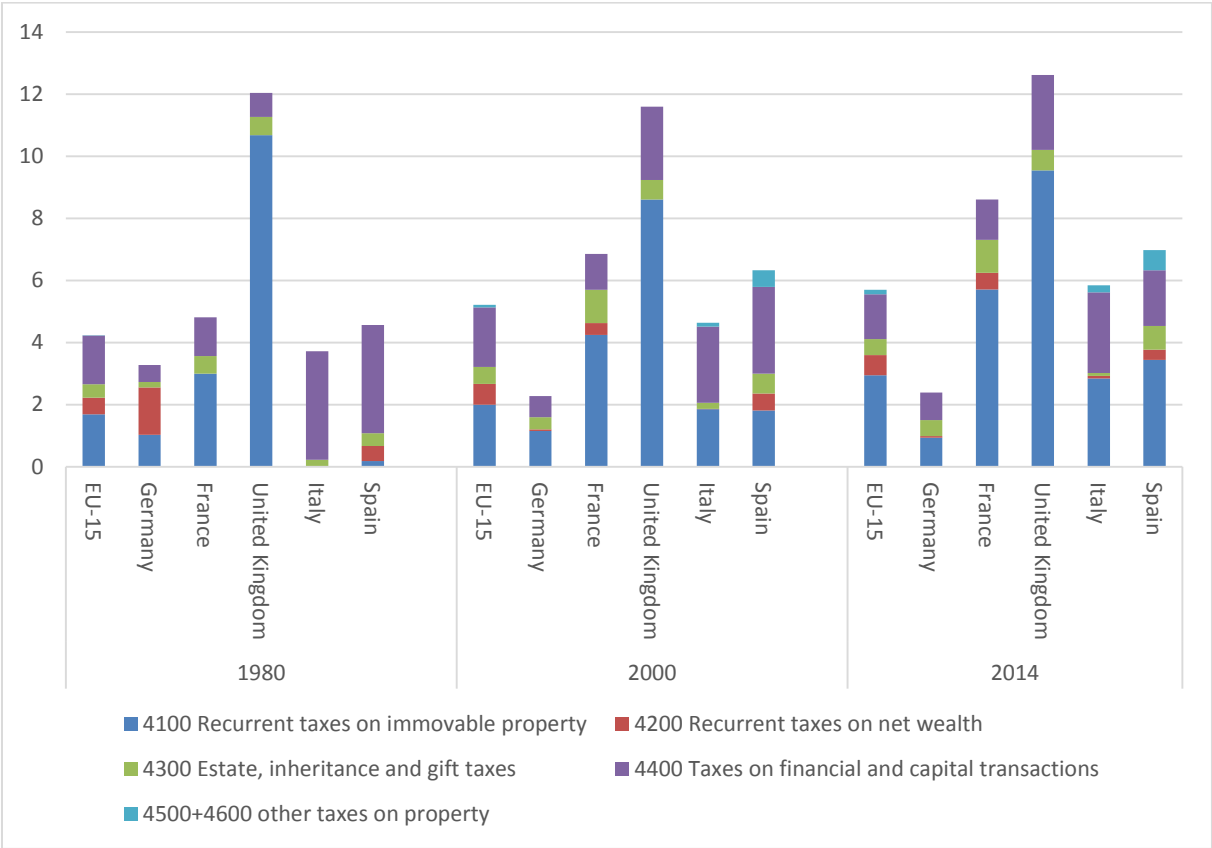
This development was mainly driven by an increasing contribution of taxes on immovable property whereas the contribution of taxes on financial and capital transactions dropped substantially in 2007 and have not recovered, yet. Other types of property taxes such as recurrent taxes on net wealth, estate, inheritance and gift taxes, and non-recurrent taxes on property contribute little to total tax revenues (between 0.1 and 0.5 per cent on average) and have remained broadly unchanged over time. The contribution of property taxes to total taxes is particularly low in Germany and has declined further over time as compared to the EU average (figure 5). At first glance, the share of property taxes in total taxation seems very high in the United Kingdom. This is because for certain municipal tasks, levies accrue that are linked to the value of real estate. These are considered property taxes in the OECD’s tax statistics, a fact which might overstate their level when compared to other countries

(Schatzenstaller 2013, p. 20).

The relative decline of taxes on financial and capital transactions seems to be driven by economic effects rather than by tax reforms and occurred primarily in Greece, Ireland, the Netherlands, Spain and Hungary. A rising share of taxes on immovable property can be observed in Belgium, Denmark, Finland, France, Greece, Ireland, Italy, Portugal, the Czech Republic, and Hungary. It seems to be driven by tax reforms, at least to some extent, as for example, Belgium, the Czech Republic and Portugal increased tax rates on immovable property. Greece, re-introduced a progressive tax on immovable property, and Slovenia adopted a new real estate tax. In Spain, the cadastral values of real estate were updated and a temporary surcharge was levied on real estate for 2012 and 2013. (EC 2009-2015). “The United Kingdom introduced a 7% rate of the Stamp Duty Land Tax applicable to the purchase of residential property with a value above GBP 2 million (€2.5 million)” (EC 2012, p. 30) and thereby increased the progressivity of its property tax schedule in 2012.

Also, in Latvia and Lithuania which are not included in the OECD dataset, tax rates were increased, and, in the case of Lithuania, the tax base was broadened (EC 2009-2015).

Figure 5: The changing structure of property tax revenues



Source: OECD (2016a)

A trend towards higher taxation of immovable property can thus be observed in the EU which has driven up the total contribution of property taxes to total taxation. Notwithstanding the first impression that equity considerations might have played a role in this development, the overall contribution of property taxes is sobering if compared to estimates of the growth of private wealth over the last decades. Piketty and Zucman (2013) suggest that since 1980 the ratio of private wealth to national income has risen constantly in Europe, notably, from about 330 per cent of GNI in 1980 to about 550 per cent in 2010. Individual country estimations indicate that private wealth has risen from 300 to 560 per cent of GNI in France, from about 300 to 400 per cent in Germany, from about 300 to 650 per cent in Italy, and from 300 to 420 per cent in the United Kingdom. On average, private wealth as a share of GNI has thus increased by approximately 70 per cent in these countries whereas property taxes as a share of GDP have increased only by about 26 per cent in the same period. This is of course a very blunt approximation. However, it suggests that the effective taxation of private wealth has actually declined significantly over the past decades.

According to Schratzenstaller (2013), it is difficult to internationally compare the development of the effective tax burden on wealth because of limited data availability. However, relying on data from 2007-09, she computes rather low effective tax burdens of 0.21 per cent for Germany, 0.37 per cent for Italy, 0.79 per cent for UK (Ibid., p. 30).

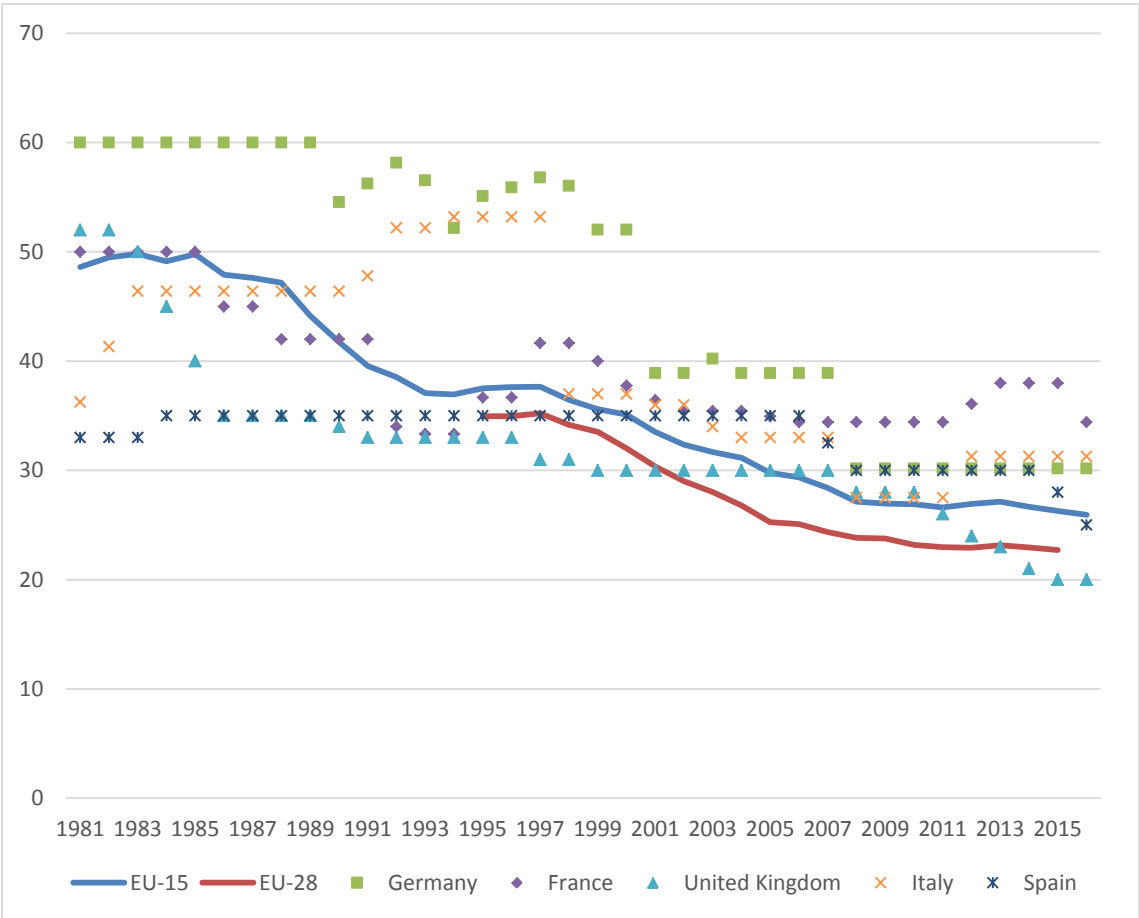
## **E. Taxation of corporate income**

### **E.1. Decades of declining nominal tax rates**

The taxation of corporate income is a highly debated issue today. On the one hand, numerous examples of the aggressive tax planning techniques of multinational firms such as Ikea, Starbucks and co. were unveiled by the media. On the other hand, based on doubtful arguments, governments across Europe have committed themselves to corporate tax competition which has resulted in nearly three decades of international raise to the bottom in terms of nominal corporate tax rates. In EU-15 countries, the average combined corporate income tax rate declined by about 23 percentage points from 48.6 in 1981 to 25.9 in 2016. The EU-28 average was 22.7 in 2016 (figure 6). The average reflects the individual trends quite well as virtually all countries in the sample adopted considerable cuts in the corporate tax rate.

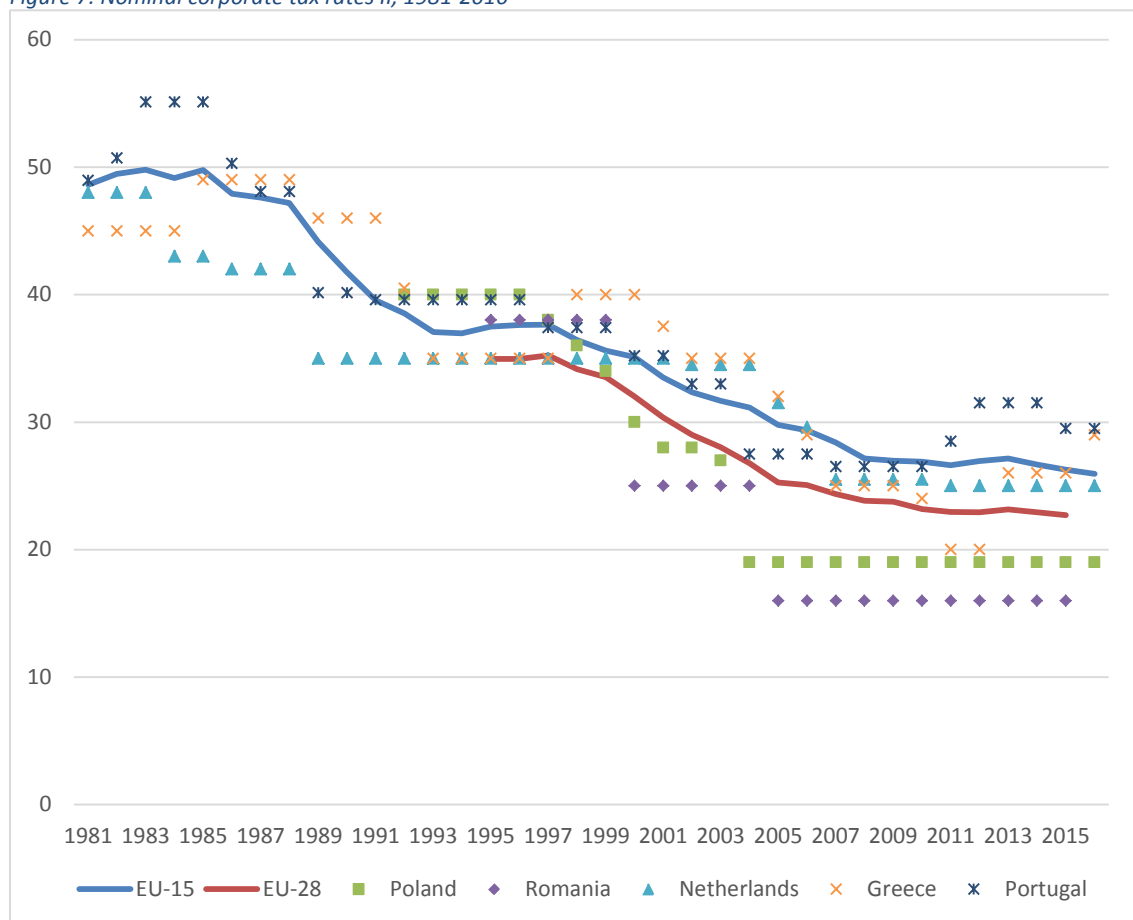
Remarkably, since the economic crisis the raise to the bottom in nominal tax rates seems to have slowed down. In 17 countries, nominal tax rates remained stable or increased slightly. Nominal tax rates remained unchanged in Austria, Belgium, Bulgaria, Croatia, Germany, Ireland, Latvia, Lithuania, Malta, Poland, Romania and increased slightly in Cyprus, France, Greece, Italy, Portugal, and Slovakia. However, Finland, Slovenia, Spain, Sweden, and the United Kingdom cut nominal tax rates significantly since 2008 (between 5 and 8 percentage points), and minor reductions were also adopted in Czech Republic, Denmark, Estonia, Hungary, Luxembourg, Netherlands, and Slovenia (between 0.4 and 2 per cent) (OECD 2016b). Accordingly, the EU-28 average declined only by 1.1 percentage points between 2008 and 2016.

Figure 6: Nominal corporate tax rates I, 1981-2016



Sources: OECD (2016b), EC (2016a)

Figure 7: Nominal corporate tax rates II, 1981-2016



Sources: OECD (2016b), EC (2016a)

However, nominal tax rates are hardly comparable in between countries as the rules for the tax base calculation differ internationally and also change over time. This is why average and marginal effective tax rates are considered as well.

## E.2. Effective corporate tax rates reflect the negative trend

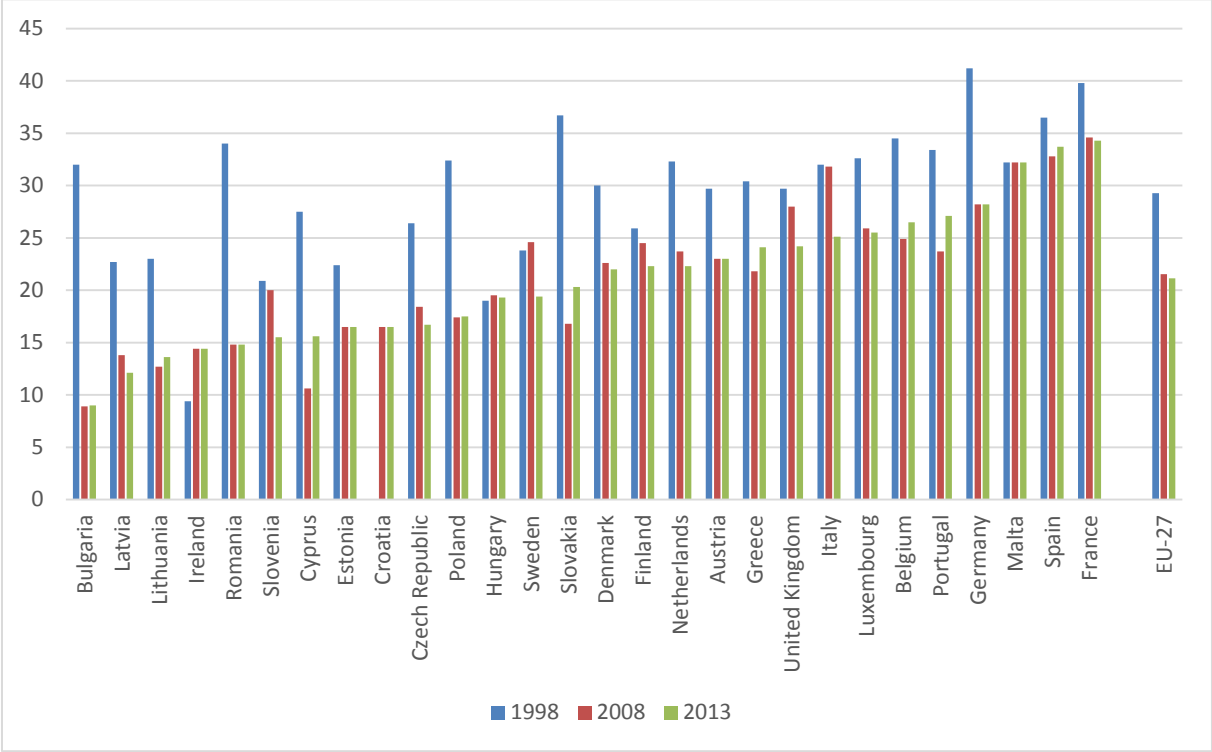
Based on microeconomic models of investment Spengel et al. (2014) compute forward-looking effective tax rates which also take into account important rules for calculating the tax due such as capital allowances and valuation rules.

The Effective Average Tax Rates (EATR) and the Effective Marginal Tax Rates (EMTR) on new investment are available for the period 1998-2013. In the given period, both measures decreased on average which is consistent with the declining nominal tax rates. Still, the decrease is slightly weaker which might indicate that the reduction of nominal rates was to some extent compensated by a broadening of the tax base. In the EU-28, the average nominal tax rate declined by about 32 per cent between 1998 and 2013 while EMTR and EATR declined by about 30 and 28 per cent, respectively. A striking exception is Ireland where,

according to Spengel et al., both the EMTR and EATR increased clearly since 1998 which contrasts with the pronounced fall of the nominal rate.

The stabilisation of nominal tax rates since the crisis is also mirrored by the effective rates which remained constant in Austria, Estonia, Germany, and increased in Belgium, Greece, Poland, Portugal, Slovakia, and Spain between 2008 and 2013. In the face of economic recession, new tax incentives were introduced with the aim of inducing private sector investment. For example, Bulgaria, Croatia, Lithuania, Portugal, and the United Kingdom adopted tax advantages for investment, and Denmark, Greece, Italy, the Netherlands, Romania, Slovakia, Spain, and the United Kingdom for R&D expenditures. France and Italy introduced tax reliefs for newly recruiting companies.

Figure 8: Effective average tax rates



Source: Spengel et al. 2014



Table 2: Changes in corporate taxes, 1998-2013

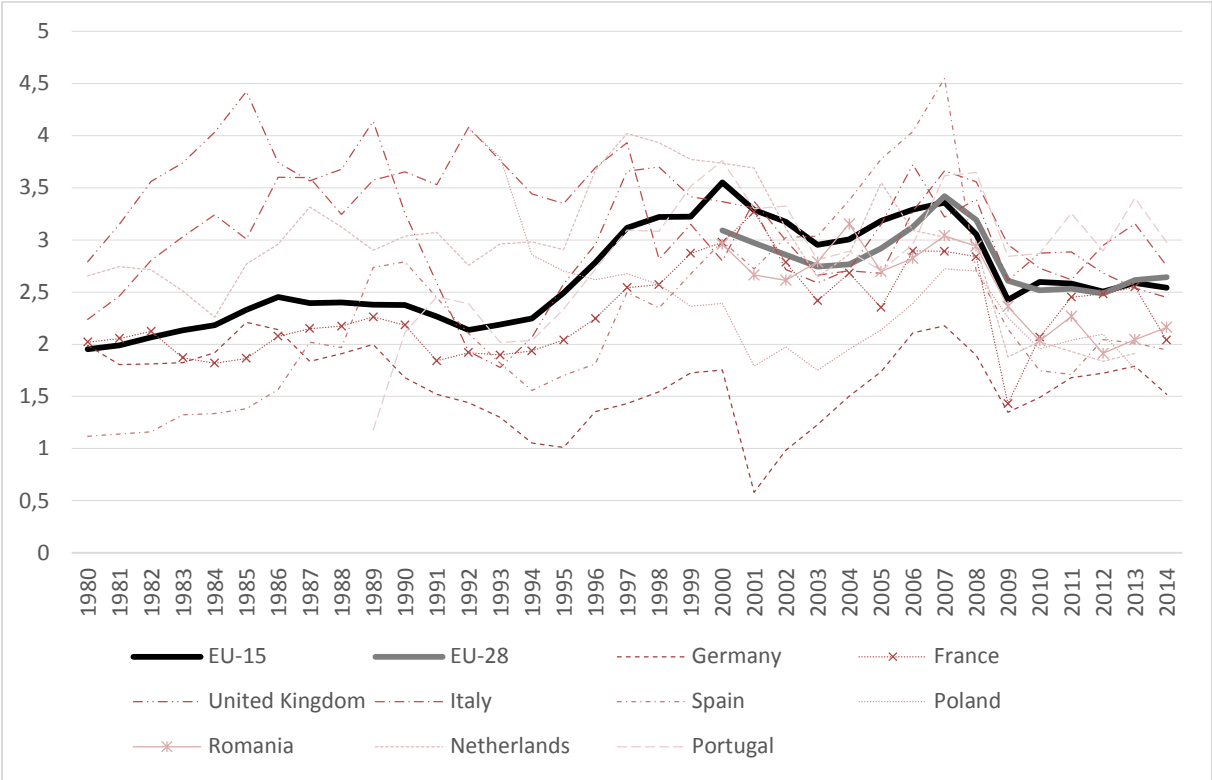
<i>change in percentage points</i>	<i>Nominal tax rate</i>	<i>EATR</i>	<i>EMTR</i>	<i>Revenues (% of total taxation)</i>
<i>Austria</i>	-9.0	-6.7	-1.8	0.3
<i>Belgium</i>	-6.2	-8	-16.8	-0.6
<i>Bulgaria</i>	-27.0	-23	-15	
<i>Croatia</i>	-15.0			
<i>Cyprus</i>	-12.5	-11.9	-9.1	
<i>Czech Republic</i>	-16.0	-9.7	-12.4	0.4
<i>Denmark</i>	-9.0	-8	-6.8	-0.6
<i>Estonia</i>	-5.0	-5.9	-9.8	-1.7
<i>Finland</i>	-3.5	-3.6	-4.2	-3.9
<i>France</i>	-3.7	-5.5	-7.2	-0.3
<i>Germany</i>	-25.9	-13	-15.4	0.5
<i>Greece</i>	-14.0	-6.3	-0.7	-4.7
<i>Hungary</i>	1.0	0.3	-2.1	-1.9
<i>Ireland</i>	-19.5	5	5.4	-2.1
<i>Italy</i>	-5.7	-6.9	1.5	0.2
<i>Latvia</i>	-10.0	-10.6	-13.6	
<i>Lithuania</i>	-14.0	-9.4	3.4	
<i>Luxembourg</i>	-8.2	-7.1	-5.5	-7.0
<i>Malta</i>	0.0	0	0	0.0
<i>Netherlands</i>	-10.0	-10	-11.5	-5.6
<i>Poland</i>	-17.0	-14.9	-11.5	-1.7
<i>Portugal</i>	-5.9	-6.3	-4.7	-0.3
<i>Romania</i>	-22.0	-19.2	-14.1	0.0
<i>Slovakia</i>	-17.0	-16.4	-17.3	0.7
<i>Slovenia</i>	-8.0	-5.4	1.1	0.6
<i>Spain</i>	-5.0	-2.8	-0.6	-1.1
<i>Sweden</i>	-6.0	-4.4	-3.4	0.7
<i>United Kingdom</i>	-8.0	-5.5	-0.8	-3.2
<b>Mean</b>	-10.8	-8.0	-6.4	-1.4
<b>EU-15</b>	-9.3	-5.9	-4.8	-1.9

Source: EC (2016a), OECD (2016a), Spengel et al. (2014)

### E.3. Increasing revenues – a corporate tax puzzle?

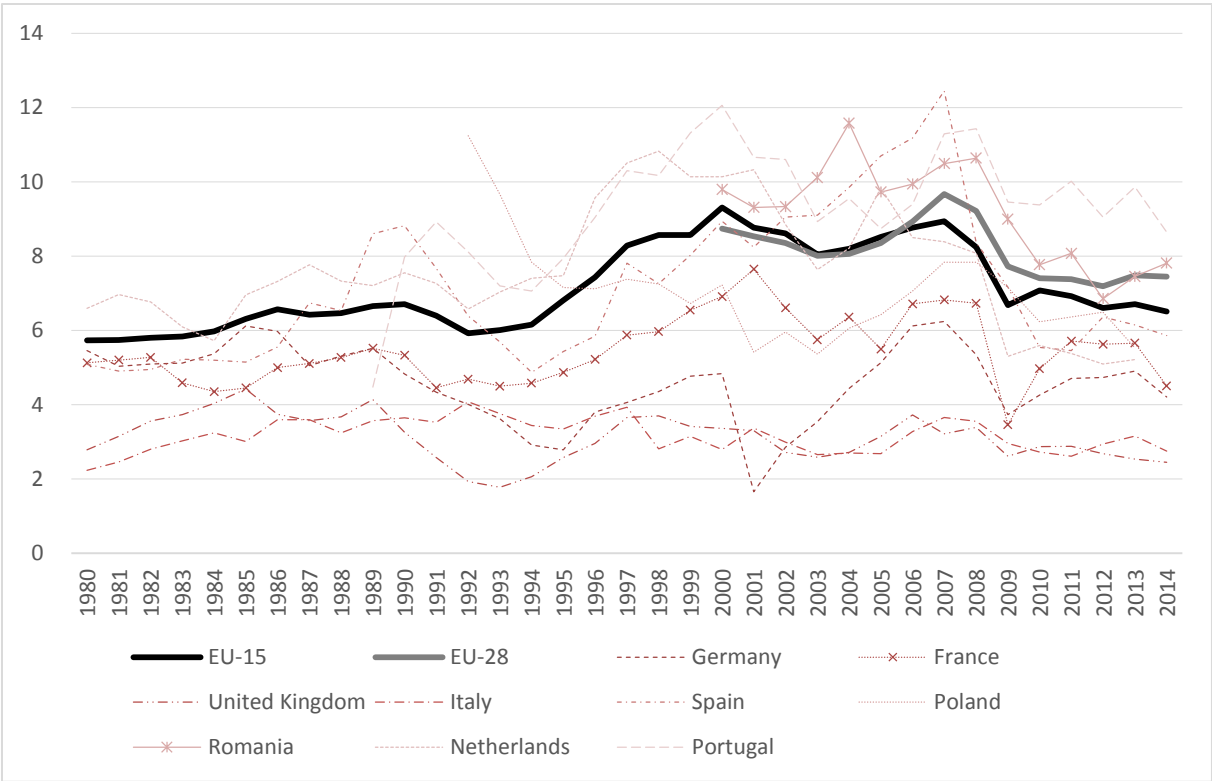
Until 2007, corporate taxes as a percentage of GDP increased in all EU-15 countries as compared to 1980 levels, except for Luxembourg. Despite declining considerably in 2008/9, the average level in 2014 was still more than 0.6 percentage points higher than in 1980. The same holds for the share of corporate taxes in total taxation. In the EU-15, it increased from 5.7 per cent in 1980 to 8.9 in 2007 and then declined to 6.5 in 2014. Revenues dropped significantly between 2008 and 2010 and have broadly stagnated since then. In the EU-27 a similar pattern emerged after 2007 (figures 9 and 10).

Figure 9: Corporate tax revenues as % GDP



Source: OECD (2016a), EC (2016a)

Figure 10: Corporate taxes as % of total taxation



Source: OECD (2016a), EC (2016a)

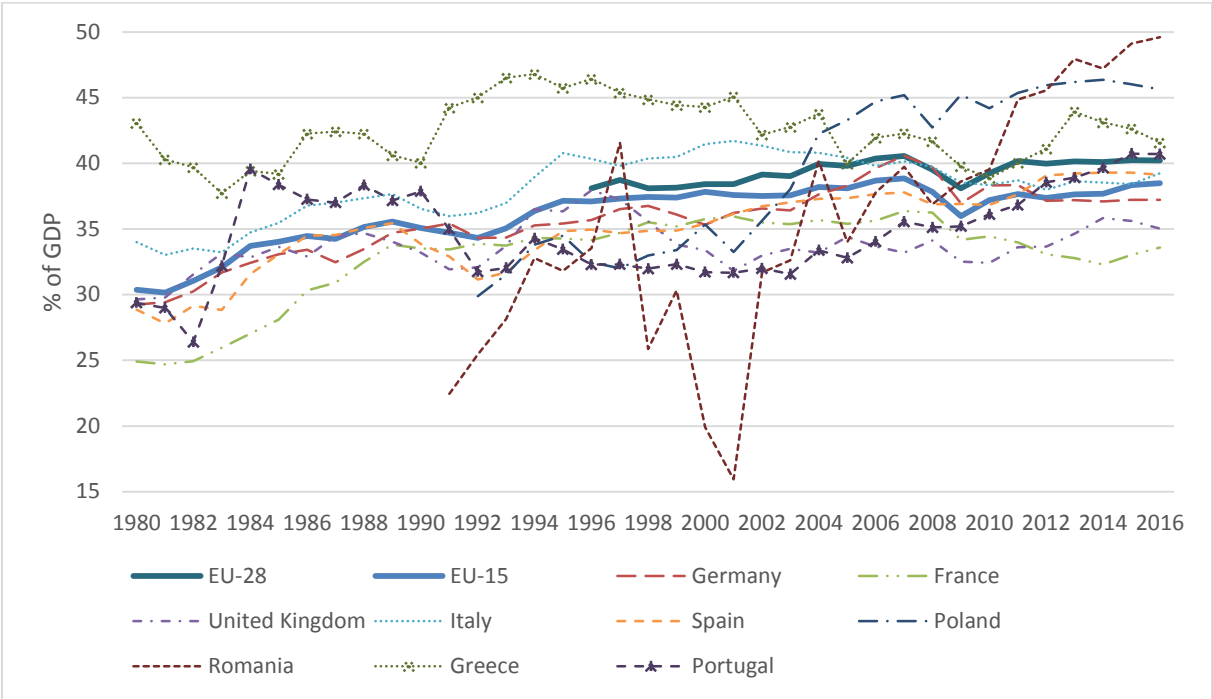
Corporate tax revenues are subject to strong cyclical fluctuations which is why it is difficult to identify tax policy effects for individual countries. Until 2007, the increasing corporate tax revenues despite continued tax reductions gave rise to discussions about how these two observations might be reconciled. Theoretically, declining nominal rates might have been accompanied by tax base broadening measures so that the effective tax burden did not change. The declining EMTR and EATR do not seem to support this argument but are only available since 1998. Another potential explanation is that the taxable incomes (corporate profits) have increased to such an extent that despite lower effective taxation, tax revenues remained stable. For example, the European Commission points to the possibility that “stimulated by the steep fall in corporate tax rates, which in some countries are now well below the top PIT rate, growing incorporatisation has been boosting CIT revenues at the expense of the personal income tax.” (EC 2010, p. 23). In a 2004 paper, Devereux et al. analyse the same question for the United Kingdom where revenues from corporate taxes increased between 1980 and 2002 while the nominal tax rate decreased. They observe that tax base-broadening measures can only partially explain this development and conclude that a rising share of corporate profits in GDP might be responsible for the “puzzle in UK corporation tax” (Devereux et al. 2004, p. 1).

They relate the rising share of corporate profits to the growth of the corporate sector on the one hand and to the assumed rising profitability in the financial sector on the other hand.

For the case of Germany, Bach (2013, p. 6) states that in absolute terms tax revenues from corporations have increased by 62 per cent while profits of corporations have increased by 140 per cent between 1992 and 2008. This might also indicate that increasing profits allowed the revenues from corporate taxes to increase despite declining nominal and effective tax rates.

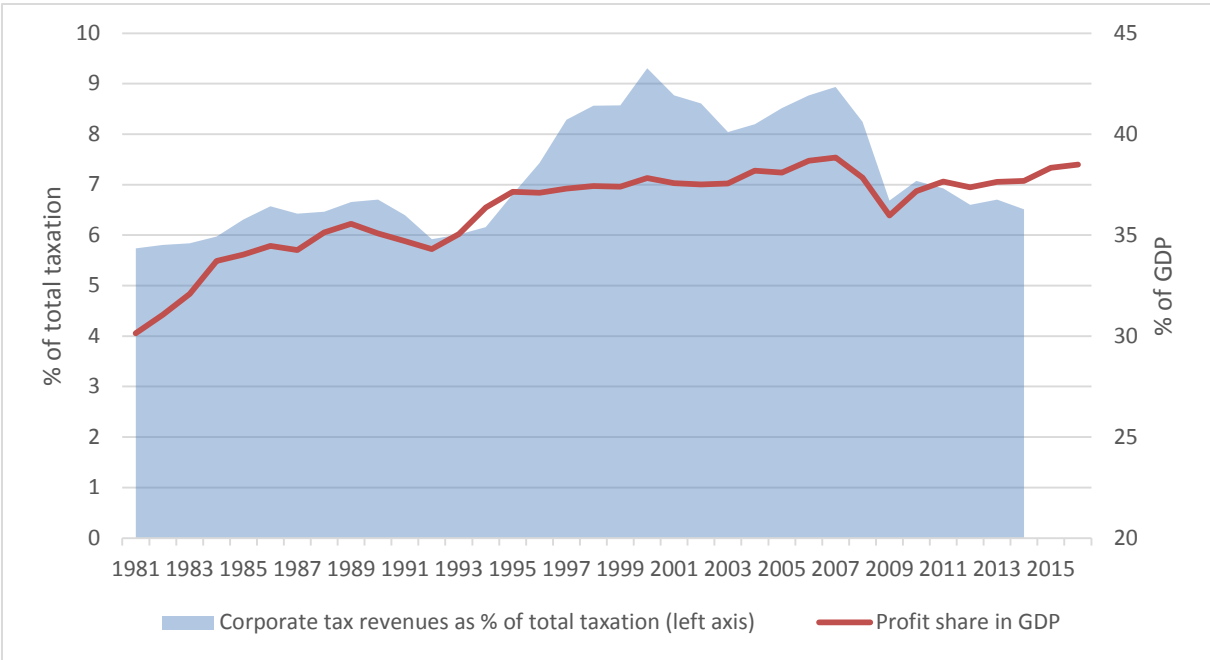
During the last decades, the profit share of GDP has increased in many EU countries, which might partly explain increasing or stable revenues from corporate taxes as a percentage of GDP (figures 11, 12). In 2009, both the capital share in GDP and corporate tax revenues in per cent of total taxation hit rock bottom. While the profit share recovered to some extent between 2009 and 2014, the share of corporate tax revenues stagnated with a slight downward tendency.

Figure 11: Profit shares in GDP



Source: EC (2016b), own calculation

Figure 12: The corporate tax puzzle, EU-15



Source: OECD (2016a), EC (2016b), own calculation

**E.6. Tax competition and tax base erosion?**

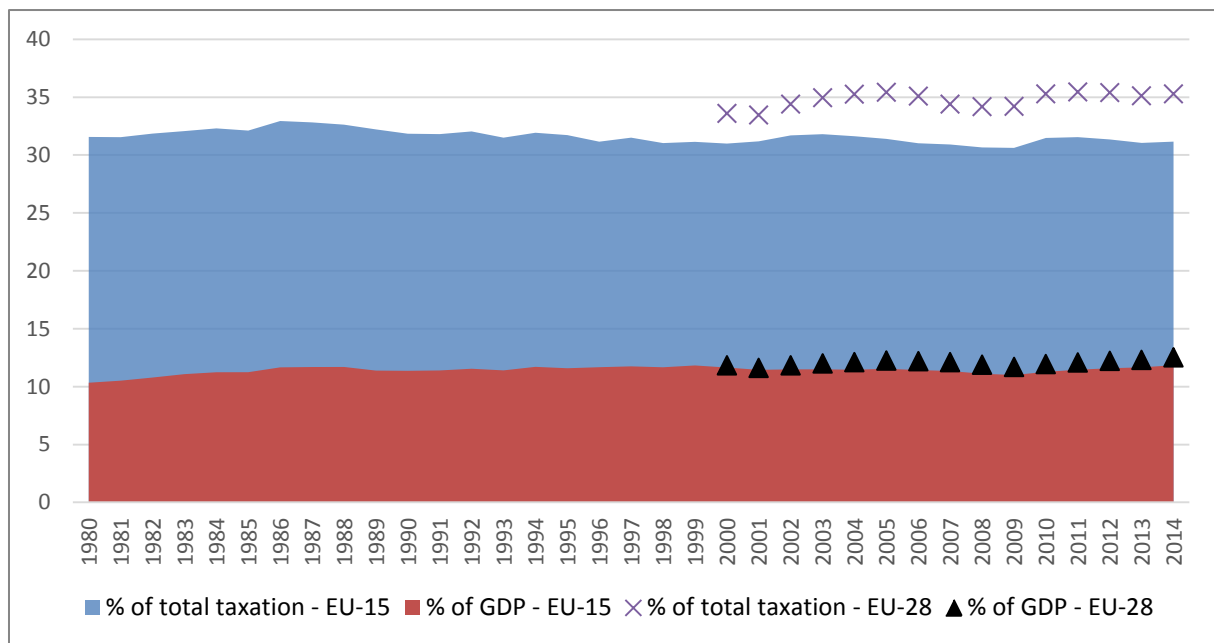
In the past, governments seemed to be eager to reduce nominal corporate tax rates further and further. However, since the economic crisis, the decline of the average nominal tax rate has slowed down. The stabilisation of the nominal tax rates might be linked to the increased pressure on public budgets in the aftermath of the financial crisis leaving less scope for further cuts. At the same time, governments have allowed for further (targeted) tax reliefs as a response to the crisis. Even though it is often argued that with international tax competition tax bases are eroding in the developed countries, the presented data does at first glance not provide alarming evidence for this scenario. Throughout the last 30 years, corporate profits were an important source of public revenues which, despite some fluctuations, remained relatively stable in most OECD countries or even increased.

## F. Taxation of Consumption

### F.1. Trends in EU countries

Consumption taxes account for a considerable share of average tax revenues in EU-15 countries. On average their share in total taxation decreased slightly from 31.6 per cent in 1980 to 30.6 in 2014, however, subject to minor fluctuations over time. In the EU-28 the weight of consumption taxes is on average more pronounced. In 2014, it accounted for 35.3 per cent of total tax revenues (figure 13). While the overall share of revenues remained broadly stable, the contribution of the different components of consumption tax has changed: The share of specific taxes on consumption such as tobacco, alcoholic drinks, and fuels has decreased while the weight of general consumption taxes such as the value-added tax has increased (figure 14).

Figure 13: Consumption tax revenues

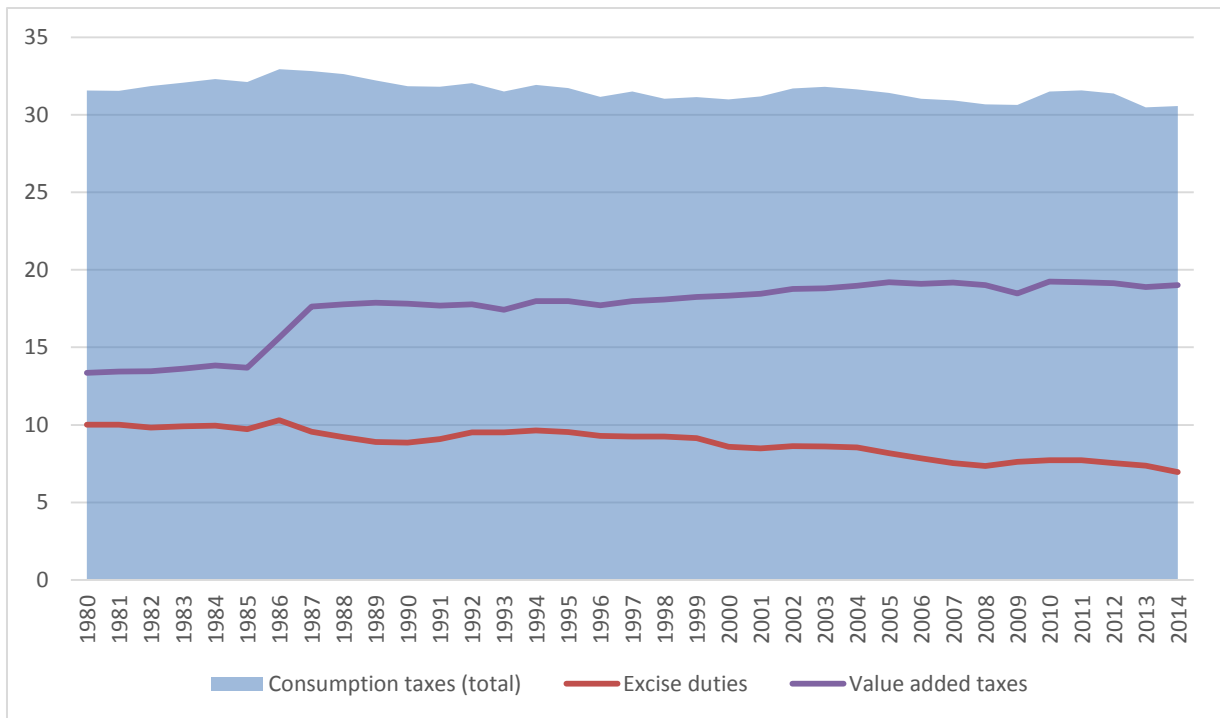


Sources: OECD (2016a), EC (2016a)

The average standard VAT rate in EU countries increased from 17.6 per cent in 1980<sup>4</sup> to 21.6 in 2015. It broadly stagnated until 2008 with a slight upward tendency but then started increasing sharply since 2008 as several countries adopted fiscal consolidation measures in the aftermath of the financial crisis (figure 15).

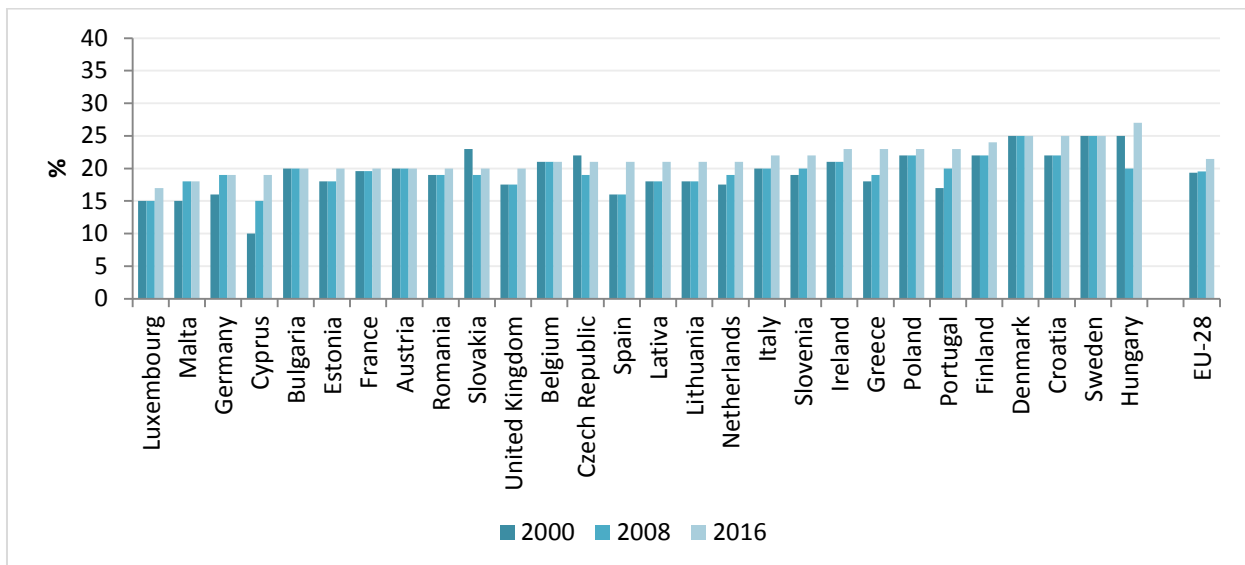
<sup>4</sup> Note that only a very limited sample of 11 EU countries is available for 1980.

Figure 14: Consumption tax revenues and sub categories, EU-15



Sources: OECD (2016a)

Figure 15: Standard VAT rates



Source: EC (2016a)

## **F.2. Rising VAT rates since the European crisis**

Since 2009, revenue raising measures relied heavily on indirect taxes on private consumption (EC 2013a, p. 30). 20 out of 28 countries raised the regular or reduced VAT rates once or several times. In the other countries, and generally in the large majority of countries, excises on alcohol and tobacco, electricity and fuels were increased. Accordingly, the share of consumption taxes in total tax revenues increased from 33.8, and 33.6 per cent in the years 2000 and 2008 to 34.4 per cent in 2014 (EC 2016c)<sup>5</sup>. International institutions such as the OECD and the European Commission have frequently praised and recommended a greater reliance on indirect taxes (e.g. OECD 2012, p. 10). Taxes on consumption would, supposedly, distort labour supply and investment decisions the least. For this reason, according to tax debates based on neoclassical models, they were considered as especially growth friendly taxes. The fact that consumption taxes place a relatively more heavy burden on lower income groups, is usually treated as collateral damage that might be compensated by additional social transfers. This view has been proven problematic for two reasons. First, in periods of budgetary pressures, additional transfers to the low-income groups are typically not put in place. Second, higher consumption taxes increase the tax burden also for medium income households, who are not eligible to social transfers but who spend a relatively larger share of their income on consumption than wealthy households.

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<sup>5</sup> These are simple arithmetic averages, which since recently are not reported by the European Commission, anymore.



## **G. A progressive turn in EU tax policy?**

Public economics tended to attach less importance to the redistributive role of tax policy over the last decades. In parallel, redistributive motives have played only a minor role in reforming tax systems in the EU since the beginning of the 1980s. This was reflected in declining income tax rates for top income earners, the preferential treatment of capital over labour income, and the modest contribution of property taxes in the face of accelerating private wealth accumulation in Europe.

As a consequence of the public debt crisis in Europe, some – slightly progressive – changes have occurred in the hitherto standard tax reform patterns. Budgetary pressures have led governments to, at least temporarily, stop the decline of top personal income tax rates. In several EU member states, top tax rates and taxes on private capital income have been increased, and taxes on immovable property revived or increased. Also, the raise to the bottom in corporate taxes has slowed down. On the one hand, these developments show that under pressure, the room for manoeuvre was actually not as limited as previously claimed. Despite tax competition to which governments had seemed to surrender without alternative before the crisis, fewer governments decreased corporate tax rates. At the same time, measures were brought on the way to encounter international tax evasion and avoidance.

Still, one cannot speak of a progressive turn of tax policy in the EU. The tax burden increased also for low and middle income groups, in some cases in the form of surcharges on the income tax, but in the majority of member states in the form of increased consumption taxes. Equity considerations might have played a role in recent reforms, and a contribution by high income groups might have been regarded as unavoidable. However, governments have refrained from substantial redistributive reforms, the more so as top tax rate increases were temporary in many cases whereas VAT increases were not.

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## **Impressum**

**Publisher:** Hans-Böckler-Stiftung, Hans-Böckler-Str. 39, 40476 Düsseldorf, Germany  
**Phone:** +49-211-7778-331, [IMK@boeckler.de](mailto:IMK@boeckler.de), <http://www.imk-boeckler.de>

**IMK Study is an online publication series available at:**  
[http://www.boeckler.de/imk\\_5023.htm](http://www.boeckler.de/imk_5023.htm)

**ISSN:** 1861-2180

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