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CORRIGENDUM

This document corrects document SWD(2016) 383 final of 22.11.2016

Correction of graphs on pages 25-27, 30-32, and 41-42. Amendment to notes on pages 40 and 44, Deletion of words 'tax authorities' on page 41.

The text shall read as follows:

COMMISSION STAFF WORKING DOCUMENT

Tax Policies in the European Union 2016 Survey

Acknowledgements

This report was prepared by DG TAXUD staff under the direction of Stephen Quest (Director-General, Taxation and Customs Union), Valère Moutarlier (Director, direct taxation, tax coordination, economic analysis and evaluation) and Gaëtan Nicodème (Head of Unit, Economic analysis, impact assessment and evaluation).

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Foreword

Two of the most pressing demands of European citizens right now are economic stability and social justice. These two objectives are inter-twined. We cannot achieve sustainable economic prosperity while current social and market imbalances persist. Nor can we redress these imbalances without an economic environment that supports jobs, growth and investment.

Taxation has a critical role to play in delivering on these twin objectives. Tax policy has been shown to have a major influence on employment decisions, investment levels and the willingness of entrepreneurs to expand. Likewise, taxation can help to address the inequities in society, not only by financing decisive spending for social mobility such as education but also by reducing market income inequalities through a progressive tax system for example.

Therefore, across Europe, tax systems need to be designed to deliver on the dual goals of fairness and economic growth. Both are equally important and their success is mutually dependent. If one lags behind, the other is weakened, hampering the overall success of the reforms. Tax systems also need to elicit trust from taxpayers. Trust that their money will be put at good use and trust that everyone pays their fair share.

The design and reform of tax systems need to take place at two levels: European and national. At national level, there is no one-size fits all approach. Each Member State needs to find the best approach to address its own specific needs, challenges and priorities. Nonetheless, there are certain general principles that apply across the board, which every Member State could take into account in reforming its tax system to make it fairer and more growth-friendly. This is where the European level brings value added.

This first edition of the Tax Policies in the EU survey contributes to the discussion on better taxation by providing a summary of recent reforms in Member States to illustrate how decision-makers are seeking to achieve these two objectives. It presents in an accessible format elements of the design and governance of Member State tax systems which influence the key characteristics of efficiency and fairness. It also puts forward and substantiates the tax policy priorities for the next European Semester cycle.

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Executive Summary

Taxation needs to be both fair and efficient. It should raise revenues allowing for redistribution and social welfare, and the provision of public goods, but should also support jobs, innovation and investment. To achieve this, tax systems therefore need to be designed to meet these dual goals of fairness and economic growth. Reforms are needed both at European and national levels.

Although there is variation between Member States, in many areas reforms appear to be moving in the right direction. However, there is still scope to improve both the fairness and the efficiency of taxation systems in the EU.

Efficiency of tax systems:

The efficiency of a tax system is influenced both by its design and its implementation. An efficient system is one that supports jobs, investment and innovation and avoids undesired tax-induced distortions in economic decisions. An efficient system also raises revenue without creating high costs for taxpayers or the tax administration.

Tax reforms can enhance efficiency by helping create an environment supportive of investment and innovation including for young, dynamic companies that foster innovation and create jobs. A coherent and coordinated approach to corporate taxation is important to reduce legal uncertainty and competitive distortions faced by companies today. At EU level action is underway to enhance the fairness and efficiency of corporate tax systems, through measures such as the Action Plan for a fair and efficient corporate tax system in the EU and the re-launch of the Common Consolidated Corporate Tax Base (CCCTB) - a business-friendly system which will deliver the simplicity and certainty needed to attract investors and encourage cross-border trade.

At national level, Member States can do more to boost investment through tax policy reforms. Designing smarter tax systems that facilitate innovation, entrepreneurship and access to finance would add to developing the right business environment for investment in the EU. This includes 1) encouraging alternative sources of financing by notably tackling the debt bias – also an objective of the Commission in its CCCTB initiative – 2) designing better fiscal incentives for entrepreneurial initiative and 3) cutting compliance costs for entrepreneurs, in particular by a) simplifying and reducing tax obligations especially for aspiring entrepreneurs and for small and young businesses, b) broadening the range of e-services and make them available in one-stop shops, c) raising awareness, informing and coaching business taxpayers to help them comply with tax rules through various channels, including social media.

Taxation can improve work incentives, help tackle long-term unemployment and ensure better redistribution. High levels of long-term unemployment and youth unemployment remain a legacy of the crisis. The steps taken by some Member States to reduce the tax burden on labour and the focus on low to middle income earners is a positive trend. However, opportunities to shift the tax burden to sources less detrimental to growth have not been fully explored in all Member States. Further and better labour tax reductions could make the difference in some Member States to help restoring employment level.

Fairness of tax systems

The fight against tax fraud, evasion and avoidance is essential to ensure fair burden-sharing, as well as to secure tax revenues for public investment, education, healthcare or welfare. In the EU alone, tens of billions of euro are still lost each year. Tackling tax abuse can create the space needed to lower taxes for honest taxpayers. At EU level, a lot of progress has been made in the fight against tax abuse, from increasing transparency on tax rulings and multinationals' tax-related information, to securing common anti-abuse measures against the most pervasive tax avoidance schemes and the Commission Action Plan on VAT.

The cross-border nature of tax evasion and avoidance and the integration of the Member States' economies call for a coordinated approach, not only through European initiatives but also through the coordination of national policies. Irrespective of progress made so far, it remains important to keep up efforts against those who cheat the system. Member States need to fight tax evasion, tax fraud and tax avoidance using a multichannel and coordinated approach. A multichannel approach means using enforcement, but also prevention, by making tax authorities more modern and digital to prevent and fight evasion, fraud and avoidance; and exploit better communication and educational measures to promote a culture of transparency and tax compliance.

The fairness agenda is much more than the fight against fraud, evasion and avoidance. Taxation also plays a role in reducing inequalities and promoting social justice. The crisis has shown that our tax-and-benefits systems can be powerful instruments to reduce market income inequalities, in particular in some Member States. In the current context of growing market income inequalities, it remains important to consider the social impact of tax systems so as to strike the right balance between efficiency and equity. Focusing labour tax cuts on groups facing the greatest employment challenges and those most responsive to tax cuts, such as the long-term unemployed, low-skilled workers and the young, can improve both the efficiency and fairness of taxation.

Structure of the report

This report presents the state of play in Member States in relation to the twin taxation priorities of efficiency and fairness. It aims to present in a clear and accessible fashion the most recent reforms and the main indicators used by the Commission to assess Member States' taxation policies in the context of the European Semester, which is the EU's annual cycle of economic policy surveillance. This is in line with the Commission's commitment to increasing the transparency and accountability of the European Semester process, as well as the use of benchmarking.

Chapter 1 provides general background information on Member States' tax systems and a description of what makes a fair and efficient tax system. Recognising that challenges are country-specific, Chapter 2 gives an overarching picture of how national taxation systems perform according to key indicators in the areas of investment, employment, tax compliance and redistribution. This aims to help Member States to find the best approach to address their own specific challenges and policy response. Chapter 3 reviews most recent tax reforms in EU countries, ending by drawing some policy recommendations for the EU as a whole alongside inspiring examples from the Member States.

1

General principles for fair & efficient tax systems

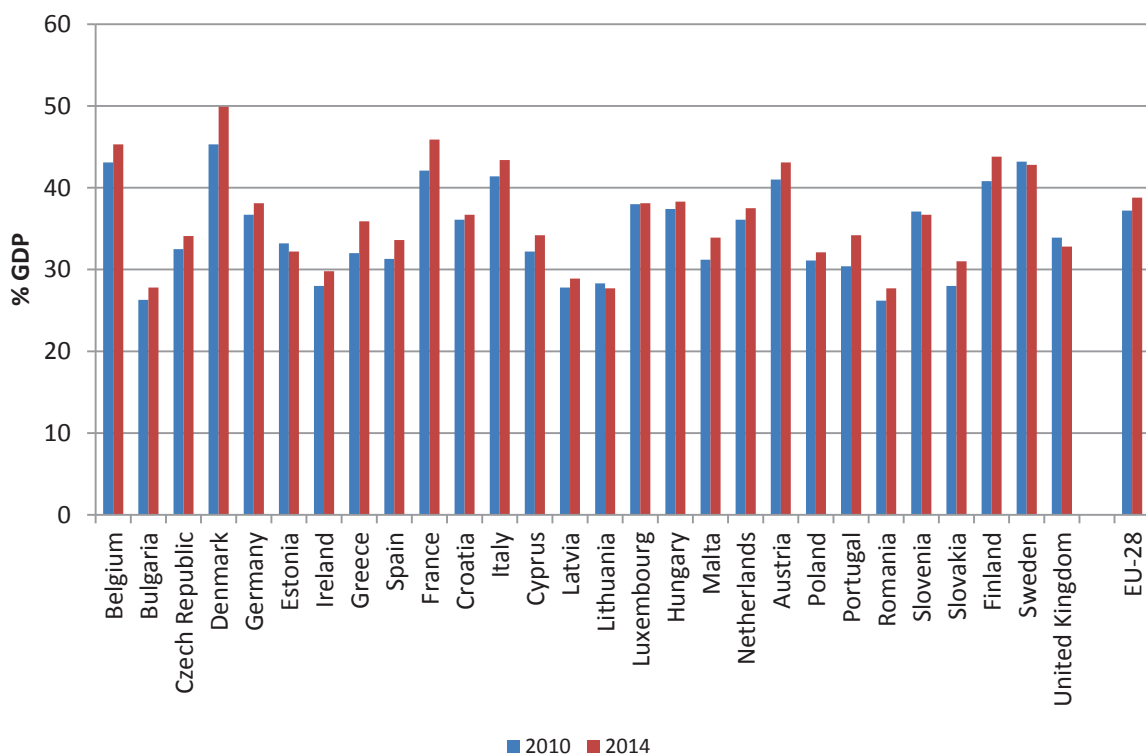
1.1 Context

A well-designed tax system is both efficient and fair. It is able to raise revenue to finance public expenditure, support growth, competitiveness and job creation, and also allows for socially-desired redistribution. An 'optimal' design involves trade-offs and necessitate prioritisation of objectives according to specific situations and choices of Member States. To ensure its legitimacy, public buy-in is crucial for planned tax policy reforms.

1.1.1 No optimal level of taxation

Strong evidence is lacking on the impact of the overall level of taxation on economic growth. The level of taxation largely reflects social choices in terms of tax revenues and government expenditure. Since 2010, the total tax revenue as a percentage of GDP has increased in most Member States. However, the level of total taxation differs between Member States. In 2014, the tax-to-GDP ratio varied between 49.9% in Denmark and 27.7% in Lithuania and Romania.

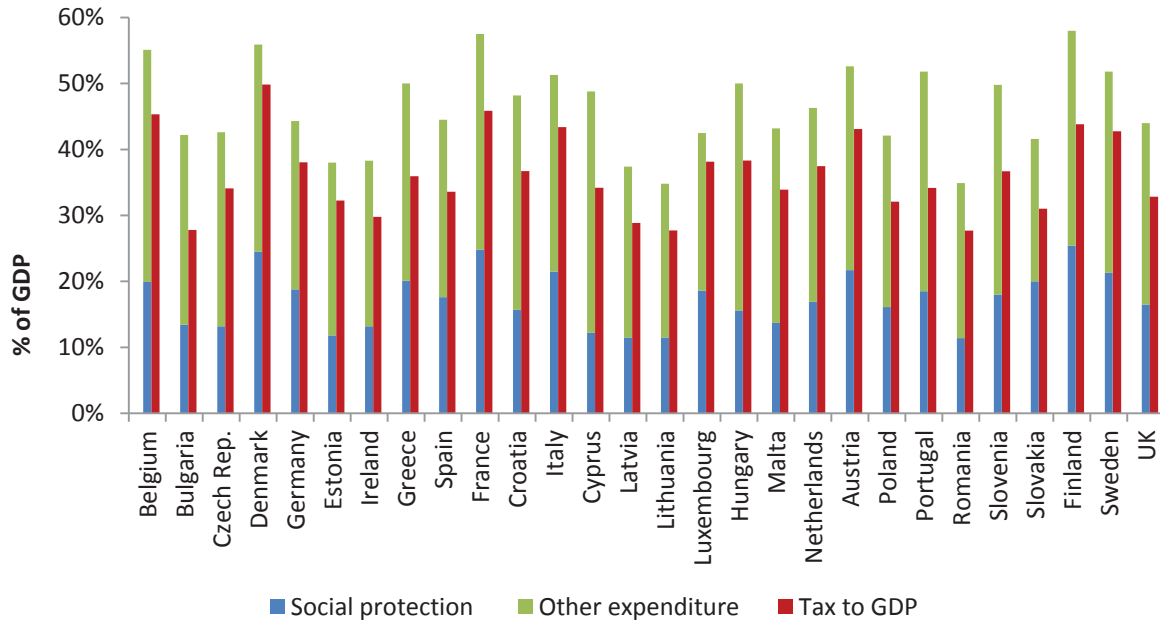
Graph 1.1: Total receipts from taxes and compulsory actual social security contributions (%GDP)



Source: European Commission (2016b), Taxation Trends in the European Union: Data for the EU Member States, Iceland and Norway. Edition 2016

There are different social models in Europe and the amount of public money necessary to finance them varies. Graph 1.2 (below) shows money spent on social protection in Member States. This ranges from about one quarter of GDP in Denmark, France and Finland to less than 12% in Estonia, Latvia, Lithuania and Romania. There is some correlation between the amount of tax collected and that of government expenditure. Yet, in 2014 all Member States spent more than earned through taxes, a crucial yet not exclusive mean to finance public budgets.

Graph 1.2: Social protection expenditure, other government expenditure & tax (%GDP), 2014



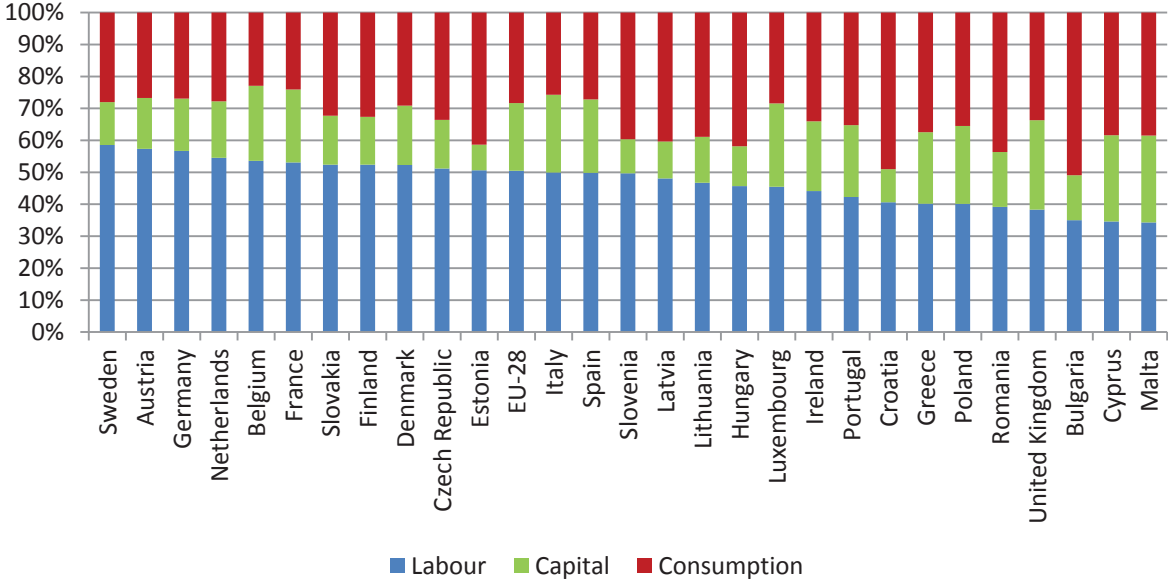
Source: DG Taxation and Customs Union, based on Eurostat data

Note: The tax to GDP ratio shows the total receipts from taxes and compulsory actual social security contributions. Other sources of revenue (such as market output, output for own final use, payments for non-market production and property income) are not shown.

1.1.2 The structure of the tax system matters

Member States also differ in the design of their tax systems according to tax rates and the choice of which activities to tax. Improving the incentive effects of specific taxes or of the structure of taxation overall can help improve efficiency and fairness. Graph 1.3 shows the structure of taxation by economic function in Member States, illustrating the variation between countries.

Graph 1.3: Structure of Taxation by Economic Function of the Tax Base, 2014 (% total taxation)



Source: European Commission (2016b), Taxation Trends in the European Union
 Note: 'Capital' taxation includes all other categories not classed as labour or consumption.

1.2 What makes a fair and efficient tax system?

Key features to look at in assessing the fairness and efficiency of a tax system are the extent to which it encourages investment and job creation, corrects inequalities and achieves high-levels of compliance. Overall, whilst there are sometimes trade-offs between the goals of efficiency and fairness, the two are by no means in opposition.

1.2.1 Stimulating investment and growth

European economies currently feature a pronounced weakness in corporate investment. Investment is expected to continue to pick up gradually throughout 2016 and 2017, but it remains below historically sustainable levels. Weak investment means lower growth, but it also depresses productivity growth and entails poor job and growth prospects in the longer term. Boosting investment is thus one of the Commission's top political priorities.

To avoid discouraging investment, taxes need to be simple, stable and neutral towards different forms of investment and/or financing; tax administration needs to be efficient. Many factors influence companies' investment decisions. Tax is one such factor since it increases the cost of capital of companies and can create high compliance costs when tax systems are complex or unpredictable. Taxation is thus an important element of a well-functioning business environment. Effective and efficient tax administration, legal certainty, stability, predictability and simplicity of tax rules matter for business and investors' decisions. Distortions in the tax system could affect access to finance and discourage equity investments. A well-designed tax system could help improve living standards by providing incentives for smart and green investment.

The efficiency of tax administration influences the level of public trust in the system. Taxpayers tend to have greater trust in organisations that are perceived to be efficient and effective. In addition to the costs of collecting taxes, one should also consider the costs related to paying taxes, which are often referred to as tax compliance costs. Compliance costs can discourage the creation of new businesses, incentive the underground economy, increase non-compliance and damage businesses' and countries' competitiveness.

1.2.2 Developing a more employment-friendly environment

A long standing problem in Europe has been getting more people into work – a situation that only worsened with the crisis. Despite recent progress made, unemployment – and especially long-term unemployment – remains high. Half of the EU unemployed have been outside the labour market for more than a year. Slow growth prospects and rising income inequalities are additional constraints putting pressure on European social models. Targeted labour tax reductions for vulnerable groups can contribute to increasing employment levels, as well as reducing poverty and social exclusion.

Labour tax cuts can be a tool promoting higher levels of employment, in particular where high labour costs discourage hiring (i.e. labour demand issues) or where incentives to take a job are low when work does not pay (i.e. labour supply issues). Reducing taxes on labour can be balanced by increasing taxes elsewhere. Literature suggests that corporate and personal income tax have a strong negative impact on growth while consumption taxes, in particular recurrent taxes on immovable property, are found to be less harmful to growth. The potential room for a tax shift depends on the existing tax structure. High levels of labour taxation together with a relatively low tax burden on consumption taxes, recurrent property taxes, or environmental taxes indicate room to shift taxes away from labour.

1.2.3 Fighting against tax fraud evasion and avoidance

Tax fraud, tax evasion and tax avoidance limit the capacity of Member States to raise revenues and to carry out their economic policy. The scale of tax evasion and avoidance is difficult to conclusively quantify, but there is a general consensus that it is substantial, with tens of billions of euro lost each year. Tackling tax evasion and fraud, whilst removing loopholes and mismatches that facilitate aggressive tax planning is essential to ensure fairness and to secure tax revenues for public investment, for education, healthcare or welfare; or for lowering taxes for honest taxpayers. The cross-border nature of tax evasion and avoidance and the integration of the Member States' economies call for a coordinated approach, not only through European initiatives but also through the coordination of national policies. Member States can tackle tax abuse through increased transparency and cross-border cooperation, a more modern and digital tax administration and by promoting a culture of compliance.

1.2.4 Correcting inequalities and promoting social justice

The fairness agenda goes beyond the fight against fraud, evasion and avoidance. Taxation also plays a role in reducing income inequalities and fostering social cohesion. The design of the European social and economic model results in less inequality than in other developed economies, such as the US. This is an important success for Europe. However, 23.7% of the EU population remains at risk of poverty or social exclusion, with around 1 in 6 at risk of income poverty. There are significant differences in both levels and trends between Member States. Tax-and-benefits systems can be powerful instruments to combat income inequalities. It remains important to consider the social impact of tax systems so as to strike the right balance between efficiency and equity of tax design in line with countries' preferences.

Addressing income inequalities requires a broad approach: from the provision of public goods and social spending to the way revenues are raised (i.e. the spread of the tax burden across taxpayers). Focusing on taxation, it is first important that everyone pays their fair share. Second, the structure of the system plays a key role. Beyond income taxation and cash benefits, the overall structure of the tax system (including VAT, property taxes, capital gains tax, inheritance tax, progressivity of personal income tax) can play a role to reduce inequalities and to foster social cohesion. Ensuring a coherent and effective progressivity of the overall tax burden faced by citizens according to their income sources can at best help to correct market income inequalities and at least avoid increasing them.

2

National tax systems performance

At national level, there is no one-size fits all approach. Each Member State needs to find the best approach to address its country specific situation. The following chapter presents a range of indicators covering aspects of the tax systems of EU Member States in order to help member states to find the best approach to address its own specific challenges and policy response.

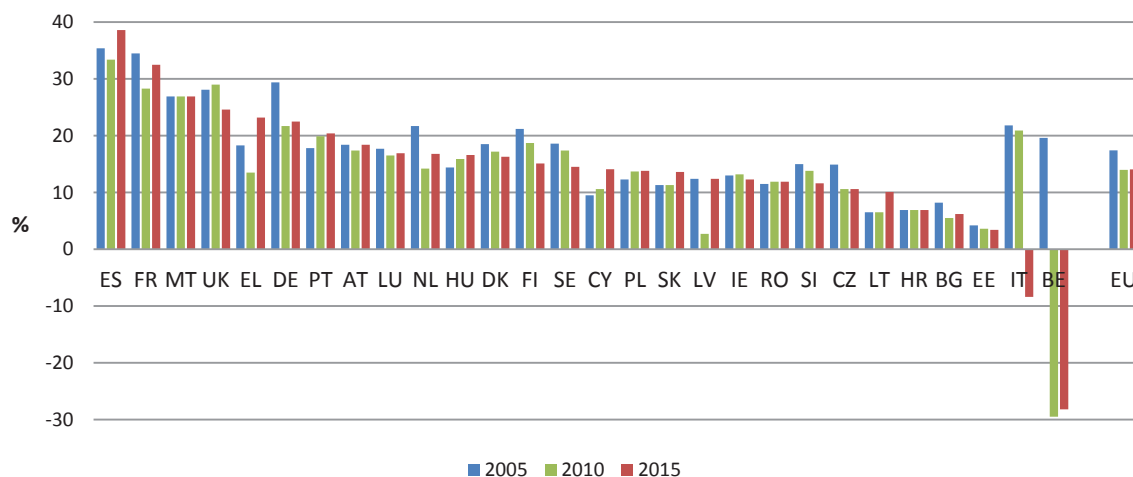
2.1 Encouraging investment

As outlined in section 1.2, tax is one of the factors influencing companies' investment decisions. This section examines features of Member States tax systems likely to influence decisions on investment, looking at indicators on effective tax rates, debt-bias in corporate taxation, tax incentives for R&D, environmental taxation and administrative efficiency.

2.1.1 Effective tax rates

Decisions whether to invest less or more, will be influenced by the effective marginal tax rate (EMTR), in other terms the tax burden on the last euro invested in a project that just breaks even, i.e. on the 'marginal' investment.¹ The EMTR captures a wide range of elements going beyond the statutory corporate taxes, such as elements of the tax base, the source of financing (debt, retained earnings or new equity), and the asset in which the investment is made (machinery, buildings, intangibles, inventory and financial assets). To stimulate investment, a tax system should be designed so as the effective marginal tax rate is as small as possible. The first avenue could be to lower the statutory tax rate. Economists have been critical of current systems of corporate income taxation as corporate taxes are distortive and affect not only investment but also, e.g. business location, profit shifting, and the choice of company structure. There are other ways to decrease the EMTR and design a tax system supportive of investment. Addressing the tax-induced debt bias and R&D tax incentives can lower effective marginal tax rates for equity and R&D investments respectively.

Graph 2.1: Effective Marginal Tax Rates in the EU, 2005-2015



Source: ZEW (2015).

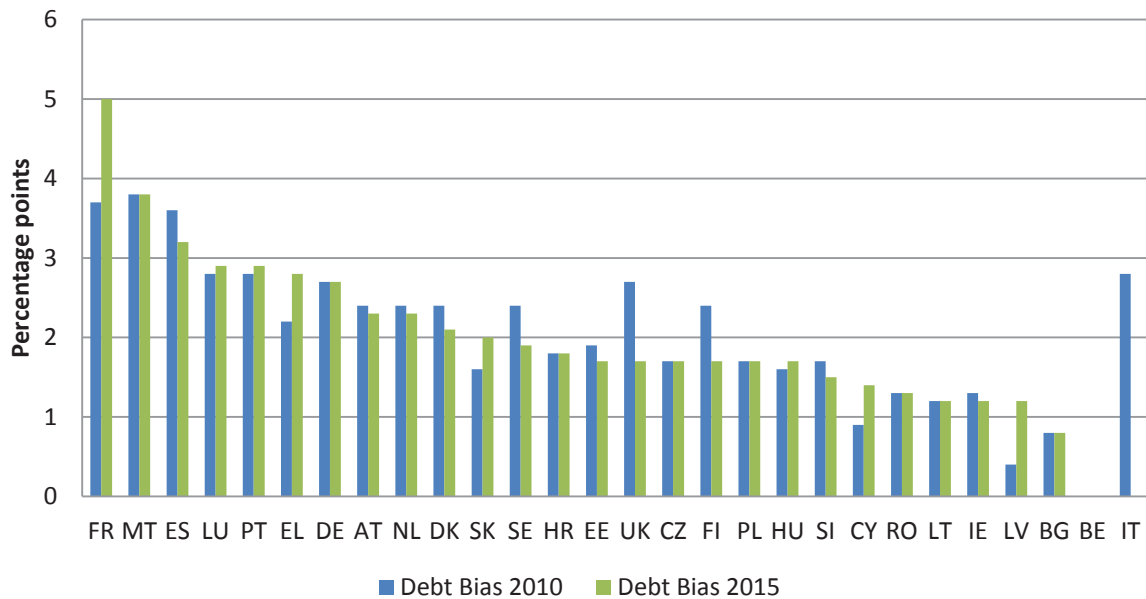
Note: The indicator is based on Devereux/Griffith model which allows the consideration of five types of assets and three sources of finance at corporate and shareholder level. This methodology has been applied to calculate the effective tax rates in the EU annually since 1998. Full dataset is available at http://ec.europa.eu/taxation_customs/common/publications/studies/index_en.htm. To reflect the Allowance for Corporate Equity in Belgium and Italy, the assumption is that the rates of these allowances equal the market interest rate in the model.

¹ Whilst the effective marginal tax rate affects the overall level of investment, it is the effective average tax rate (EATR) that influences firms' decisions as to location.

2.1.2 Debt-bias in corporate taxation

Most corporate tax systems give incentives to companies to take on more debt by allowing interest payments to be deducted, but don't grant similar treatment to equity. Because a debt investment enjoys a preferential tax treatment, the minimum pre-tax return an investor will require to make the investment worthwhile will be lower for an investment financed by debt. The size of this debt bias differs across the EU. The debt-bias leads to higher debt levels, which make companies more fragile and economies more prone to crises. The asymmetric tax treatment of debt and equity is also exploited by some multinationals, in order to strategically organise their debt to reduce their overall tax burden.

Graph 2.2: The debt-equity tax bias in corporate financing in EU Member States, 2015.

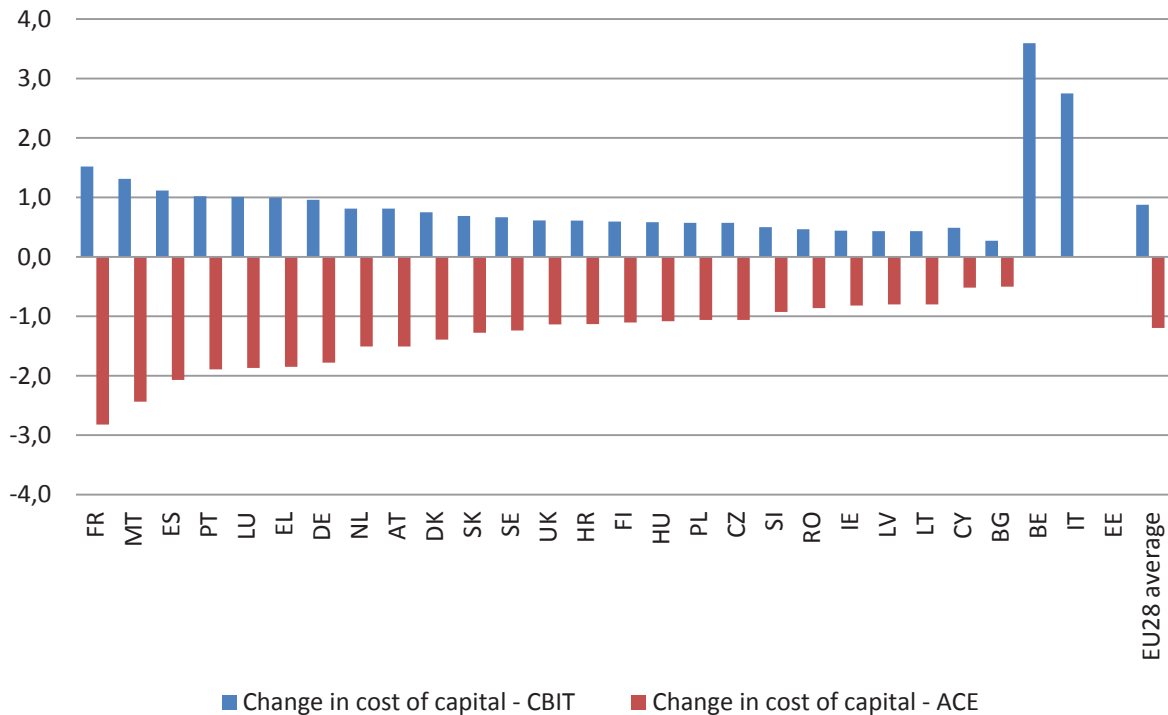


Source: ZEW (2015).

Note: The graph shows the debt bias in corporate taxation measured as difference in cost of capital for new equity and debt investment. The cost of capital measures the required minimum pre-tax return of a real investment (the 'marginal investment') to achieve the same after-tax return as a safe investment in the capital market. The standard assumption by the ZEW for the real return on the safe investment is 5%. To reflect the Allowance for Corporate Equity in Belgium and Italy, the assumption is that the rates of these allowances equal the market interest rate in the model.

The corporate debt bias can be addressed by different reforms such as abolishing the deductibility of interest costs (CBIT reform), or by extending the deductibility to include the return on equity (ACE or AGI reforms). Such reforms eliminate the debt bias, but the cost of capital is affected differently. The graph presents how cost of capital would change following two potential reforms. The CBIT reforms would increase the overall mean cost of capital for new investment in almost all EU countries, while ACE reforms would reduce it. To note that CBIT reforms would broaden the tax base and ACE would narrow it. Any reform needs to be well designed in order not to leave room for tax planning (see a good example of reform in section 3.2).

Graph 2.3. Change in overall mean cost of capital for ACE and CBIT Reforms.



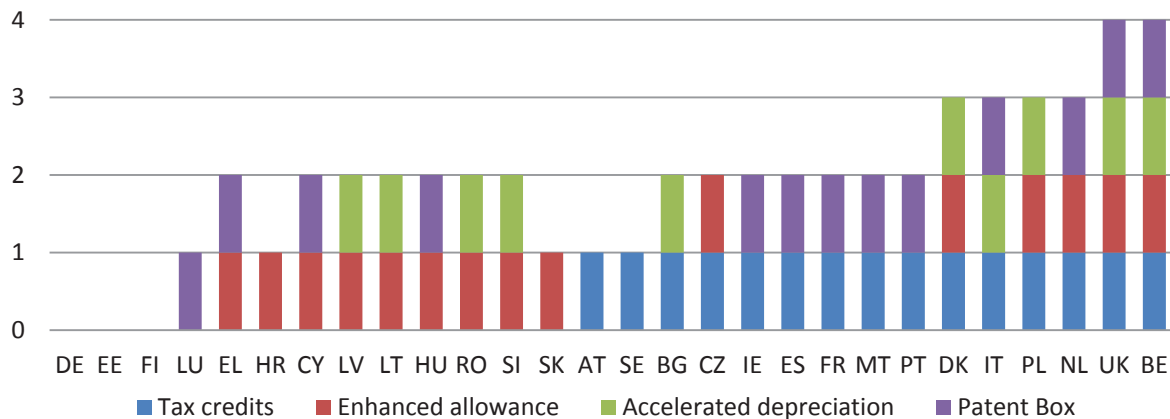
Source: ZEW (2016a).

Note: There is no change (zero) for ACE reforms for BE, IT and both reforms for EE.

2.1.3 R&D tax incentives

Well-designed R&D tax incentives stimulate R&D investment and innovation. Tax allowances or credits based on real R&D costs (i.e. expense-based R&D tax incentives) are preferred to output-based schemes such as patent boxes (CPB, 2014). Patent boxes give a tax break on the output from R&D activities i.e. earned from exploiting intellectual property rights. Research shows that they do not stimulate R&D and may rather be used as a profit-shifting instrument, leading to high revenue losses (Alstadsæter et al, 2015). A total of 25 Member States are currently using fiscal incentives to encourage investment in R&D. The chart below shows which types of incentive are used in each Member State.

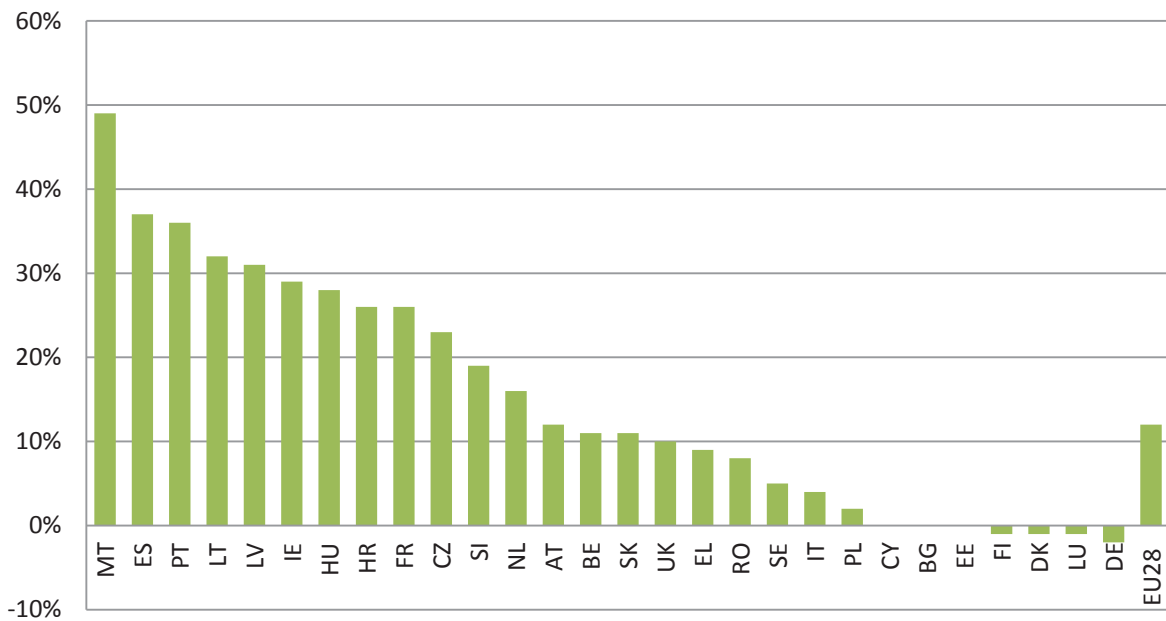
Graph 2.4: Number of R&D tax incentives in the EU countries



Source: CPB(2014) and update by the Commission services where relevant. No R&D incentives in DE, EE and FI. The incentive can apply to corporate and personal income taxes, social security contributions and payroll taxes.

The generosity of R&D tax incentives varies a lot across countries. The graph below shows how much out of a euro invested in R&D is supported by the tax system. For example, in France, if a company invests one euro in R&D, estimated 26 cents can be supported by the tax system. In the case that a country does not offer R&D tax incentives and/or immediate tax depreciation of R&D assets, the tax subsidy rate can turn negative. In some countries, R&D tax incentives account for a major share of government funds for private R&D. It is therefore important to ensure that the schemes are well-designed and effective. A 2016 JRC technical report shows that tax credits can be more effective in terms of their impact on macroeconomic outcomes in countries where fiscal pressure and/or R&D worker productivity is high.²

Graph 2.5: Tax subsidy rates to R&D in the EU, 2015

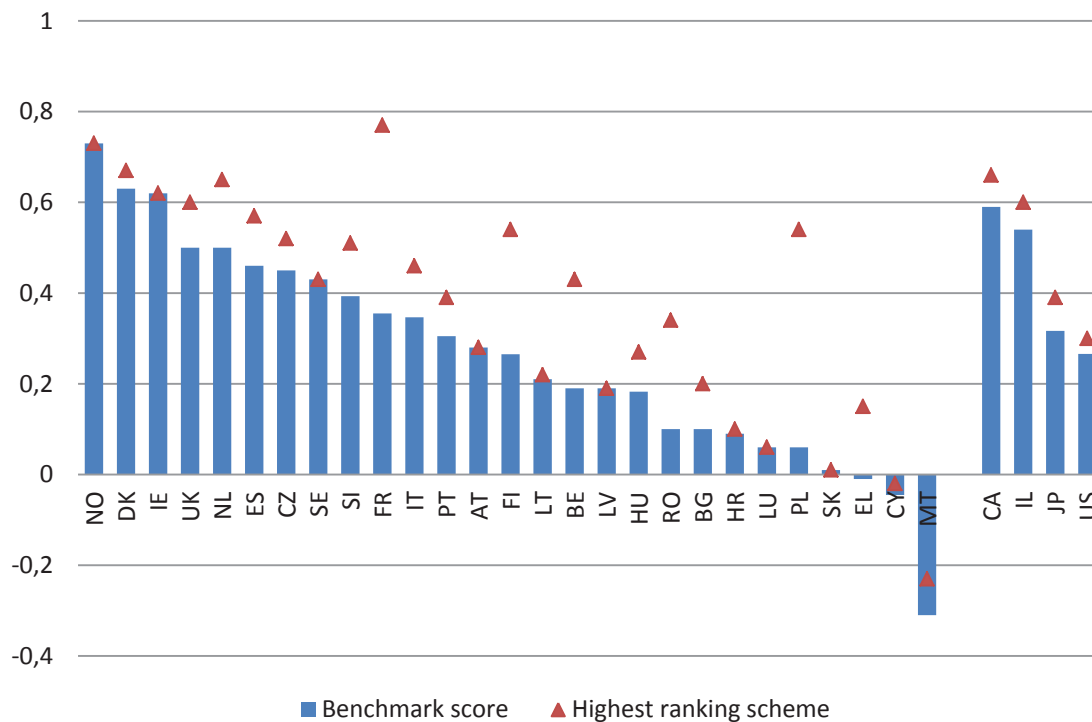


Source: OECD, R&D Tax Incentive Indicators, www.oecd.org/sti/rd-tax-stats.htm, July 2015 and European Commission (2016a). Subsidy rates as applicable for large companies.

² These results are based on a simulation undertaken with the Commission's QUEST III semi-endogenous macroeconomic model. Forthcoming.

A 2014 study carried out for the European Commission identified a number of good practices for R&D tax incentives³ and on this basis, benchmarked the national R&D tax incentives. A benchmark score equal to one would reflect all good practices. The differences in benchmark scores suggest scope to improve the design, targeting or administration of R&D tax incentives. The effectiveness of tax incentives could be improved in particular by ensuring that young and small companies are able to benefit from these incentives, by simplifying and regularly evaluating their impact. Moreover, the benchmark is an average of R&D tax incentives offered in a country as many countries apply more than one R&D tax support scheme. A gap between the best ranking scheme and the average could indicate scope for streamlining the tax support to R&D.

Graph 2.6: Benchmark Scores for R&D tax incentives



Source: CPB(2014).

Note: The higher the score for the country, the closer its R&D tax incentives are to the best practice. The benchmark scores were computed as the simple average over the R&D tax incentives used in a country. The benchmarking is based on about twenty principles of good practice and uses a three-point scale: "1" for best practice; "-1" for non-recommended practice; and "0" for "neutral".

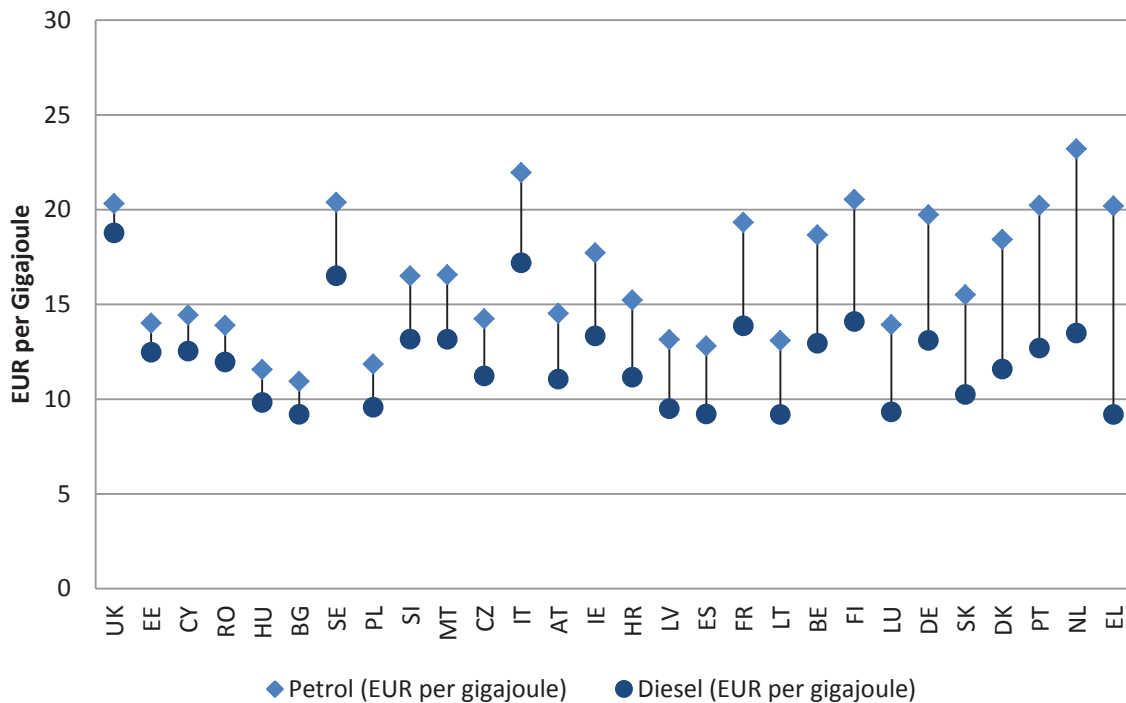
³ See "[A Study on R&D Tax Incentives](#)". Taxation working paper N. 52 - 2014

2.1.4 Environmental investment

The design of the tax system also influences investors' decisions and can create incentives (or disincentives) for investment that provides wider benefits to society. Distortions in the tax system that favour relatively more polluting forms of technology can lead to negative environmental impacts and lost revenue.

The graph below shows the marginal tax rates on petrol and diesel when used in transport, in Euros per gigajoule. In all Member States the marginal tax rates on diesel when used as a propellant are lower than those on unleaded petrol, despite diesel having a higher carbon content and higher negative environmental impact than unleaded petrol. Some Member States offset this advantage via registration or circulation taxation. However, while a registration tax affects a buyer's decision when purchasing a car, and an annual tax adds to the overall cost of ownership, neither affects the marginal cost of driving a car.

Graph 2.7: Marginal tax rates on petrol and diesel when used as propellants, 2016

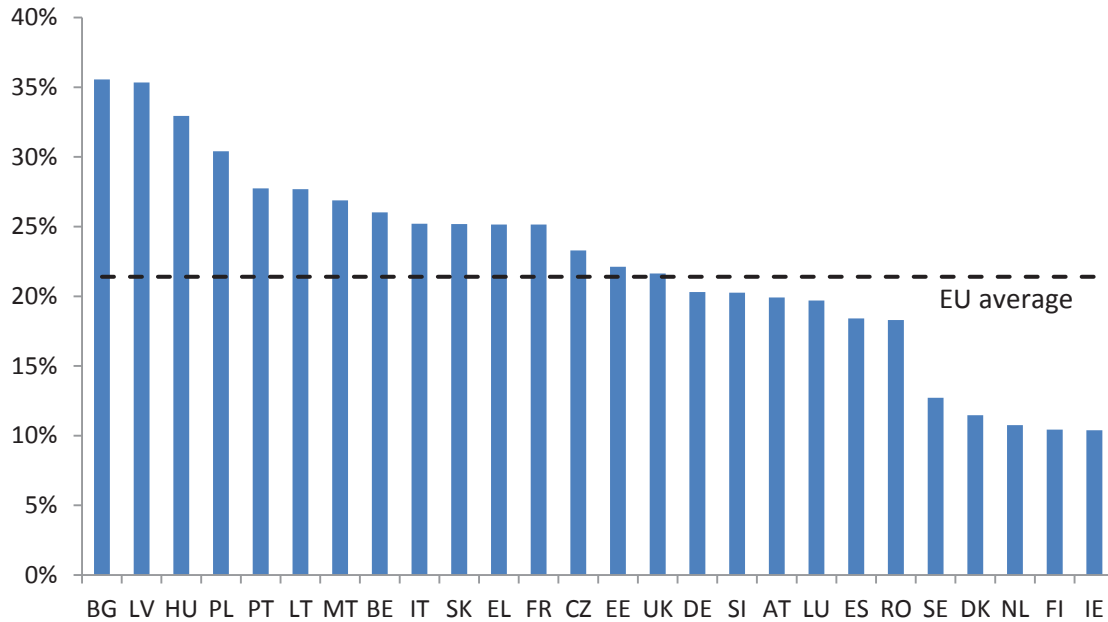


Source: European Commission services

Note: Marginal tax rates are calculated on the basis of excise duty rates, and exclude VAT but include carbon taxes.

Several Member States effectively subsidise the private use of company cars through favourable tax treatment. These countries' income tax rules often do not differentiate between the use of a company car for business and private purposes. In addition, a small number of Member States allow partial deduction of the VAT charged on the purchase of company cars intended for private use by employees. Such under-taxation of company cars encourage users to buy bigger cars and drive more, leading to higher environmental and social costs as well as significant revenue losses.

Graph 2.8: Subsidy for private use of company cars, 2014



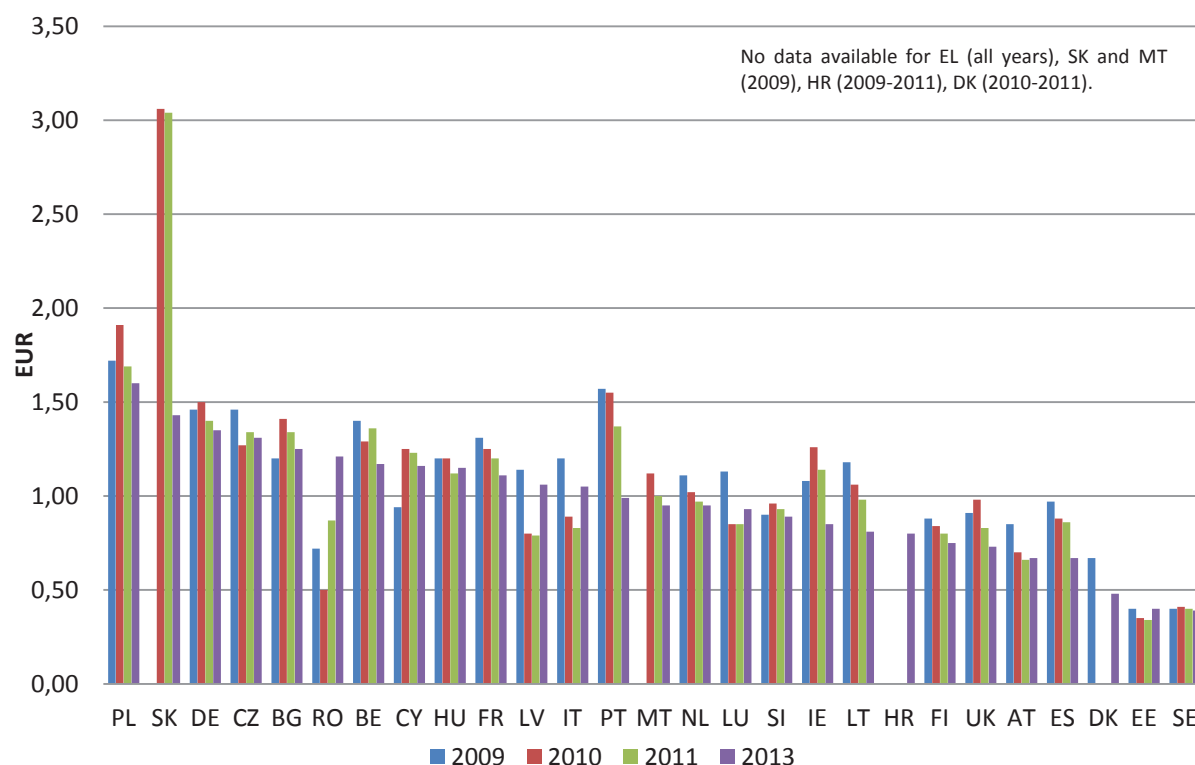
Source: European Commission services

Note: The subsidy for private use of a company car is calculated as the difference between the cost to the employer of providing a car (including taxes, insurance and maintenance costs, and fuel costs) and the benefit-in-kind on which the employee is taxed under the personal income tax system. It does not reflect the way the benefit is treated for social security purposes.

2.1.5 Improving the efficiency of tax administration

The ratio of administrative costs and revenues collected can be considered as a proxy indicator of how efficient a tax authority is. Almost all Member States' tax authorities calculate and publish this ratio in their annual reports. On the basis of the latest data, the cost of running most EU tax authorities lies in between 50 cent and 1.5 euro for every 100 euro of taxes collected.

Graph 2.9: Administrative costs of tax authorities per 100 euro of taxes collected, 2009-2013

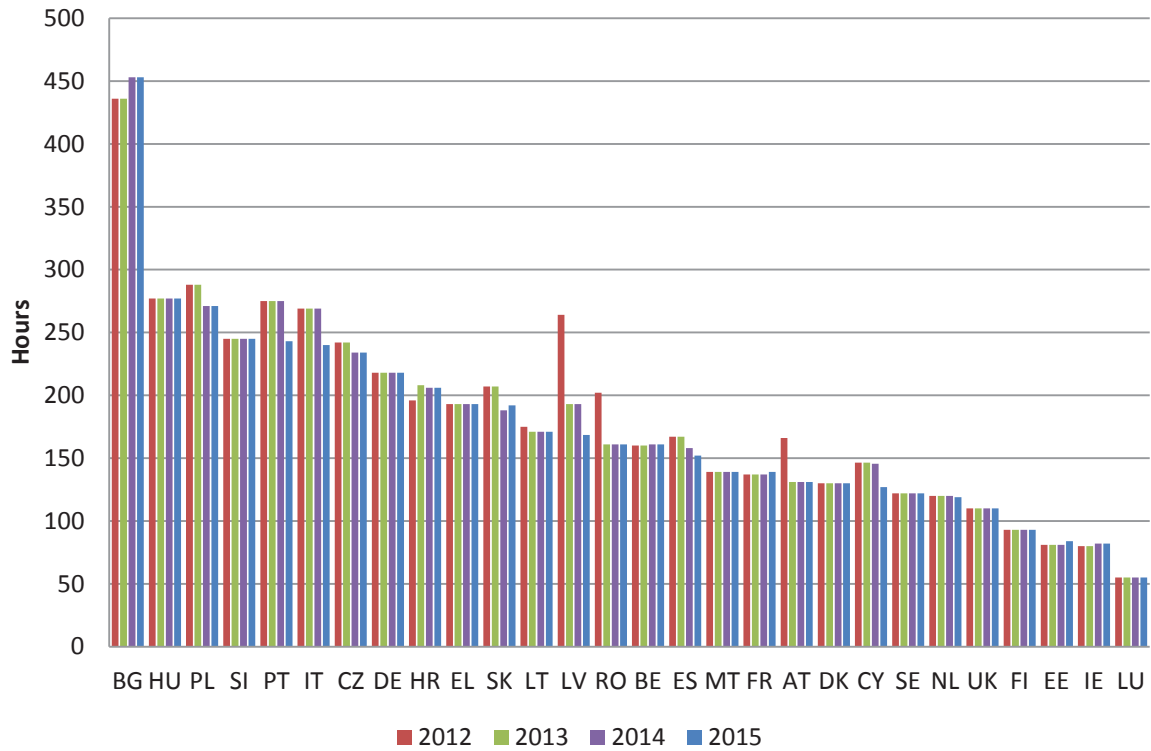


Source: OECD (2015a), Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris.

Note: (1) No data available for EL. 2009 data for MT are not available. Data for HR are only available for 2013. (2) There is no universally accepted methodology for measuring administrative costs. Data for PL, SK, DE, CZ, FR and PT do not include SSC and excise. Data for BE, CY and AT do not include SSC. Data for BG, SI and HR do not include excise. Data for ES (2009-2011) and IE (all years) include customs. Data for SE exclude debt collection. The OECD notes that for IT the computed ratios significantly understate the true ratio as they do not take account of expenditure incurred on tax-related work carried out by other agencies that have not been quantified.

Compliance costs mostly relate to time spent rather than direct costs, such as those associated with bookkeeping. The graph below shows the number of hours needed to comply with taxes per year for a medium-sized company. Time spent includes hours needed to deal with the corporate income tax, value added tax and taxes on employees, including taxes on wages and social contributions. The time needed to comply with taxes for a medium-sized company can serve as a good proxy of how high tax compliance costs are in a country.

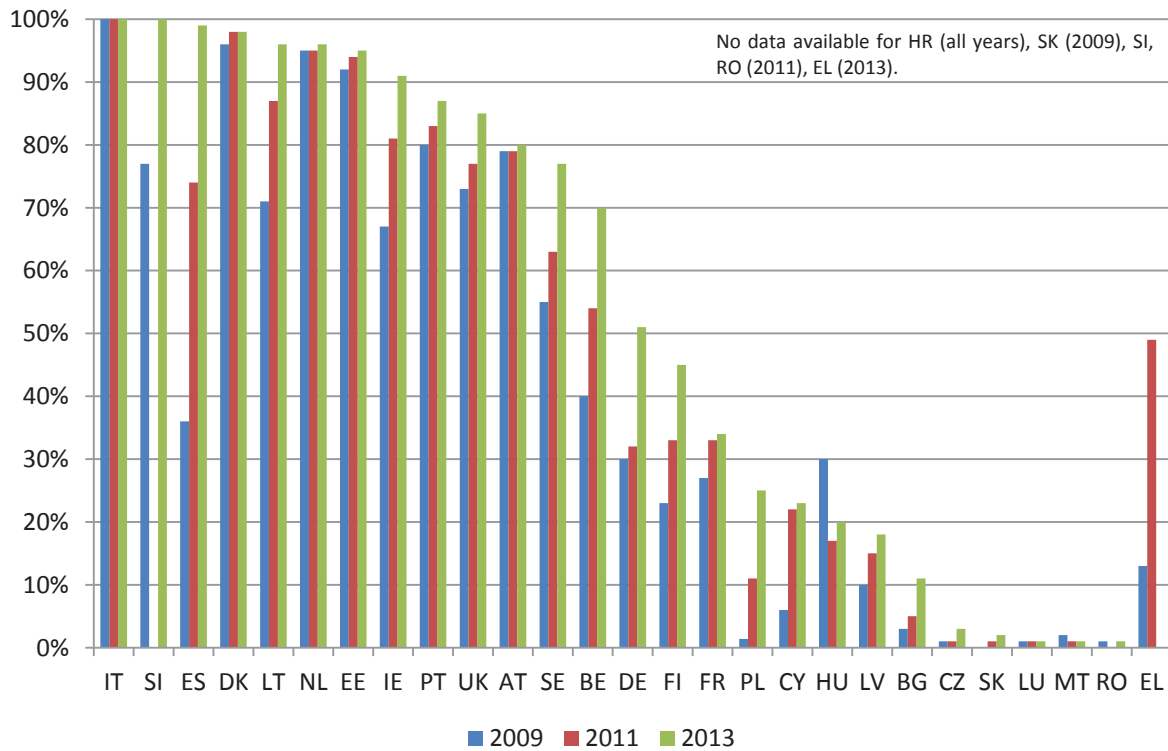
Graph 2.10: Number of hours needed to comply with taxes per year for a medium-sized company, 2012-2015



Source: World Bank (2016). Doing Business 2017: Equal Opportunities for All. Washington, DC: World Bank.

Tax compliance costs are influenced not only by tax rules but also by how simple it is to deal with tax authorities. A wide offer of digital services for taxpayers, especially e-filing opportunities, can reduce compliance costs, while making tax administration more efficient and increasing compliance. The indicator shows how many personal income tax returns out of every 100 are sent back to tax authorities online – in contrast with sending them back on paper. The latest data indicate improvements in all EU countries when compared with the situation in 2009, yet the level of e-filing in some countries remains very low.

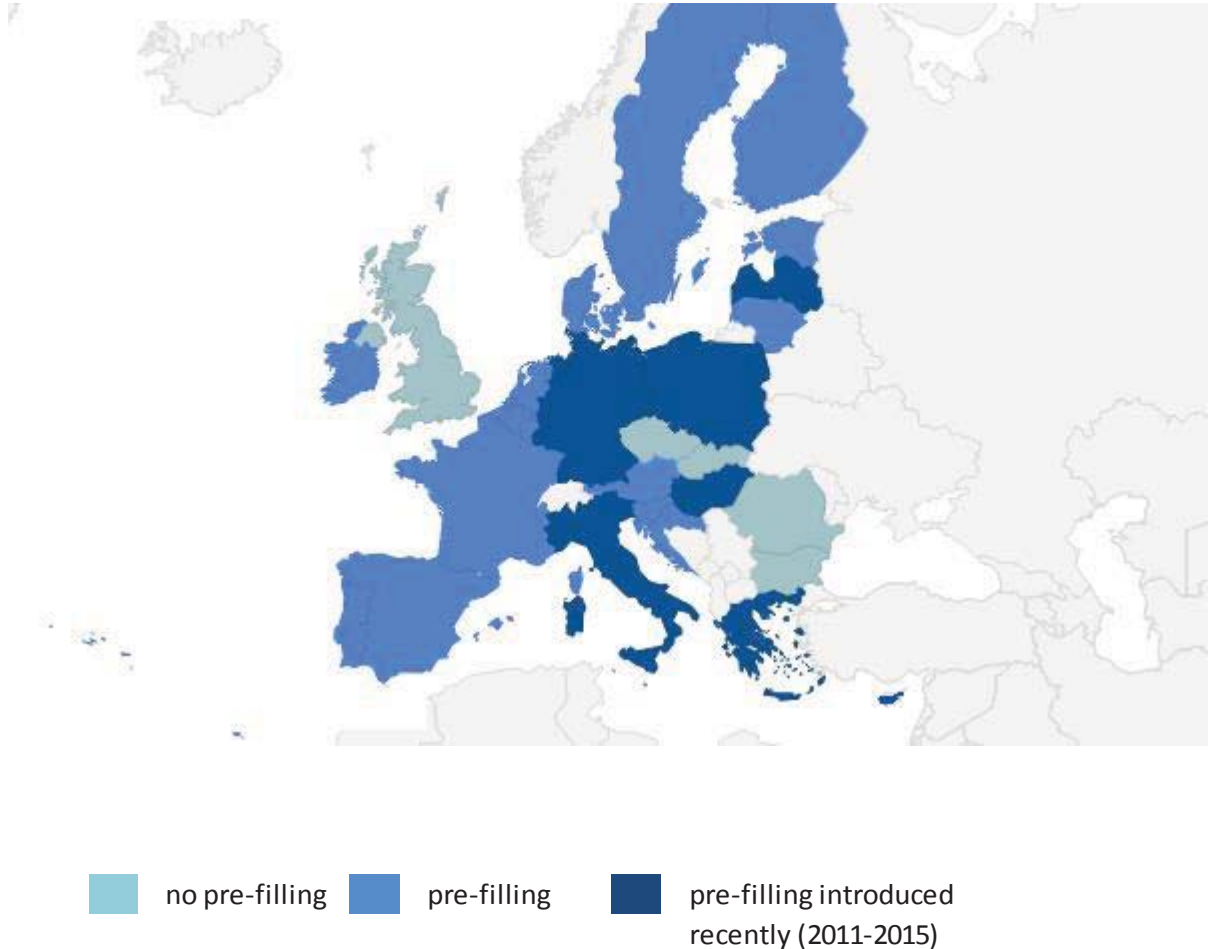
Graph 2.11: Share of e-filing of personal income tax returns (% of total), 2009-2013



Source: OECD (2015a), *Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies*, OECD Publishing, Paris.
 Note: No data for HR. Data for 2013 for EL, 2011 for SI and RO, and 2009 for SK are not available.

The electronic pre-filling of personal income tax returns is one way to simplify the process for taxpayers, although other approaches, such as taxing salary or interest payments directly at source can also make a difference. A clear majority of Member States prefills personal income tax returns to assist in compliance. Prefilling is usually done on the basis of information about taxpayers that tax authorities already have at their disposal. This information usually comes from banks, employers and other third parties. The map below shows which member states pre-fill personal income tax returns, indicating progress since 2011.

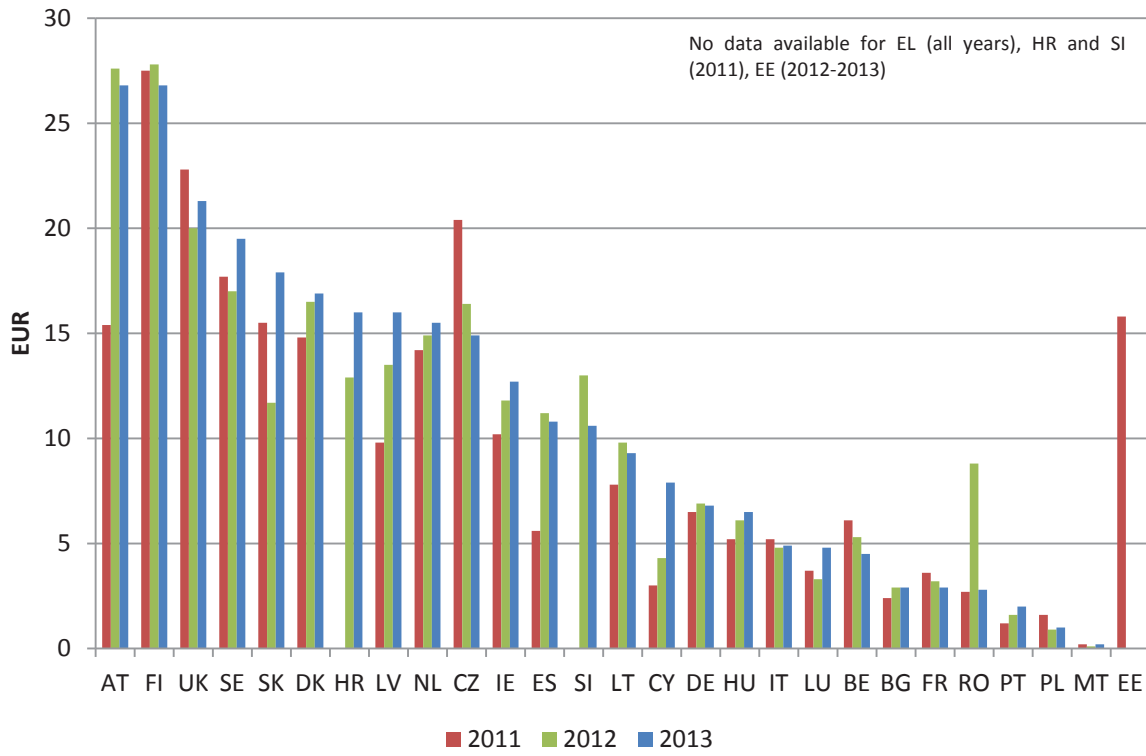
Figure 2.1: Pre-filling of personal income tax returns using third party information, 2013



Source: OECD (2015a), Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris; and Commission services.

The amount of resources invested in digital technologies can be taken as a proxy indicator of how modernised a tax administration is. Research by the OECD shows that substantial expenditure in digital technologies tends to go hand in hand with good performance.

Graph 2.12: IT expenditure for every 100 euro of total revenue body expenditure, 2010-2013



Source: OECD (2015a), Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris. Note: No data available for EL. No data for 2011 for HR and SI. No data for 2012 and 2013 for EE.

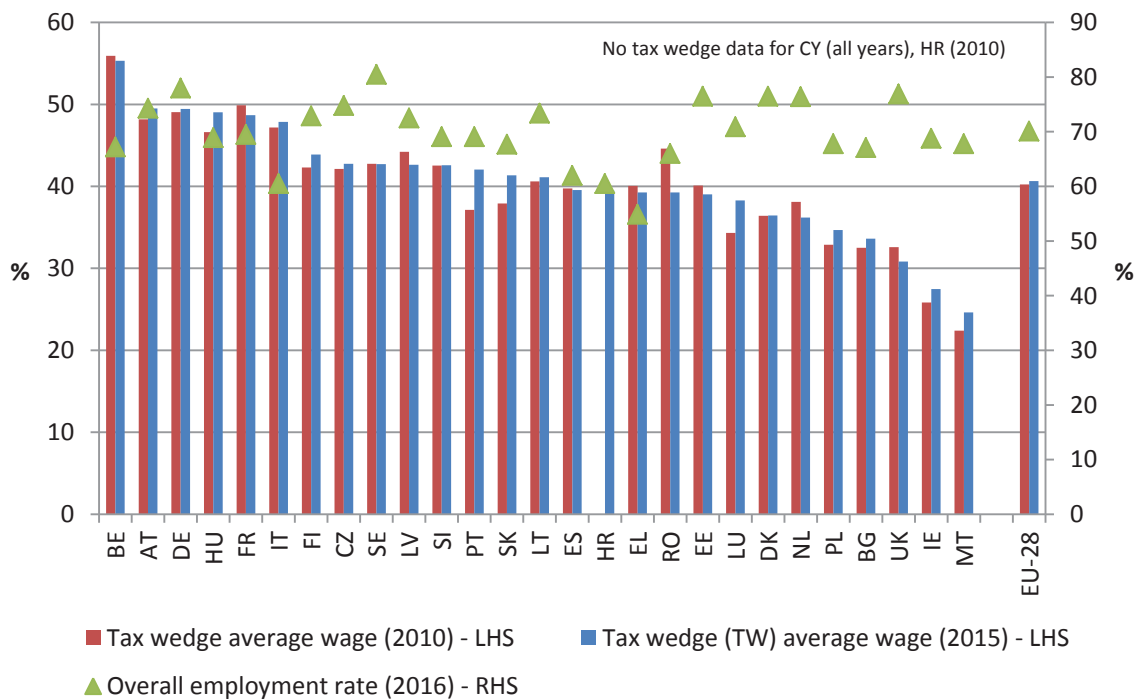
2.2 Supporting job creation and employment

As explained in section 1.2, the design of the tax system can have an influence both demand for and supply of labour, in particular in the short run. Shifting the tax burden from labour to bases less detrimental to growth can help improve the efficiency of the tax system. Where scope for a tax shift is limited, targeted tax cuts aimed at low income earners or more responsive groups can be a way to improve both efficiency and fairness.

2.2.1 Overall tax burden on labour

The graph below shows the tax wedge for a worker earning the average wage in different EU countries. The tax wedge measures proportional difference between the costs of a worker to their employer and the employee’s net earnings. It thus measures both incentives to work (labour supply side) and to hire persons (labour demand side). The tax wedge is defined as the sum of personal income taxes and employee and employer social security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social security contributions paid by the employer). Between 2010 and 2015 the average tax wedge slightly increased in the EU, with 15 Member States increasing the tax wedge on the average wage, whilst 10 reduced it.

Graph 2.13: Level of tax wedge in EU Member States, 2015

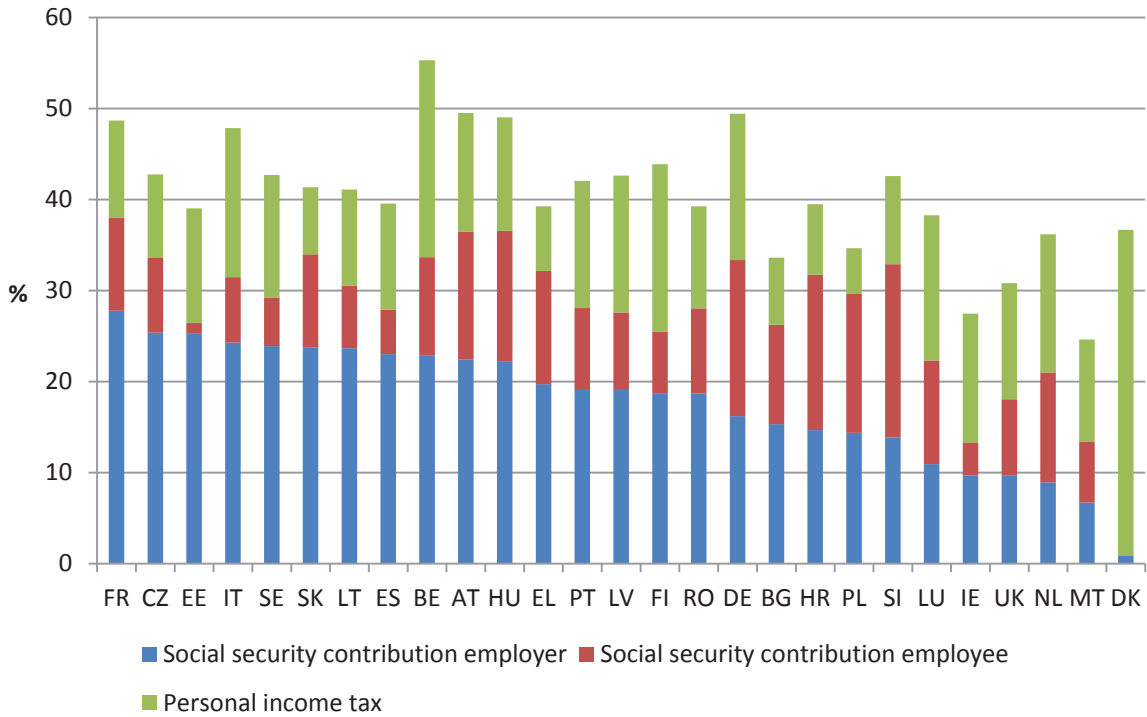


Source: European Commission tax and benefits indicator database based on OECD data.

Note: Left axis: Tax wedge. The tax wedge data is for single earner with no children, average wage. Recent data for Cyprus is not available. 2010 data is not available for HR. Right axis: overall employment rate.

The composition of the tax wedge is important in the short run as the different elements can have an impact either on labour demand and supply. The graph below divides the tax wedge for a single worker earning the average wage into its separate components: personal income tax, employer SSCs and employee SSCs. It is ordered by employer social security contributions, showing that the varying labour demand incentives created by labour taxation in different Member States. Labour supply incentives for specific groups are explored in more detail below.

Graph 2.14: Composition of tax wedge in EU Member States, 2015



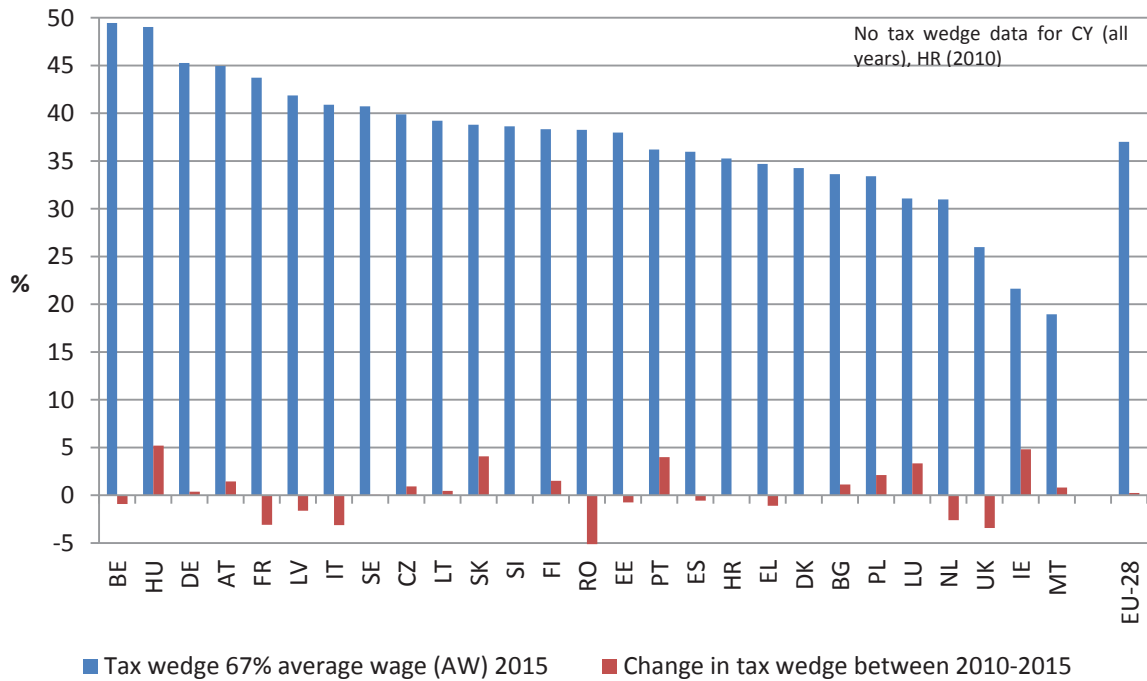
Source: European Commission tax and benefits indicator database based on OECD data.

Note: Recent data for Cyprus is not available. As the data is for single earner with no children, family allowances do not influence the level of the tax wedge. Expressed in percentage.

2.2.2 Tax burden on specific groups

Certain specific groups, such as low income earners, can be more sensitive to changes in the tax burden on labour. The graph below shows the tax wedge for a single earner with no children at 67% of the average wage, as well as the change in the tax wedge between 2010 and 2015.

Graph 2.15: Tax wedge for low income earners in EU Member States



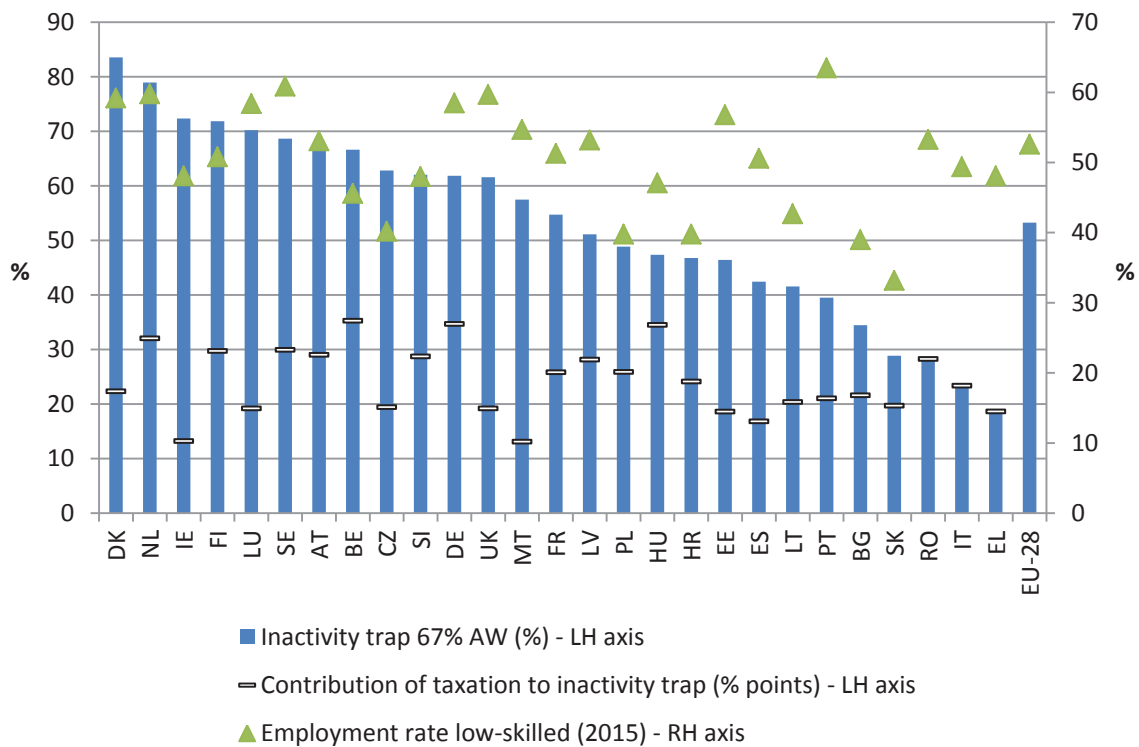
Source: European Commission tax and benefits indicator database based on OECD data.

Note: The data on the tax wedge is for a single earner at 67% of the average wage with no children. Recent data for Cyprus is not available. 2010 data for HR is not available.

The tax wedge is defined as the sum of personal income taxes and employee and employer social security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social security contributions paid by the employer).

The inactivity trap - or the implicit tax on returning to work for inactive persons - measures the part of additional gross wage that is taxed away in the case where an inactive person (not entitled to receive unemployment benefits but eligible for income-tested social assistance) takes up a job. In other words, this indicator measures the financial incentives to move from inactivity and social assistance to employment. The 'trap' indicates that the change in disposable income is small and, conversely, the work-disincentive effect of tax and benefit systems is large. Taxation is one element that contributes to the total inactivity trap, other factors include withdrawn benefits.

Graph 2.16: Inactivity trap for low income earners in EU Member States, 2015

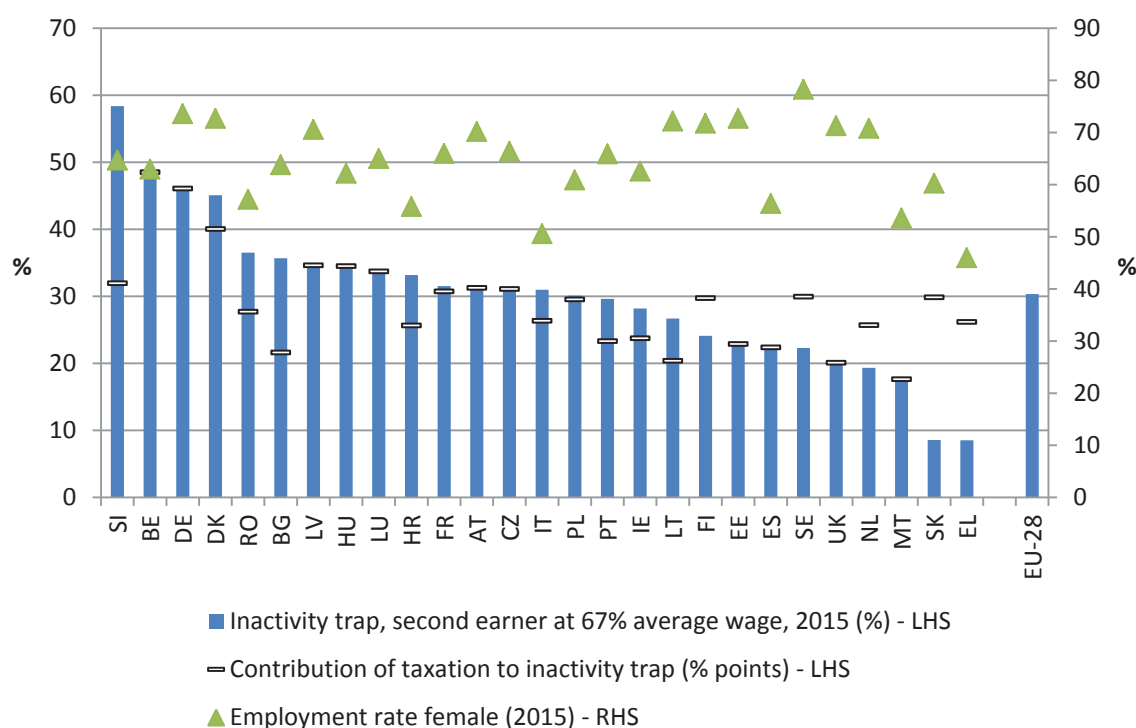


Source: Eurostat and European Commission tax and benefits indicator database based on OECD data.

Note: The data on the inactivity trap is for a single earner at 67 % of the average wage with no children. 'Contribution of taxation' refers to the contribution made by taxation to the inactivity trap in percentage points (other contributors being, e.g. withdrawn unemployment benefits, social assistance and housing benefits). The age group considered for the employment rate is 20-64 years. 'Low-skilled' refers to levels 0-2 ISCED. The employment rate for low-skilled workers is used as proxy for low-income earners. It is recognised that these are not necessarily the same. Recent inactivity trap data for Cyprus is not available.

Tax system features such as transferable tax credits and the degree of joint taxation contribute to the variation in the level of the inactivity trap for second earners. In most member states the contribution of taxation to the inactivity trap for second earners, in cases where the other earner earns the average wage, is relatively high. Where the contribution of taxation is higher than the trap itself, other measures, such as in work benefits, compensate for the level of taxation. It should be noted that other factors, such as the availability of affordable and high quality childcare may contribute to the decision over whether to return to work, or increase working hours.

Graph 2.17: Inactivity trap for second earners in EU Member States, 2014

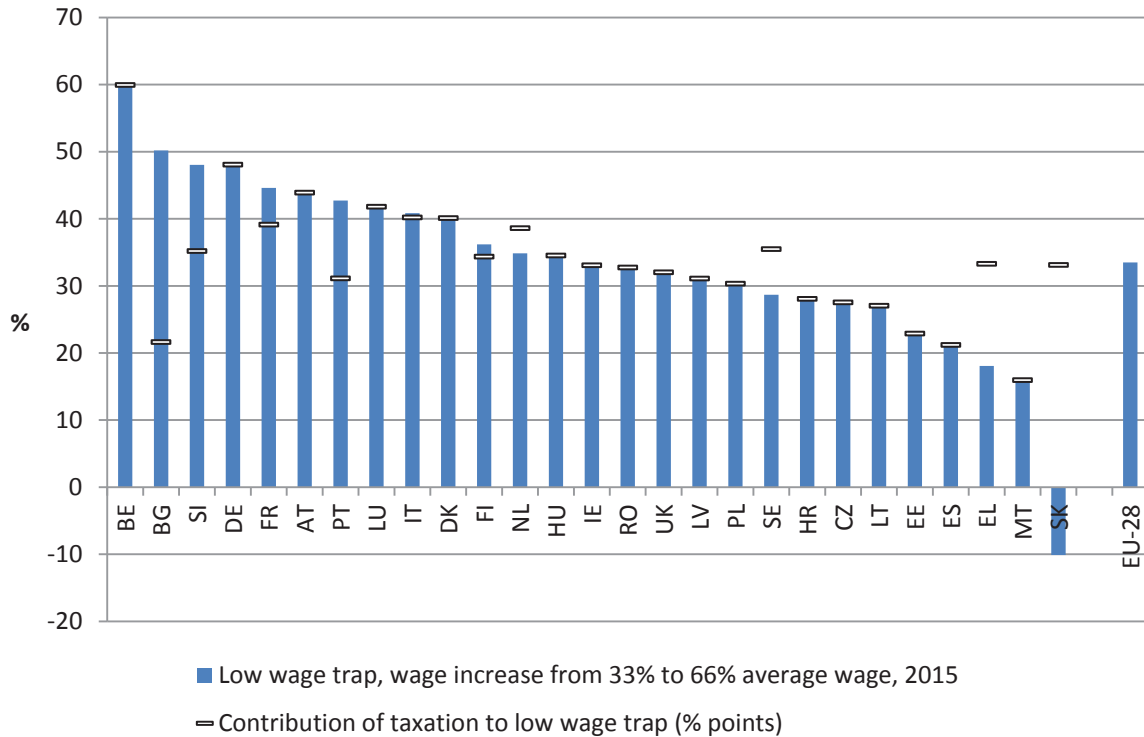


Source: Eurostat and European Commission tax and benefits indicator database based on OECD data.

Note: The trap data is for a second earner at 67% of the average wage in a two-earner family with two children; the principal earner earns the average wage (AW). 'Contribution of taxation' refers to the contribution made by taxation to the inactivity trap, in percentage points (other contributors being, e.g. withdrawn unemployment benefits, social assistance and housing benefits). The age range used is 20-64 years. The employment rate for women is used as proxy for second earners. It is recognised that these are not necessarily the same. The employment rate of women is not measured in full-time equivalents and therefore overestimates the extent of women's employment in many Member States. Recent inactivity trap data for CY is not available.

The low-wage trap is defined as the rate at which taxes are increased and benefits withdrawn as earnings rise due to an increase in work productivity. For second earners, as with the inactivity trap, taxation plays a very significant role in determining the level of the low wage trap in most Member States. Many low-wage second earners are women working part-time. As above, it should be noted that other factors, such as the availability of affordable and high quality childcare may contribute to the decision over whether to increase working hours.

Graph 2.18: Low wage trap for second earners in EU Member States, 2015



Source: European Commission tax and benefits indicator database based on OECD data.

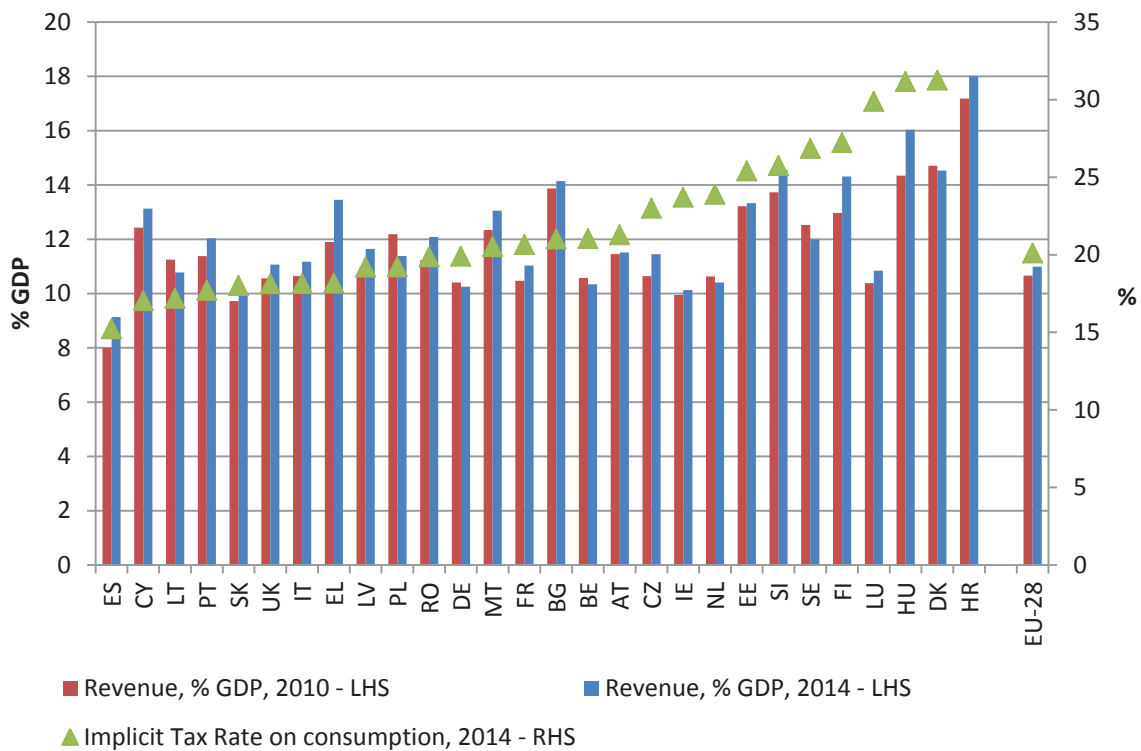
Note: The trap data is for a second earner with a wage increase from 33% to 67% of the average wage, in a two-earner family with two children; the principal earner earns the average wage (AW). 'Contribution from taxation' refers to the contribution made by taxation to the inactivity trap, in percentage points (other contributors being, e.g. withdrawn unemployment benefits, social assistance and housing benefits). Recent data for Cyprus is not available.

2.2.3: Scope to shift taxes towards tax bases less detrimental to growth

A tax shift away from labour towards revenue sources less detrimental to growth, i.e. consumption taxes, recurrent housing taxes and environmental taxes, may help to stimulate growth and to increase employment and investment.

The graph below shows revenue from consumption taxes as a percentage of GDP for each EU country. It also shows the implicit tax rate on consumption in Member States, which is defined as the ratio of revenue from all consumption taxes to households' final consumption expenditure.

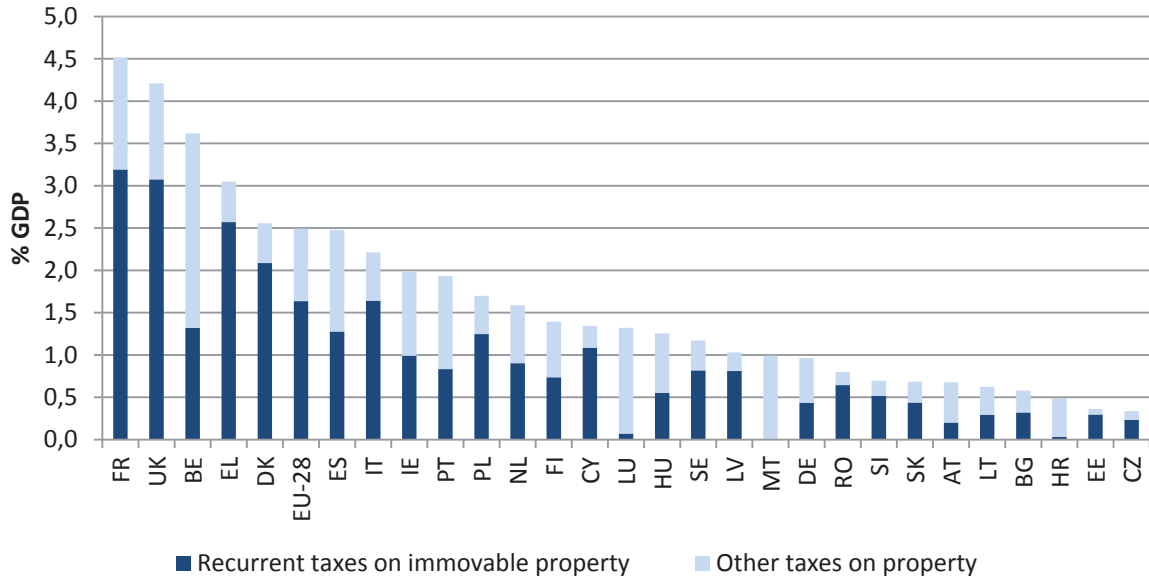
Graph 2.19: Tax revenues from consumption taxes and implicit tax rate (ITR) on consumption, 2014



Source: European Commission (2016b), Taxation Trends in the European Union
 Note: Implicit tax rate on consumption not available for HR.

Recurrent property taxation is a second type of taxation which is relatively growth-friendly. The graph below shows revenue from recurrent property taxes as a percentage of GDP in EU Member States. Recurrent property taxes remain low in a majority of Member States and there may be scope to increase them. In countries where the current systems of housing taxation rely heavily on transaction taxes, an internal shift from transaction taxes towards recurrent taxes could also bring efficiency gains.

Graph 2.20: Tax revenues from property taxes as percentage of GDP – 2014

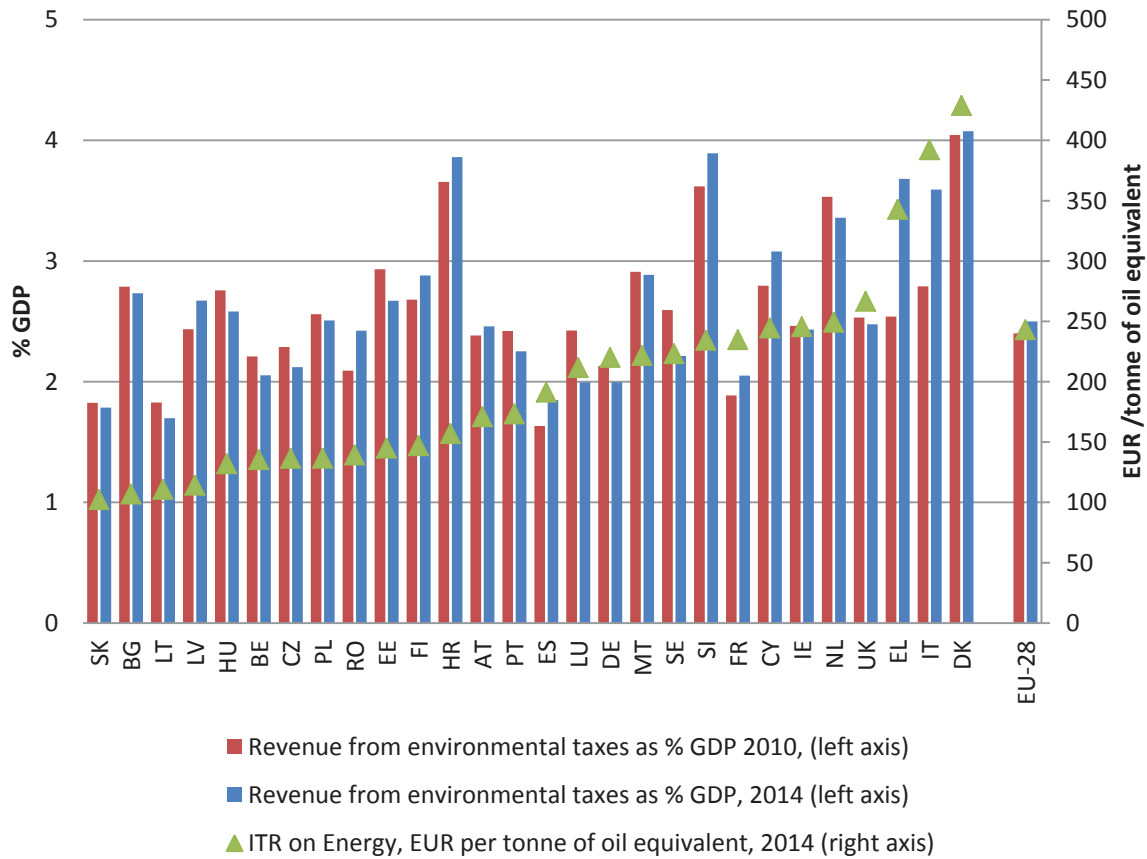


Source: European Commission (2015), Taxation Trends in the EU, 2015 edition.

Note: Data does not include personal income tax on imputed rents. There is no recurrent real estate tax in Malta.

A third type of relatively growth-friendly taxation is environmental taxation. The graph below shows revenue from energy, transport, pollution and resources as a percentage of GDP. It also shows the implicit tax rate (ITR) on energy in Member States. The implicit tax rate on energy is the ratio of total revenue from energy taxes to final energy consumption. It is expressed in Euro per tonne of oil equivalent.

Graph 2.21: Tax revenues from environmental taxes and implicit tax rate on energy, 2010-2014



Source: European Commission (2016b), Taxation Trends in the European Union

Note: Energy taxes include taxes on energy products used for both transport and stationary. Transport taxes include taxes related to the ownership and use of motor vehicles. They also include taxes on other transport equipment such as planes and on related transport services. Pollution taxes include taxes on measured or estimated emissions to air (except taxes on carbon dioxide emissions) and water, on the management of waste and on noise. Resource taxes include any taxes linked to the extraction of use of a natural resource.

2.3 Tax compliance

As outlined in section 1.2, improving tax compliance by combatting tax fraud, evasion and avoidance can help to improve fairness and secure tax revenues for public investment. Although it is by definition difficult to estimate how much money is lost to tax fraud, evasion and avoidance, this section presents indicators which aim to provide an indication of the scale of the issue.

2.3.1 Estimates of the non-observed economy

Part of economic activity escapes taxation due to various reasons. Some of it may take place underground, e.g. undeclared work, illegally or informally. Statisticians refer to this share of the economy as the non-observed economy (NOE). According to the EU statistical office, the NOE refers to all productive activities that may not be captured in the basic data sources used for compiling national account. All EU statistical offices take into account the NOE when calculating national account statistics. Various statistical methods or adjustments are used to overcome the gaps in national accounts information that the non-observed economy creates. However, not all EU statistical offices disclose data on those adjustments.

Table 2.1: Value of the non-observed economy (NOE) as % GDP, reference years as specified

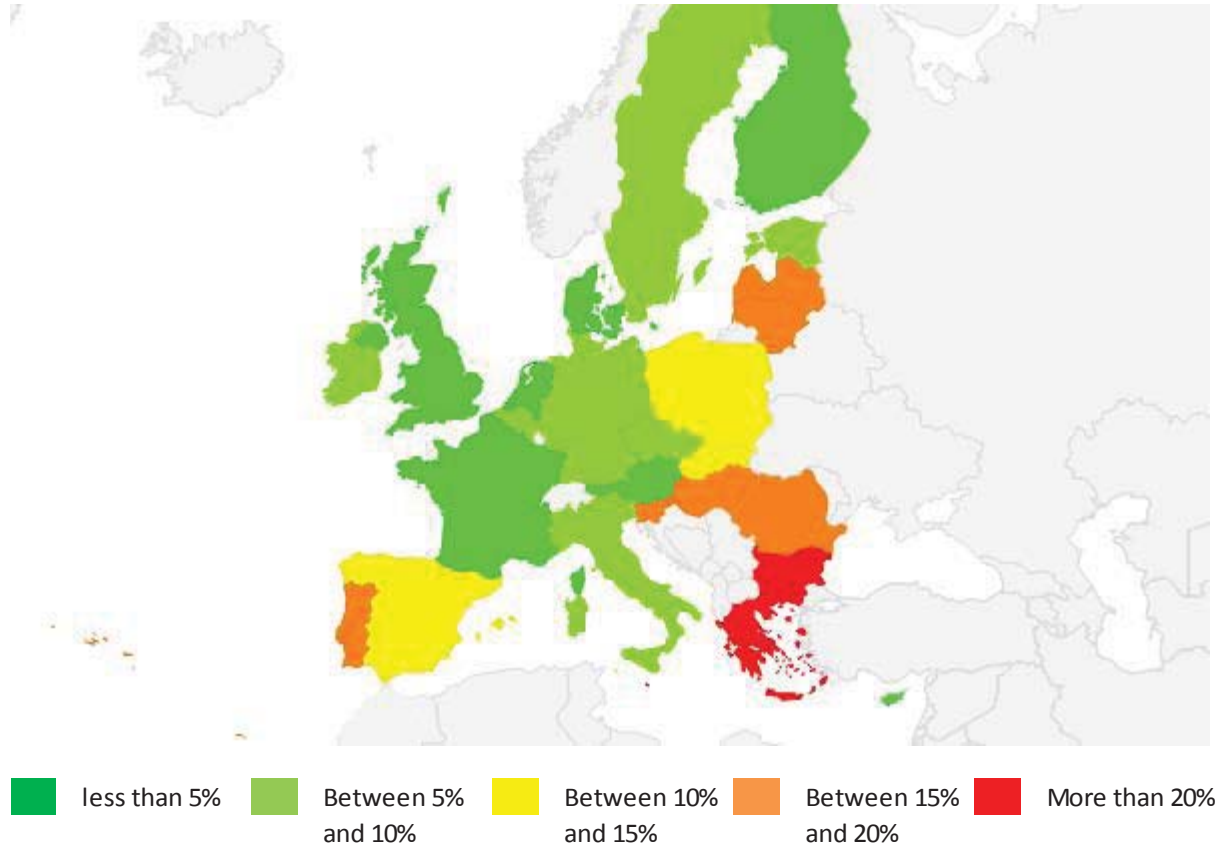
Country	NOE adjustments (% GDP)	Reference year	Country	NOE adjustments (% GDP)	Reference year
BE	4.6	2009	LT	18.9	2002
BG	13.4	2011	LU	N/A	-
CZ	8.1	2009	HU	10.9	2009
DK	N/A	-	MT	N/A	-
DE	N/A	-	NL	2.3	2007
EE	9.6	2002	AT	7.5	2008
IE	4	1998	PL	15.4	2009
EL	N/A	-	PT	N/A	-
ES	11.2	2000	RO	21.5	2010
FR	6.7	2008	SI	10.2	2007
HR	10.1	2002	SK	15.6	2009
IT	17.5	2008	FI	N/A	-
CY	N/A	-	SE	3.0	2009
LV	13.6	2000	UK	2.3	2005

Source: OECD (2012). Working Party on National Accounts: Summary of the OECD Survey on Measuring the Non-Observed Economy. OECD Publishing; UN (2008). Non-Observed Economy in National Accounts – Survey of Country Practices – United Nations, Economic Commission for Europe UNECE, as reported in OECD (2012); For Bulgaria: national statistical institute; For Romania: national statistical institute, quoted in the annual report of the Romanian Fiscal Council.

Note: The reference years and categories included differ by country. The differences in methodologies used mean that the data for different Member States are not comparable.

Undeclared work represents a relevant share of the non-observed economy. Paid activities that are lawful per se but not declared to public authorities are considered undeclared work. By its nature, it is challenging to estimate a phenomenon which is supposed to remain hidden. Estimates show however that the severity of the challenge varies across the Union, with peaks of more than 20% of GDP in some EU countries and a share of less than 5% in others.

Figure 2.2: Undeclared work as a share of GDP, most recent estimates

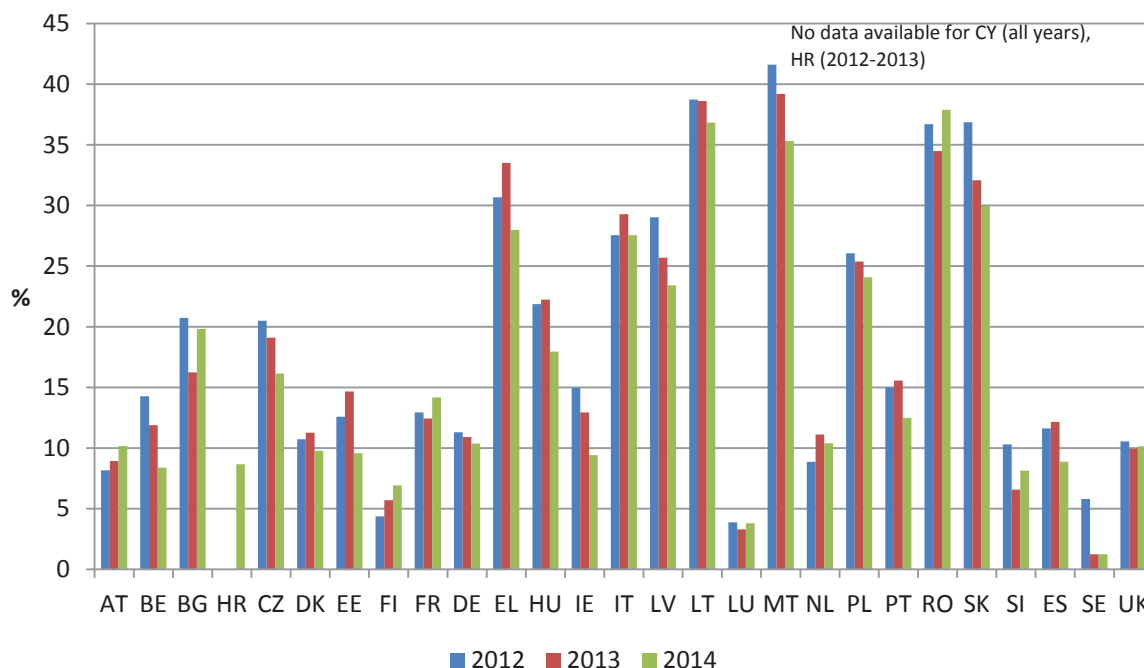


Source: European Commission (2004, 2007), European Employment Observatory Review, Spring 2004 and Spring 2007. To access the data points behind the map, including information on reference years, please visit: http://ec.europa.eu/europe2020/pdf/themes/2016/undeclared_work_201605.pdf

Note: Lowest bound of undeclared work figures as %GDP are shown where a range is given.

Moving from the whole economy to specific taxes, there are several estimates of how much taxes should be collected but eventually aren't. The VAT gap is the difference between the amount of VAT actually collected and the estimated amount of VAT that is theoretically collectable based on VAT rules. It measures the effectiveness of VAT compliance and enforcement measures in each Member State. It estimates revenue loss due to non-compliance i.e. fraud, evasion and avoidance, as well as due to bankruptcies, financial insolvencies and errors or miscalculations.

Graph 2.22: VAT gap as percentage of VAT theoretical liability, 2012-2014



Source: CASE et al. (2016). Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report, TAXUD/2015/CC/131. Note: 2012 and 2013 data for HR are not available. No data for CY.

The VAT gap is the only tax gap for which there are comparative estimates for almost all EU countries. However, several Member States estimate the gap for other taxes as well, as emerged from the work carried out by the Fiscalis 2020 project group on the Tax Gap.

Table 2.2: Overview of tax gap estimation in selected Member States

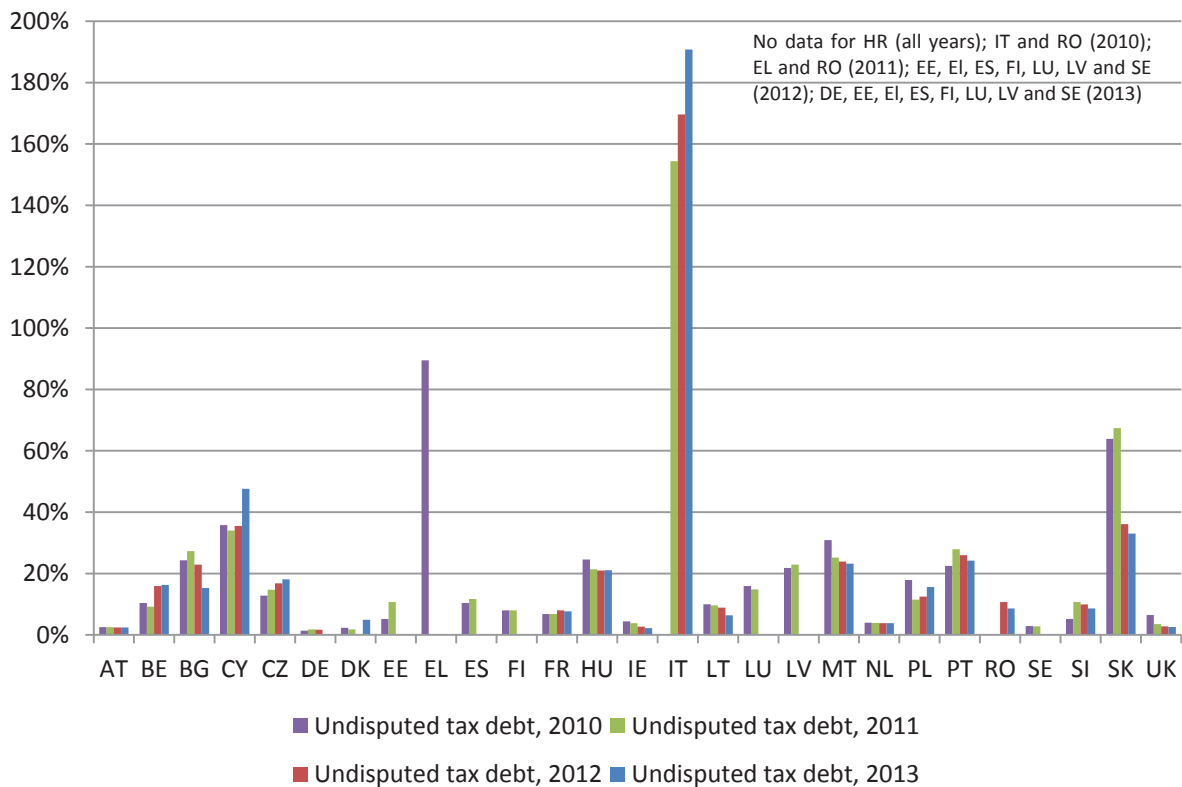
	CZ	EE	FI	FR	DE	IT	LV	PL	PT	SK	SI	UK
VAT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIT	✗	✓	✗	✗	✗	✓	✓	✗	✗	✗	✗	✓
CIT	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗	✓
SSC	✗	✓	✗	✗	✗	✗	✓	✗	✗	✗	✗	✓

Source: Fiscalis 2020 tax gap project group (2016), The Concept of Tax Gaps: Report on VAT Gap Estimations, (FPG/041) Note: Data for group members which reported tax gap estimation activity only. BE, LT and ES also took part in the group but did not report any tax gap estimation activity.

2.3.2 Tax debt as share of revenue collection

Not all taxes are paid on time. When this happens, taxes are in arrears and are defined as tax debt. Tax debtors are those taxpayers which fail to comply with payment deadlines. A high level of tax debt may be indicative of challenges with tax compliance in a broader sense that payment. Even the most sophisticated methods to ensure that taxpayers comply are worth little unless the tax owed is actually collected.

Graph 2.23: Undisputed tax debt as a percentage of net revenue collection, 2010-2013



Source: Data for 2011 (except DK, EE, ES, FI, LU and SE), 2012, and 2013 from OECD (2015a), Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris; Data for 2010, and 2011 (for DK, EE, ES, FI, LU, and SE) from OECD (2013), Tax Administration 2013: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris.

Note: No data for HR. 2010 data not available for IT and RO. 2011 data not available for EL and RO. 2012 data not available for EE, EI, ES, FI, LU, LV and SE. 2013 data not available for DE, EE, EI, ES, FI, LU, LV and SE. Net revenue collection is calculated as taxes collected minus refunds paid.

2.3.3 Estimates of tax avoidance

Tax avoidance consists in taxpayers' reducing their tax liability through arrangements that may be legal but are in contradiction with the intent of the law. Tax avoidance can take various forms. While the existence of tax avoidance practices is demonstrated in many studies, it is hard to measure revenues lost to it given the complexity of the phenomenon and data limitation. A study commissioned by the European Parliament (Dover et al., 2015) finds that the revenue loss from profit shifting within the EU amounts to about EUR 50-70 billion⁴, equivalent to at least 17 per cent of corporate income tax (CIT) revenue in 2013.

Other measures exist that do not attempt to measure the total revenue loss, but are nonetheless indicative of the potential size of the problem of tax avoidance. The impact of aggressive tax planning on tax rates effectively paid by companies provides, for example, a useful indication of the potential size of the problem. Companies that artificially shift their profits to minimise their tax liability do not only lead to loss of revenues for the States. They also put at a competitive disadvantage companies that do pay their fair share of tax. The below table shows that the use of cross-border tax planning can considerably reduce effective taxation levels.

Table 2.3 on the impact of tax planning on forward-looking effective average tax rate (EATR)

%	Mean	Min	Max	Average reduction in the EU-28
Effective average tax rate domestic case	21.1	9.0	38.3	n/a
Effective average tax rate after cross-border tax planning via				
• Hybrid financing	13.7	4.3	26.6	-36.27%
• Intellectual Property (patent box)	-1.6	-3.7	1.8	-108.35%
• Financing via offshore treaty country	15.9	6.4	28.6	-25.02%

Source: ZEW (2016b), The Impact of Tax-planning on Forward-looking Effective Tax Rates, forthcoming in Taxation Papers, Publications Office for the European Union, Luxembourg, and European Commission (2016a), Staff Working document accompanying the proposals for a Council Directive on a Common Corporate Tax Base and a Common Consolidated Corporate Tax Base (CCCTB)

Notes: (1) Hybrid financing: A parent located in the EU or the US finances an intermediate company located in an 'EU average' country which grants a 'hybrid loan' to a subsidiary located in the EU. The hybrid loan is treated as equity in the EU average country and as a loan in the subsidiary country. (2) Intellectual property box: A parent located in the EU finances both, an intermediate company in an EU country that has an attractive intellectual property box regime and another subsidiary in the EU or the US. The intermediate company licenses the intellectual property to the subsidiary and receives royalties from the subsidiary. The figures show the extreme case where the intellectual property is the only productive asset of the multinational. (3) Financing via offshore treaty: A parent located in the EU or the US finances an intermediate company located in a zero-tax country which has concluded tax treaties with EU countries. The intermediate company grants a loan to a subsidiary located in the EU and receives interest payments from the subsidiary. (4) Mean: In the domestic case the mean is the simple EU-28 average, while in cross-border cases, the mean is the average over all possible combinations of parent-subsidiary locations in the EU-28 and the US. (5) Controlled foreign companies rules and thin capitalization rules are disregarded in the calculations of the EATR.

⁴ The method captures profit shifting within the EU, excluding Spain, Hungary and Finland.

2.3.4 Overview of critical tax rules

Multinationals that engage in aggressive tax planning reduce their tax liability by taking advantage of the technicalities of a tax system or by playing on mismatches between two or more tax systems. Aggressive tax planning can result in double deductions (e.g. the same loss is deducted both in the state of source and in the state of residence) and double non-taxation (e.g. income which is not taxed in the source state is exempt in the state of residence). It is therefore essential to look at Member States' tax rules in order to assess whether they could potentially be used in aggressive tax planning schemes. In that respect, anti-abuse rules play a crucial role in restricting tax avoidance schemes.

The below figure gives an overview of the absence of three types of anti-abuse rules across Member States: *interest limitation and thin-capitalisation rules*, which aim at discouraging artificial debt arrangements designed to minimise taxes; *controlled foreign companies rules*, which aim at deterring profit shifting to a low/no tax country, and *rules to counter mismatches in tax qualification*, which aim at preventing companies from exploiting mismatches between tax systems to avoid taxation.

Table 2.4: Overview of some anti-tax avoidance rules missing in Member States' national laws, 2015

	BE	BG	CY	EE	HR	LU	MT	NL	RO	SI	AT	CZ	IE	LV	LT	PL	SK	DE	EL	FI	HU	PT	FR	IT	SE	UK	DK	ES	
Interest limitation and thin-capitalisation rules	✓	✓	✗	✗	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Controlled Foreign Companies Rules	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rule to counter mismatches in tax qualification of domestic companies or partnerships between own state and foreign state.	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓

Source: Ramboll Management Consulting and Corit Advisory (2015), 'Study on Structures of Aggressive Tax Planning and Indicators', Taxation Papers, No 61 – 2015, Publications Office for the European Union, Luxembourg.

Note: (1) The graph and table focuses on some anti-abuse rules identified in the above-mentioned study, with a cut-off date set mid-2015. (2) The study examined one way of addressing hybrid entity mismatches, which would consist in aligning the tax qualification with the one followed by the foreign state. The above table reports which Members have or do not have such rules. This should however not be interpreted as meaning that hybrid entities mismatches can only be addressed this way or should only be addressed this way. (3) A cross means that the given anti-abuse rule is missing from a Member State's national laws.

The absence of withholding taxes generally aims at preventing double taxation. For example, the elimination of withholding taxes on dividends within a group of companies is a key principle underpinning the EU Parent/Subsidiary Directive. However, it may also facilitate aggressive tax planning under certain circumstances. At the same time, the existence of withholding taxes prevents shifting profits tax-free, and thereby discourage or impede aggressive tax planning. The chart below shows which countries apply a withholding tax (exceeding 0%) on interest, dividends or royalties flowing to third country jurisdictions.

Table 2.5: Withholding taxes in EU Member States towards third country jurisdictions, 2015

	HU	MT	CY	EE	LU	NL	IE	SK	UK	AT	DE	FI	SE	BE	BG	CZ	DK	EL	ES	FR	HR	IT	LT	LV	PL	PT	RO	SI
Royalties	✗	✗	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Interests	✗	✗	✗	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dividends	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: ZEW (2016b)

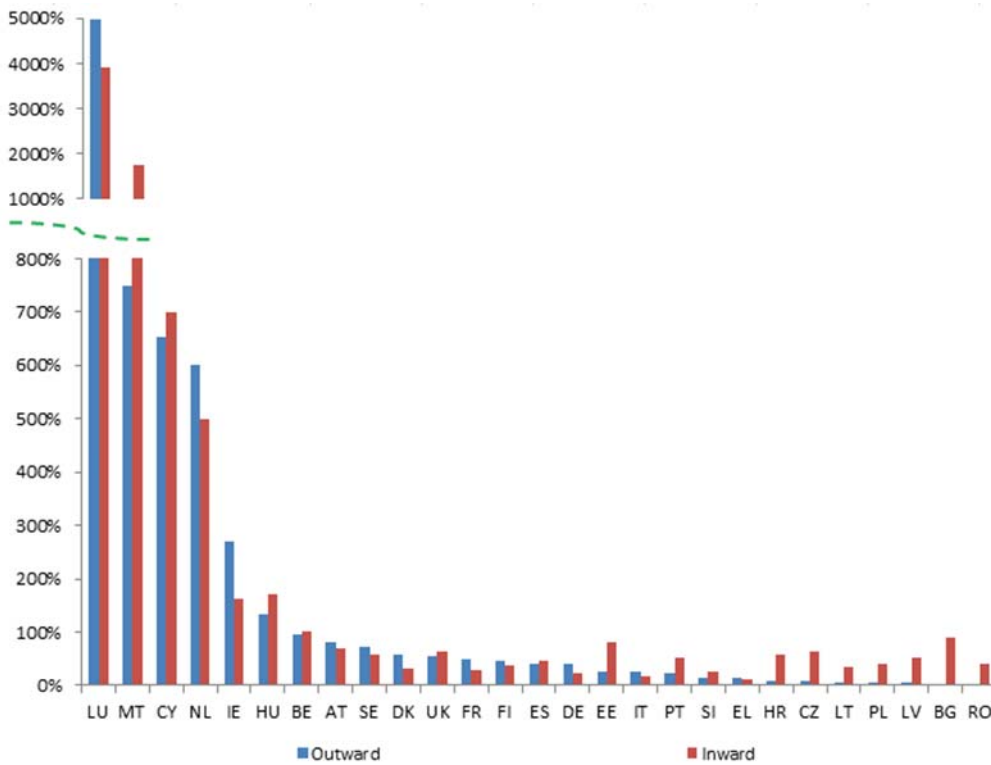
Notes: (1) The above table focuses on the domestic withholding tax (WHT) rates, i.e. the rates that are specified in national corporate tax law. It does therefore not reflect the WHT rates specified in double tax treaties. A cross means that the Member State does not apply a withholding tax (exceeding 0%).

2.3.5 Financial activity

Countries whose tax rules are used in tax avoidance structures are generally characterized by (abnormally) high financial flows compared to their real economic activity. It is therefore relevant to look at information on a possible disconnection between financial and real economic activities, which might be an indication of tax avoidance.

In that respect, it is useful to look at foreign direct investments (FDI) as they capture the investments made cross border between related companies. The below graphs therefore contrast FDI data with the GDP of the country. It should be stressed that such indicators do not in themselves suffice to draw final conclusions whether a country is being used for tax avoidance purposes. Other factors influence the ratios (for example smaller countries tend to have higher ratios of FDI to GDP). However they provide useful indications as to whether the issue of aggressive tax planning should be further investigated for a given Member State.

Graph 2.24 on FDI positions expressed in % of GDP, 2014

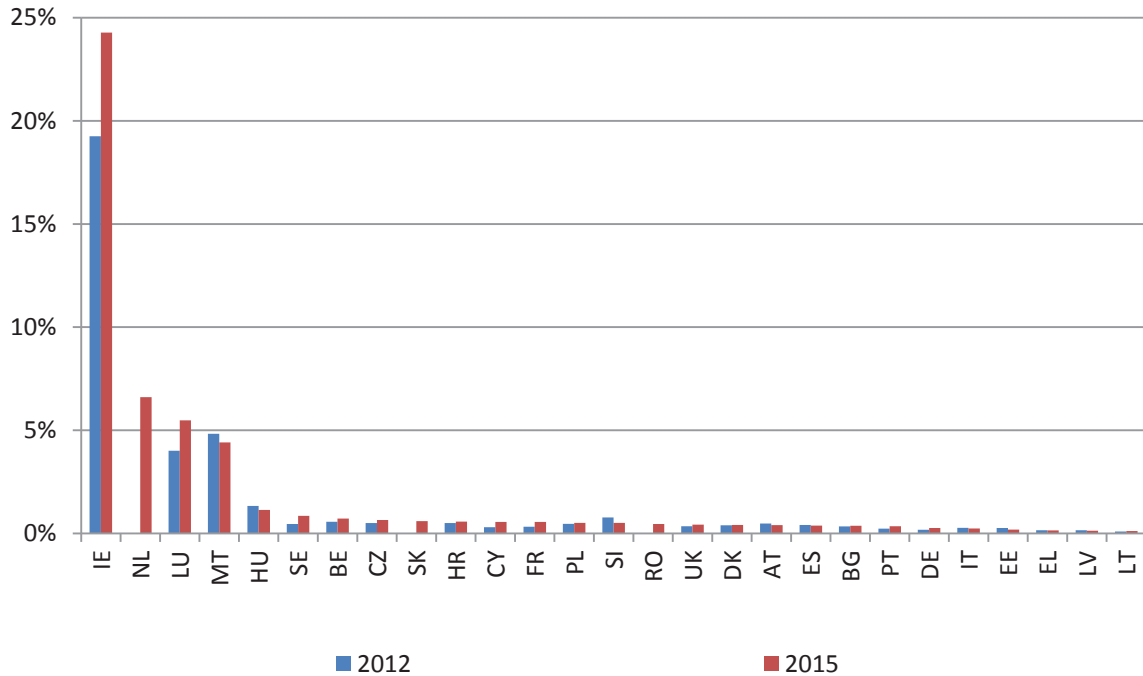


Source: Eurostat and own computations

Notes: (1) Foreign direct investment is the category of international investment in which an entity resident in one country (the direct investor) acquires a lasting interest in an enterprise resident in another country (the direct investment enterprise). A direct investment enterprise is one in which a direct investor owns 10 % or more of the ordinary shares or voting rights (or the equivalent for an unincorporated enterprise). (2) Inward FDI or Direct investment in the reporting economy (DIRE) denotes investment by foreigners in enterprises resident in the reporting economy. Outward FDI or Direct Investment Abroad (DIA) accounts for investment by resident entities in affiliated enterprises abroad. (3) FDI stocks (or positions) denote the value of the investment at the end of the period. (4) No data are available for the Slovak Republic.

Some tax avoidance strategies play on the location of intangible assets. A high share of royalty payments relative to GDP might therefore be indicative of loopholes in tax legislation allowing for tax avoidance. Again, such indicator does not in itself suffice to draw final conclusions whether a country is being used for tax avoidance purposes.

Graph 2.25: Charges paid for the use of intellectual property expressed in % of GDP



Source: Eurostat, and own computations.

Note: No data on charges for the use of intellectual property is available for Finland for 2012 and 2015. No data is available for NL, RO and SK for 2012.

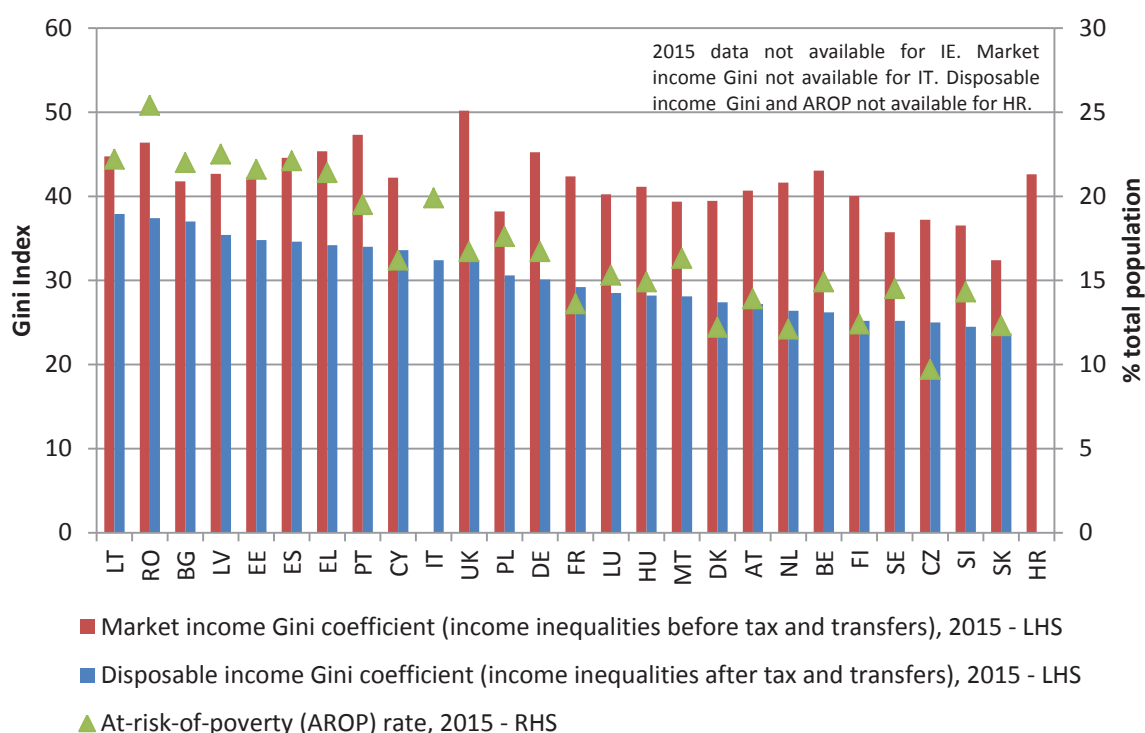
2.4. Redistribution

As outlined in section 1.2, the fairness of the tax system is about more than combatting tax fraud, evasion and avoidance. Taxation also plays a role in reducing income inequalities and fostering social cohesion. The indicators in this section give an indication of the redistributive impact of the tax system in different Member States.

2.4.1. Addressing income inequalities

The graph below shows market income inequality (before tax and benefits) and disposable income inequality (after tax and benefits) according to the Gini index, alongside the percentage of the population at risk of poverty in Member States. It illustrates that whilst tax-and-benefit systems act to combat income inequalities in all Member States, the scale of their effect differs. Income inequality remains high in certain Member States, including some where the redistributive effect of tax and benefits is relatively low.

Graph 2.26: Level of income inequality in EU Member States, 2015

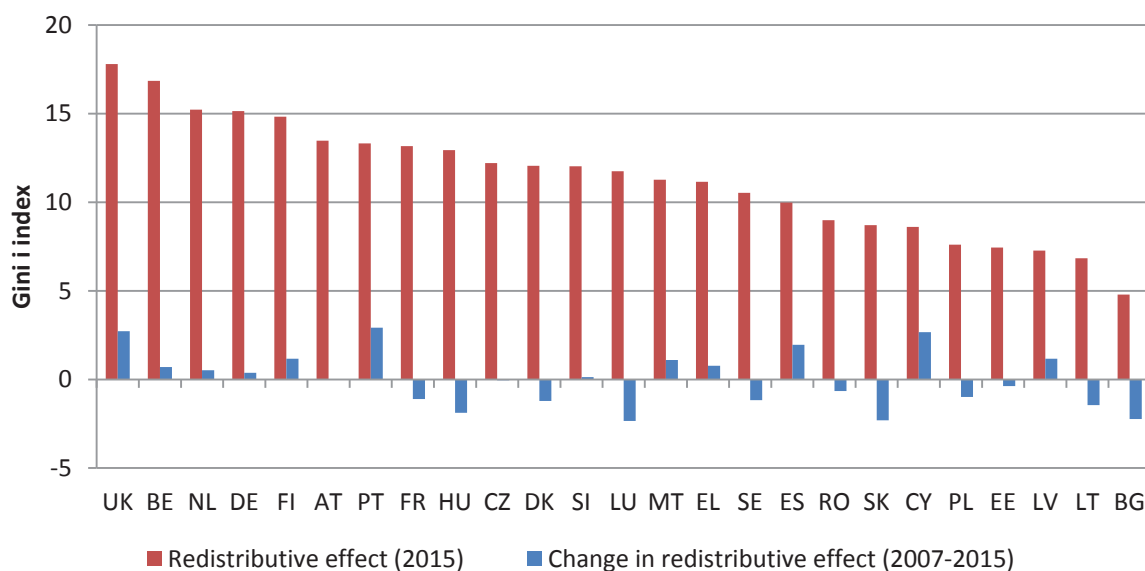


Source: Eurostat, EU-SILC.

Note: Left axis: Gini coefficients. The scale ranges from 0 to 100. The value 0 corresponds to perfect equality (same income to everybody) while 100 corresponds to maximum inequality (all income distributed to only one person and all the others have nothing). Gini coefficient for market income is derived from the total house gross income net of unemployment benefits, sickness benefits, disability benefits, education-related allowances, family/children related allowances, social exclusion not classified elsewhere, and housing allowances. Right axis: At risk of poverty rate as percentage of the total population. The indicator is used in complement of the Gini coefficients to closer reflect social challenges in EU Member States. 2015 data not available for IE. Market income Gini not available for IT. Disposable income Gini and AROPO not available for HR.

The change in the redistributive effect of the tax and benefit system during the crisis period differed between Member States. Between 2007 and 2015, the redistributive effect of the tax and benefit systems has increased in nearly half of EU Member States while it decreased in nearly one third.

Graph 2.27: Corrective power of the tax and benefit systems in EU Member States (Gini index)

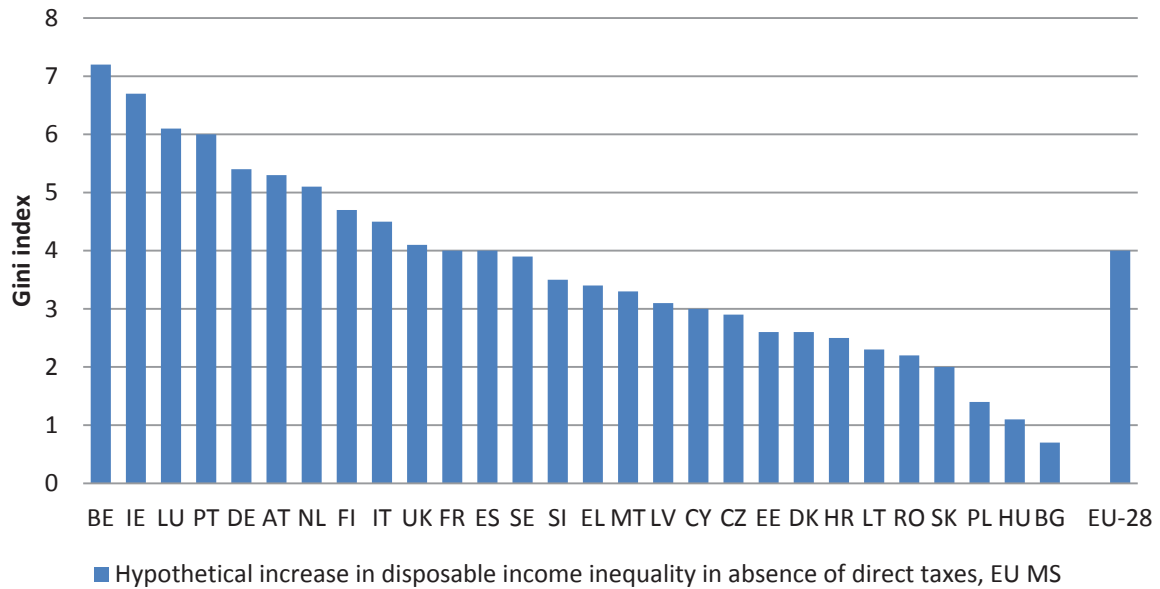


Source: Eurostat.

Note: Income data are adjusted for household size (equalisation). Left axis: Difference between the Gini coefficients for market income inequality (i.e. before tax and benefits) and disposable income inequality (i.e. after tax and benefits). The scale of Gini coefficient is from 0 to 100. The value 0 corresponds to perfect equality (same income to everybody) while 100 corresponds to maximum inequality (all income distributed to only one person and all the others have nothing). Gini coefficient for market income is derived from the total house gross income net of unemployment benefits, sickness benefits, disability benefits, education-related allowances, family/children related allowances, social exclusion not classified elsewhere, and housing allowances. 2015 data for HR, IE and IT are not available.

The role that the design of direct taxation and social security contributions (exclusive of transfers) play in reducing market income inequality differs between member states. The graph below shows the theoretical increase that would occur in disposable income inequality in the absence of direct taxes, based on EUROMOD simulations.

Graph 2.28: Redistributive effect of direct taxation, 2015



Source: Extracted from table 4 in Chrysa Leventi and Sanja Vujackov (2016) Baseline results from the EU28 EUROMOD (2011-2015) EUROMOD Working Paper Series EM3/16 May 2016

Note: The scale of Gini coefficient is from 0 to 100. The value 0 corresponds to perfect equality (same income to everybody) while 100 corresponds to maximum inequality (all income distributed to only one person and all the others have nothing). For LT, LU, HU, MT, RO, SI and EU-28, EUROMOD simulations are based on the 2014 tax system.

2.4.2. Progressivity of personal income taxation

An important element of the fairness of the tax system is the progressivity of the income tax systems and in particular the tax burden placed on low income earners. This is also relevant to employment creation, as outlined in section 2.2.

The graph below shows the degree of progressivity of labour income taxation by comparing the tax wedge on high income, average income, low income and very low income earners. The progressivity is theoretical, based on standard rates. It does not reflect tax fraud, avoidance and evasion.

Graph 2.29: Degree of progressivity of labour income taxation in EU Member States, 2015



Source: European Commission tax and benefits indicator database based on OECD data.

Note: The data on the tax wedge is for a single earner with no children. Recent data for Cyprus is not available. Countries are ordered by the ratio of the tax wedge at 167% average wage compared to the tax wedge at 50% average wage.

3

Tax reforms in the EU & policy recommendations

This section presents tax reforms announced or implemented between June 2015 and June 2016 in the areas of investment, employment, tax compliance and redistribution⁵. It complements the analysis presented in Chapter 2, by looking at the most recent developments that are not yet visible in the indicators. Building on this analysis, there are general policy recommendations and principles that every Member State could take into account in reforming its tax system to make it fairer and more growth-friendly. Finally, the section presents some more specific reform options and inspiring examples.

3.1 Recent reforms

3.1.1 Stimulating investment

Stimulating investment has been an important priority in recent tax reforms. In previous years, corporate taxation was mainly reformed at the level of the base rather than the tax rate. Member States often narrowed their tax bases to stimulate investment (e.g. by extending tax credits for R&D) and broaden them to curb tax planning practices and close loopholes. This pattern continued in 2015-2016. A few countries however reduced their rates in 2015-2016, such as Spain and the UK which followed from their announcements in earlier years, and Luxembourg and Italy announced CIT cuts as from 2017.

Tax reforms play a role in removing barriers to financing and could help deliver a Capital Markets Union.⁶ One avenue of such reforms is addressing debt bias in corporate taxation. **However, in recent years, countries have not shown much appetite for fundamental reforms that address the debt bias.** In 2015, Cyprus joined Belgium and Italy in granting an allowance for corporate equity (ACE) which allows cost of equity to be tax deducted at par with cost of debt. Most countries focused on limiting the effects of debt bias in terms of tax planning by introducing the rules that limit how much interest can be deducted by companies.

Interest in R&D tax incentives continues but focuses on implementation, while countries experiment with tax incentives for equity investors. Most countries reformed and expanded their R&D tax incentives during the crisis years thus partly compensating for cuts in direct R&D spending which took place due to fiscal consolidation efforts. As a result, R&D tax incentives reforms were less frequent in 2015-2016. Austria increased the generosity of its R&D tax credit and Slovakia and Poland overhauled their R&D tax incentives. In Malta, since 2016, companies employing PhD students or graduates are eligible for a tax credit. In addition, some Member States have introduced incentives for business angel and venture capital investors, for example Belgium, Italy, and Poland, to encourage equity investment into smaller companies. Reforms in a few

⁵ More detail about reforms in individual member states and taxation trends since 2004 can be found in the Taxation Trends report published by DG TAXUD (European Commission 2016b).

⁶ European Commission, Action Plan on building a Capital Markets Union – COM(2015) 468

countries focused on smaller taxpayers. Belgium increased the deduction rates for productive investment, in particular for self-employed and SMEs with a top-up for start-ups and high tech companies. Some Member States put in place stimulus measures to upgrade industrial equipment. For example, France introduced a bonus depreciation of 140 % for such investment in 2015, followed by a similar measure in Italy in 2016. Luxembourg planned an increase of its investment tax credits.

There have been reforms to smoothen tax compliance, inter alia, through digital integration. For instance, in France more taxes can now be declared and paid digitally. In Bulgaria, self-employed taxpayers are able to submit tax returns and insurance declarations in a digital way. In Italy, more digital services are now offered to taxpayers, including the ability to apply for a VAT exemption and provide other information online. Transparent and predictable tax systems are important for investments. In February 2016, in Denmark, a package of measures was proposed with a view to increase legal certainty for taxpayers. The package includes setting up of an ombudsman to enhance the protection of taxpayers' rights. The length of complaints is to be reduced as from 2017, with a guarantee for the maximum duration of cases for individuals and SMEs.

Going forward, it seems important to focus on creating a coherent framework for investment, including by designing better fiscal incentives and making tax compliance simpler. First, for R&D tax incentives, the focus could be on facilitating access to young and smaller companies and monitoring implementation. Second, the design and monitoring of tax incentives for equity investments into start-ups and innovative companies is essential to ensure they are well targeted. The Commission is taking action under its Action Plan on Building a Capital Markets Union to encourage best practices in tax incentives for venture capital and business angel investment. Thirdly, the overall system of tax support could be reviewed to ensure it is coherent. Some countries apply reduced rates for SMEs, however such rates can discourage companies from growing as they would face higher taxation. Finally, to move towards taxpayers' empowerment, tax administrations can build the digital services of the future adopting a "user first" approach. The use of data analytics will become more and more important. To foster progress, tax administrations can incentivise the use of self-services. Meanwhile, tax administrations could encourage taxpayers to use digital channels through communication, education and assistance. In parallel, tax administrations could keep track of progress, using metrics and scoreboards to visualise and communicate to stakeholders how well they are performing in turning tax compliance into an almost invisible and costless day-to-day activity.

3.1.2 Developing a more employment-friendly environment

The overall tax burden on labour in the EU increased between 2010 and 2015, although reforms in 2014-15 had already begun to reverse this trend. In 2015-16 several Member States reduced labour taxation, in some cases with a particular focus on low wage earners. Indirect taxes have also generally increased since 2010, but in 2015-16, changes were mixed.

Several member states reduced personal income tax (PIT) or social security contributions (SSCs) for employees, in some cases with a particular focus on low to middle income earners. Reforms included a general PIT rate decrease in Austria combined with a temporary increase to the top income tax level. As part of a comprehensive tax package, the Netherlands decreased the PIT rate in the middle two income brackets. Annual increases in the tax-free allowance were announced in Estonia, as well as in the UK, where it was accompanied by an

increase in the higher rate tax threshold. Increases to the PIT or employee SSCs were relatively few. Germany increased contributions for long term care by 0.2 pp to 2.55%.

A number of Member States reduced employer SSC contributions, either through rate reductions (in Belgium, Estonia, France and Luxembourg), raising minimum thresholds (in Bulgaria) or targeted reductions or exemptions (in Belgium). By contrast, Sweden and Italy ended previous targeted measures on young people and new hires respectively.

Nearly half of Member States reformed (or announced a reform) their excise duties on tobacco, alcohol, beverages and unhealthy products, in most cases increasing the excise rates. Similarly, nearly half of the Member States made changes to environmental and energy taxes (excise and non-excise). The majority concerned energy or motor taxes, and most were to increase taxes. For example Estonia, Lithuania, Latvia, Sweden, Bulgaria or Portugal increased their excise on energy products. In Hungary the refund on commercial diesel was decreased. Only a few countries reduced their taxes.

While most of the countries significantly increased VAT rate to consolidate public finances during the crisis, this trend has come to an end over the past two years. None of the 28 MS raised the standard rate and only a few increased the reduced rates on specific products or limited the scope of exemptions. For example, Austria increased the VAT rate for specific supplies (e.g. plants, museums, etc.) from 10% to 13% and Belgium set the rate on electricity for households back to the standard rate of 21%. Conversely, nearly half of the MS introduced new reduced rates. For example, in Slovakia a reduced rate of 10% will apply to certain foodstuffs. Romania introduced a reduced VAT rate for drinkable water and for water used for irrigation purposes.

Despite these changes the overall tax burden on labour remains high in the EU in comparison to other developed economies, and there remains scope for further labour tax reductions.

3.1.3 Fighting against tax fraud, evasion and avoidance

Enforcement has been and is a crucial tool to make tax systems fairer. It is about using the power of public authority to its fullest to compel taxpayers to do the right thing, including cross-border cooperation, effective audits and access to information and intelligence. Making the legal framework stronger has also been central to tackle tax avoidance. In 2015-16, Member States continued to take action to improve their systems, continuing the trend from recent years and complementing EU-level action.

Several reforms have aimed at improving tax compliance, for example by a more stringent surveillance and control of market transactions, reducing evasion opportunities, and by making deterrence more effective. For instance, the Czech Republic and Slovakia have introduced compulsory electronic cash registries. Poland has lowered the threshold for cash payments and Latvia has made sanctions and controls on the use of cash stricter. To improve VAT compliance, Lithuania now asks more information on VAT invoices and Italy has expanded the use of the reverse charge mechanism. To increase excise duties compliance, Bulgaria has strengthened the control powers of its customs authority. Moreover, Bulgaria has also stepped up checks on the production of certain excise goods. Croatia is implementing a comprehensive compliance risk management system, while conducting targeted audits in high risk sectors. Hungary has introduced the concept of risky taxpayers. Latvia's tax authorities have been granted access to a wider range of information about the financial market, as credit institutions and payment service providers are obliged to report suspicious activities of Latvian residents to the State Revenue

Service. To deter late or no payment of taxes due, Slovakia has started to publish and update monthly (instead of yearly) its list of tax debtors. In Bulgaria, business licences can now be refused in case of outstanding tax debt. There have also been reforms to make the sanctions system more effective, for example in Slovakia, where taxpayers can now correct their tax returns also after a tax audit has started, and in Italy, which on the one hand has extended the maximum time after which a tax audit can be conducted in case of fraud and on the other hand has reduced penalties for milder offences. There have also been several actions aimed at strengthening cooperation between Member States in fighting tax fraud and tax evasion, for example Romania increased the use of administrative cooperation instruments including multilateral controls to identify and eliminate cross-border VAT fraud schemes.

However, despite reforms and progress achieved, tax evasion and fraud continue to pose a major challenge for Europe. According to the latest available figures for the VAT gap, tens of billions of euro are lost each year to non-compliance, which however includes not only fraud and evasion but also avoidance, bankruptcies, financial insolvencies as well as miscalculations, and this for VAT only. In some Member States (e.g. Romania) the VAT gap is almost as large as the amount of public investment in health and education put together. In Poland, the VAT gap is about one third of how much the country spends to support unemployment.

The fight against tax evasion, avoidance and aggressive tax planning has been a priority of the Commission as is reflected by the numerous initiatives in this area (see box below). Therefore, reforms at national level have to be seen in the broader context of the EU and international agreements.

Most of the reforms undertaken to fight aggressive tax planning consisted in strengthening the anti-abuse legislation and enhancing transparency, also at national level. For example, in its business tax roadmap, the UK announced the introduction in 2017 of a restriction on the tax deductibility of corporate interest expense as well as rules to address hybrid mismatch arrangements. The transfer pricing guidelines will also be updated to reflect the outcome of the Base Erosion and Profit Shifting (BEPS) project, including the introduction of the Country by Country (CbCR) reporting for the attention of tax authorities. In order to prevent the shifting of profits through royalty payments, the UK also foresees a widening of the withholding tax on royalty (i.e. payments for the use of intangibles such as trademarks) and the introduction of a treaty abuse rule to prevent royalty payment being made through conduits. Italy introduced a new definition of the concept of "abuse of law", reviewed its controlled foreign companies (CFC) rules and introduced CbCR. Another example of reforms to strengthen the anti-abuse framework is the adoption by Poland of a general anti-abuse rule. Furthermore, several Member States have started implementing new transfer pricing documentation requirements, including CbCR.

Some Member States have also acted in order to ensure that specific tax regimes are less prone to tax avoidance and have addressed mismatches that arose from the interaction between tax rules of several countries. For example, the UK announced a reform of corporation tax loss relief. In line with the agreement reached at the OECD in the context of the work on BEPS Action 5⁷, which has been endorsed by the Code of Conduct for Business Taxation, all Member States (except for France) that have a patent box regime have legislated or announced

⁷ OECD Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance, Action 5 – 2015 Final Report, (OECD 2015b)

legislation to close their patent box regimes to new entrants and to end all benefits for existing claimants within an agreed timeline.

Optimisation strategies used by wealthy individuals have also been specifically addressed. For example, Denmark introduced new rules to better control foreign trusts to decrease possibilities for aggressive tax planning. In the UK, the non-domicile status will be abolished from April 2017 and inheritance tax should be charged on UK property even under more opaque ownership structures.

In summary, a number of reforms have been undertaken or announced by Member States in order to fight tax avoidance. However, more could be done. Coordination across Member States is of importance in order to effectively tackle the issue.

EU Developments

1. Fight against tax avoidance, evasion and aggressive tax planning

The Commission has set an ambitious agenda to address tax avoidance, evasion and aggressive tax planning and ensure fair and efficient taxation in the EU. Ensuring effective taxation whereby companies pay taxes where they generate their profits, and enhancing tax transparency have been at the heart of the proposed reforms.

In March 2015, the Commission launched a package of measures to boost tax transparency. It included a proposal for an automatic exchange of information on tax rulings, which was adopted by the Council in December 2015⁸. All advance cross-border tax rulings and advance pricing arrangements will be subject to an automatic exchange of information as from January 2017. Moreover, in June 2015 the Commission adopted a proposal on country-by-country reporting between Member States' tax authorities on key tax-related information on multinational companies operating in the EU. Such proposal was adopted by the Member States in May 2016⁹. Further to the introduction of non-public Country-by-Country reporting (CbCR), the Commission adopted in April 2016 a proposal to introduce public reporting requirements for multinational entities¹⁰. Finally, in July 2016, the Commission proposed further measures to enhance transparency and the fight against tax evasion and avoidance. Those measures include, inter alia, a proposal aimed at enabling Member States' tax authorities to have access to national anti-money laundering information¹¹ (in particular beneficial ownership and due diligence information), some targeted amendments to the Anti-Money Laundering Directive, as well as an initiative to increase oversight of enablers and promoters of aggressive tax planning schemes.

⁸ Council Directive 2014/107/EU of 9 December 2014 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation (OJ L 359, 16.12.2014).

⁹ Council Directive (EU) 2016/881 of 25 May 2016 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation (OJ L 146, 3.6.2016).

¹⁰ Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU as regards disclosure of income tax information by certain undertakings and branches (COM(2016) 198 final).

¹¹ Proposal for a Council Directive amending Directive 2011/16/EU as regards access to anti-money-laundering information by tax authorities (COM(2016) 452 final).

The June 2015 Action Plan for Fair and Efficient Corporate Taxation¹² was swiftly followed by the adoption of the Anti-Tax Avoidance Package in January 2016. This package is made up of four proposals to ensure that tax is paid where the value is generated and that tax information is effectively accessed. The package complements and builds on the outcome of the OECD/G20 Base Erosion and Profit Shifting (BEPS) project. Next to the amendment to the existing Directive on administrative cooperation to implement the CbCR (discussed above), it includes the anti-tax avoidance Directive¹³. The Directive, which was adopted by the Council in July 2016, puts forward tax rules aimed at preventing that income goes untaxed (or taxed at very low level). It covers the following rules: interest limitation rule, exit taxation, general anti-abuse rule, controlled foreign company rules, and rules on hybrid mismatches. The package also includes a Recommendation on Tax Treaty issues¹⁴, which advises Member States on how to reinforce their tax treaties against abuse by aggressive tax planners in a way that is compliant with EU law. Finally, the Communication on external strategy for effective taxation¹⁵ sets out a coordinated EU approach against external risks of tax avoidance and to promote international tax good governance. Follow-up work to this Communication is ongoing and the Commission has recently published a Scoreboard of third country jurisdictions, which is the first step in the creation of a common EU list of non-cooperative tax jurisdictions.

The Anti-Tax Avoidance Package complements existing initiatives and forums to ensure effective taxation and transparency, such as the Code of Conduct or the Joint Transfer Pricing Forum.

2. CCCTB

The re-launched [Common Consolidated Corporate Tax Base](#) (CCCTB), adopted by the Commission on 25 October 2016, will make it easier and cheaper to do business in the Single Market and will act as a powerful tool against tax avoidance. The CCCTB will offer companies solid and predictable rules, a fair and level-playing field and reduced costs and administration. This will make the EU a more attractive market in which to invest and do business. The re-launched CCCTB will also support R&D, a key driver of growth. Companies will be allowed a super-deduction on their R&D costs, which will particularly benefit young and innovative companies which choose to opt-in to the new system. The CCCTB will take steps to address the bias in the tax system towards debt over equity, by providing an Allowance for Growth and Investment (AGI) for equity issuance. This will encourage companies to seek more stable sources of financing and to tap capital markets, in line with the goals of the Capital Market Union.

¹² European Commission (2015a), Communication from the Commission to the European Parliament and the Council - A Fair and Efficient Corporate Tax System in the European Union: 5 Key Areas for Action, COM(2015) 302 final.

¹³ Council Directive (EU) 2016/1164 of 12 July 2016 laying down rules against tax avoidance practices that directly affect the functioning of the internal market (OJ L 193 of 19.7.2016).

¹⁴ Commission Recommendation (EU) 2016/136 of 28 January 2016 on the implementation of measures against tax treaty abuse (OJ L 25, 2.2.2016)

¹⁵ European Commission (2016c), Communication from the Commission to the European Parliament and the Council on an External Strategy for Effective Taxation, COM/2016/024 final.

3. VAT Action Plan

Although the current VAT system is a major source of tax revenues in the EU, it remains fragmented which creates significant administrative burdens, especially for SMEs and digital companies. The current system is complex for businesses that wish to expand beyond the Member State in which they are established. Cross border VAT fraud has reached EUR 50 billion.

The European Commission adopted an Action Plan on VAT¹⁶ early April 2016 with the objective of modernising the current system, to make it simpler, more fraud-proof and business-friendly. The Action Plan sets out immediate and urgent actions to tackle the VAT gap and adapt the VAT system to the digital economy and the needs of SMEs. The Action Plan also provides clear orientations towards a robust single European VAT area in relation to the definitive VAT system for cross-border supplies and proposes options to grant Member States greater flexibility in setting them¹⁷.

3.1.4 A fair distribution of the tax burden

In 2015-16 a concern for fairness as well as efficiency could be seen in reforms to labour taxation in a number of Member States, in particular in reforms to SSCs, PIT and capital and property taxation expecting to bring more progressivity in some tax systems. As discussed above, several Member States reduced the tax burden on low and middle income earners. In addition to the reforms described above, Belgium announced an increase to the basic allowance and a change in tax schedule, which, combined with higher deductions for professional costs, and an increase in the social work bonus for low wage-earners should increase workers' take-home pay, especially for the low-waged. Latvia introduced a differentiated non-taxable minimum income for individuals. In the Netherlands changes to tax credits included an increase in the maximum for both the general tax credit and the tax credit for combining work and childcare, accompanied by a steeper deduction rate as earnings rise.

As in previous years, these targeted labour tax cuts were sometimes accompanied by increased tax burden on higher income earners and capital gains. This was the case in Austria, where the tax reform included a temporary increase of the top PIT rate. Belgium will also finance its tax shift partly through higher withholding tax on dividends and interests and a tax on short-term capital gains. In Spain labour tax cuts of previous years will be partly financed thanks to the extension of wealth tax for the full year 2016. Luxembourg plans an increase of the withholding tax on interest.

A few Member States decreased property taxes, notably for equity concerns. For example, Malta extended the stamp duty exemption for first time property buyers, France maintained some of the tax allowances for tax payers with low revenues. Denmark nominally froze the land tax for own-occupied properties in 2016. Conversely, Italy increased the property transfer tax on agricultural lands for rentiers from 12% to 15%. The UK amended the Stamp duty land tax, setting higher rates on additional properties.

¹⁶ European Commission (2016d), Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on an action plan on VAT - Towards a single EU VAT area - Time to decide, COM(2016) 148 final.

¹⁷ [http://europa.eu/rapid/press-release MEMO-16-1024_en.htm](http://europa.eu/rapid/press-release_MEMO-16-1024_en.htm)

Some Member States are considering reforms to the design of their tax system. In Latvia, the Ministry of Finance is currently reflecting on the possibility to switch from a flat rate system with allowances to a multiple-rate system to improve the effective progressivity of its tax system. The Luxembourg government plans a comprehensive tax reform which will enter into force in 2017. Enhancing social fairness is one of the stated objectives of the reform, which provides among others for a greater progressivity in the lower tax brackets, an increase in the number of tax brackets, and the introduction of higher tax rates for the top earners (with an increase of the top PIT rate from 40% to 41% and 42%). In addition, some allowances will be reviewed, such as the deductibility for domesticity and childcare costs that would be increased from EUR 3600 to EUR 5400. With a view to simplify labour taxation, increase compliance and fairness, Polish Deputy Prime Minister has announced a deeper reform of integrating personal income taxation and social society contributions including changes to the personal allowance.

However, disposable income inequality levels remain high in some Member States where there seems to be some room for manoeuvre to improve the fairness of the tax design. Despite last year's trend to increasingly target labour tax cuts on low income earners, further tax reductions targeted at this group could contribute to both jobs creation and greater social fairness. In Member States where social fairness is an issue, more efforts to consider the progressivity of the tax system as a whole could help to fairly spread the tax burden across tax payers.

3.2 Reform options and inspiring examples

Taking into account what makes a fair and efficient tax system (Chapter 1), the specific situations in Member States (Chapter 2) and the general reform trends outlined above, there are various reforms options available to Member States looking to improve their taxation system.

3.2.1 Encouraging alternative sources of financing and designing better fiscal incentives

Options for Member States aiming to do more to boost investment through tax policy means include:

Encouraging alternative sources of financing and designing better fiscal incentives:

- Encouraging investment through equity as a complementary source of financing to debt, notably by reducing the debt bias for businesses under tax provisions (see example of AGI under the CCCTB).
- Improving the effectiveness of tax incentives in promoting R&D in the private sector by ensuring that young and small companies are able to benefit, simplifying and regularly evaluating their impact (see example of France and R&D super-deduction under the CCCTB).
- Ensuring that tax incentives for encouraging business angel and venture capital investment are well targeted. Concentrating efforts on monitoring and simplifying tax incentives that have the potential to boost real investment. A multitude of tax reliefs does not allow for proper monitoring, makes the system more complex and represents public resources that could be put to a better use.

Making tax compliance simpler for taxpayers, especially entrepreneurs, by:

- Making tax administration more customer-centric, expanding the use of digital services, such as third-party information to prefill tax returns and of e-filing, while cutting red tape for all taxpayers and for small and medium-sized companies and entrepreneurs in particular (see example of Estonia).
- Keeping tax laws stable, pro-actively managing changes. When changes need to happen, engage taxpayers in advance to help them to adjust and give them timely, tailored information, using a variety of channels.

Inspiring examples of tax reforms to boost investment in the Member States

The Commission's proposal for a CCCTB removes the debt bias distortion, by offering an **Allowance for Growth and Investment (AGI)**. It will allow a tax deduction for companies that choose to increase equity for financing rather than take on debt. The deduction will be calculated by multiplying the change in equity by a fixed rate, which is composed of a risk-free interest rate and a risk premium. The AGI also has strong anti-avoidance provisions. This allowance ensures that equity receives a similar level of tax benefits as debt does, creating a more neutral and investment-friendly tax environment.

France applies a tax scheme for young innovative companies that have been benchmarked as best practice in the recent study on R&D tax incentives. Such young innovative firms are exempt from social security contributions on research and innovation personnel they hire for the whole eight year period that companies qualify as young. The immediate refund option and short response time allow firms to obtain the funding faster, which is crucial to financially constrained firms. Since in place, evaluations have shown the positive impact on employment, sales increases and survival rate. The Commission's CCCTB proposal offers **a super-deduction for R&D costs**. To support small and innovative companies, an even more generous super-deduction is given to start-up companies which will be allowed to deduct up to 200% of their R&D costs.

Estonia is currently developing a new generation of tax e-services to simplify and fasten further tax compliance. The aim of the e-tax administration (e-MTA) project is to allow taxpayers to provide tax authorities data in real-time: as sales are made and recorded, inventories updated, wages paid etc., minimising taxpayers' intervention. One of the key objectives of the project is making tax compliance easy to track, accessible from a "one stop shop" and fully automated. Estonia wishes to make sure that the e-MTA project delivers user-centric solutions, and is built according to taxpayers' wishes of which services they desire accessing in the future. To do so, the Estonian tax administration is asking feedback and suggestions directly from its customers, who can simply fill and submit e-forms with ideas online from the tax administration website.

3.2.2 Shifting the tax burden away from labour and focusing on the most reactive groups

For Member States that face challenges around employment and the tax burden on labour, potential reform options could include:

Finance labour tax cuts by relying on alternative tax bases less detrimental to growth:

- Given budgetary constraints, labour tax cuts could be financed by relying on alternative tax bases such as those less detrimental to growth (consumption, environmentally harmful activities, and property) where the tax burden on those bases is comparatively low.

Focusing labour tax cuts on groups most reactive and facing the highest challenges:

- Focusing labour tax cut on groups facing the greatest unemployment challenges and precarious work conditions such as low-skilled, young people, elderly and long term unemployment rather than generic tax reductions (see example of Belgium).

Inspiring examples of tax reforms to support employment (see also the example under redistribution below)

At the end of 2015, as part of the on-going tax shift **Belgium** legislated an increase to the basic allowance and a change in tax schedule, which, combined with higher deductions for professional costs, should increase workers' take-home pay, especially for the low-waged. Further measures included a gradual decrease in employer's social contributions from 33% to 25% and a further reduction in employees' social contributions, owing to an increase in the social work bonus for low wage-earners. The labour tax cuts are to be financed in part by a series of tax increases on consumption and non-labour income and by stepping up the fight against tax fraud and tax evasion.

3.2.3 Strengthening administration, closing loopholes and promoting a culture of compliance

Reform options for Member States looking to combat tax fraud, evasion and avoidance include:

More cooperation and a stronger administrative capacity & legal framework:

- Combating tax fraud, evasion and evasion making full use of enhanced transparency and cross-border cooperation tools – such as automatic exchange of information, sharing of analysis of data between countries, multilateral controls and joint audits (see example of Romania). Making tax authorities more modern and digital to prevent and fight evasion, fraud and avoidance.
- Strengthening the legal framework, for example by closing loopholes in domestic legislation (see example of Ireland) or reinforcing anti-abuse provisions.

Promoting trust, transparency and a culture of tax compliance:

- Communicating effectively to taxpayers the value delivered through tax revenues; monitor and show results of tax administrations' performance (see example of Latvia).
- Strengthening taxpayers' tax morale using communication and education campaigns to explain why it is important that everyone pay their fair share, targeting in particular young people - the taxpayers of tomorrow (see example of Poland).
- Cooperating with businesses to improve tax compliance while using behavioural economics insights to nudge taxpayers to do the right thing at the right time. (See example of UK)

Inspiring examples of tax reforms to enhance tax compliance

Romania targeted its enforcement actions on cross-border VAT carousel fraud, cooperating with other Member States. In 2014, the Romanian tax administration took part in four joint inspections together with several other Member States' tax authorities and exchanged almost 5,000 inquiries for suspected cases of VAT fraud and evasion with other Member States.

Ireland announced changes to the tax residency rules as part of the 2015 Budget Law. The possibility to apply the so-called double Irish tax scheme disappeared for new companies, while a six year transitional period was foreseen for existing companies.

With the explicit purpose of showing citizens the "value for money" of taxes paid, **Latvia** set up a new interactive webpage ("Dots devējam atdodas"). Through the website, users can get a clearer idea of how the taxes they are paying are contributing to essential public services such as pensions, health care, schooling etc. To stimulate communication and interaction, the website allows users to share their findings through various social media. A special communication campaign accompanied the launch of the webpage with the aim of shaping the mind-set and attitudes of citizens, raising awareness of the essential role that taxes play in ensuring the long term development and welfare.

Poland's tax authorities continue to organise informational and educational activities to raise taxpayers' awareness of the importance of tax compliance and of the value that taxes help to deliver. Concrete examples include the campaign "From our Taxes for Us" and the introduction of tax-related topics in primary schools' textbooks.

In the **UK**, the Behavioural Insights Team and the tax administration have used normative messages to nudge people to pay back their tax debts. By telling tax debtors that the greatest majority of people in the neighbouring area had already settled their tax affairs, there was a significant increase in tax compliance compared with another group of tax debtors to which no such messages had been sent. This experiment provides further evidence that reference to social norms are effective, especially when targeted to a local area.

3.2.4 Enhancing the fair distribution of the tax burden across the population

In addition to the potential reforms outlined on labour taxation above, Member States that face particular challenges in social fairness could consider:

Enhancing the fair distribution of the tax burden across the population:

- Consider strengthening progressivity in the PIT, taxation of capital income of individuals, property taxes and revenues from fighting against tax fraud, tax evasion and aggressive tax planning (see example of Austria).

Inspiring example of tax reforms that enhance redistribution

In **Austria**, a major labour tax reform was implemented in 2016, which expanded the progressive income tax scale for individuals to six brackets, and included the reduction of the PIT rate at the bottom tax bracket and a temporary increase to the top PIT rate, together with higher taxes on capital income. Other measures included an increase in the tax-exempt allowance for children, a reduction in the minimum monthly contribution for health insurance for self-employed workers, an increase in tax credits for employees, and the reimbursement of social security contributions for those with a very low tax liability.

Glossary

Allowance for corporate equity (ACE) A corporate tax system where interest payments and a defined return on equity can both be deducted from the corporate income tax base. (It moves the system closer to financing neutrality between debt and equity at the corporate level.)

Allowance for growth and investment (AGI) is a corporate tax system where interest payments and a return on equity can both be deducted from the corporate income tax base. It moves the system closer to financing neutrality between debt and equity at the corporate level. It goes some steps further than ACE because it removes tax avoidance by cascading the benefits (the funds injected in a group benefit from deductibility only once) and uses an incremental system based on a moving reference year.

Comprehensive business income tax (CBIT) A type of corporate tax system where neither interest payments nor the return on equity can be deducted from corporate profits, and are thus fully taxed at the normal corporate income tax rate. It equalises the tax treatment of debt and equity finance at the corporate level.

Controlled Foreign Companies (CFC) rules Rules that attribute a proportion of the income of a controlled foreign company to its resident controlling shareholder and tax that shareholder to that income if certain conditions are met (usually that the tax rate in the foreign country is lower than a set percentage of the tax rate in the country applying the CFC charge).

Direct taxes Taxes levied on income, wealth and capital.

Effective average tax rate (EATR) is a tax rate calculated from the nominal tax rate and the definition of the tax base. Particularly, this effective tax rate is based on total investment income.

Effective marginal tax rate (EMTR) is a tax rate calculated from the combination of the nominal (i.e. statutory) tax rate and the definition of the tax base (i.e. the taxable profit). In particular, this effective tax rate is based on additional investment income.

Environmental taxes Taxes on energy, transport, pollution and resources (excluding VAT, as this is levied on all products). **Energy taxes** include taxes on energy products used for both transport (e.g. petrol and diesel) and stationary purposes (e.g. fuel oils, natural gas, coal and electricity). **Transport taxes** include taxes related to the ownership and use of motor vehicles. They also include taxes on other transport equipment such as planes and on related transport services, e.g. duties on charter or scheduled flights. **Pollution taxes** include taxes on measured or estimated emissions to air (except taxes on carbon dioxide emissions) and water, on the management of waste and on noise. **Resource taxes** include any taxes linked to the extraction or use of a natural resource (e.g. taxes on the extraction of gas and oil and licence fees paid for hunting and fishing rights).¹⁸

European Semester The European Semester is the first phase of the EU's annual cycle of economic policy guidance and surveillance. Each year, during this first phase, the European Commission analyses Member States' budgetary and structural reform policies, provides recommendations to each Member State, and monitors their implementation. In the second phase of the annual cycle, known as the National Semester, Member States implement the policies agreed.

Implicit tax rate on consumption The ratio of revenue from all consumption taxes to households' final consumption expenditure.

¹⁸ This definition is based on 'Environmental taxes — a statistical guideline' (European Commission, 2001). National classifications may deviate from the guidelines

Implicit tax rate on energy The ratio of total revenue from energy taxes to final energy consumption.

Inactivity trap The inactivity trap measures the financial incentive for an inactive person not entitled to unemployment benefits (but potentially receiving other benefits such as social assistance) to move from inactivity to paid employment. It is defined as the rate at which the additional gross income of such a transition is taxed.

Indirect taxation Taxes that are levied at the production stage, and not on the income or property resulting from economic production processes. The main examples of indirect taxation are VAT, excise duties, import levies, and energy and other environmental taxes.

Low-wage trap The low wage trap measures the financial incentive to increase a low level of earnings by working additional hours. It is defined as the rate at which the additional gross income of such a move is taxed.

Social security contributions Mandatory contributions paid by employers and employees into a social insurance scheme set up to cover pensions, healthcare and other welfare provisions.

Tax avoidance According to the OECD glossary of tax terms, tax avoidance is defined as the arrangement of a taxpayer's affairs in a way that is intended to reduce his or her tax liability and that - although the arrangement may be strictly legal - is usually in contradiction with the intent of the law it purports to follow.

Tax evasion Generally comprises illegal arrangements where liability to tax is hidden or ignored, i.e. the taxpayer pays less tax than he is legally obligated to pay by hiding income or information from the tax authorities.

Tax fraud A form of deliberate evasion of tax which is generally punishable under criminal law. The term includes situations in which deliberately false statements are submitted or fake documents are produced.

Tax wedge on labour The difference between the wage costs to the employer of a worker and the amount of net income that the worker receives. The difference arises as a result of taxes, including personal income tax and compulsory social security contributions.

Thin capitalisation rules Restrictions on the deductibility of interest payments made by corporations with excessive debt to equity ratios.¹⁹

VAT collection gap The difference between VAT revenue actually collected by the government and the theoretical net VAT liability for the economy as a whole, under the country's current VAT system. The theoretical net liability is estimated by identifying the categories of expenditure that give rise to irrecoverable VAT and applying the appropriate VAT rates to the respective estimates of expenditure in the different categories.

Withholding tax According to the OECD, a withholding tax refers to a tax on income imposed at source, i.e. a third party is charged with the task of deducting the tax from certain kinds of payments and remitting that amount to the government. Withholding taxes are found in practically all tax systems and are widely used in respect of dividends, interest, royalties and similar tax payments. The rates of withholding tax are frequently reduced by tax treaties.

¹⁹ Adapted from Arnold & McIntyre, *International Tax Primer*, Second Edition, Kluwer International, 2002

References

Alstadsæter, A., Barrios, S., Nicodeme, G., Skonieczna, A., and A. Vezzani (2015). Patent Boxes Design, Patents Location and Local R&D. Taxation Paper 57, Directorate General for Taxation and Customs Union.

Arnold, B., and McIntyre, M. (2002). *International Tax Primer. Second Edition*. Kluwer Law International.

CASE et al. (2016). Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report, TAXUD/2015/CC/131.

Chrysa Leventi and Sanja Vujackov (2016). Baseline results from the EU28 EUROMOD (2011-2015) EUROMOD Working Paper Series EM3/16 May 2016

Commission Recommendation (EU) 2016/136 of 28 January 2016 on the implementation of measures against tax treaty abuse (OJ L 25, 2.2.2016)

Council Directive 2014/107/EU of 9 December 2014 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation (OJ L 359, 16.12.2014).

Council Directive (EU) 2016/881 of 25 May 2016 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation (OJ L 146, 3.6.2016).

Council Directive (EU) 2016/1164 of 12 July 2016 laying down rules against tax avoidance practices that directly affect the functioning of the internal market (OJ L 193 of 19.7.2016).

Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/34/EU as regards disclosure of income tax information by certain undertakings and branches (COM(2016) 198 final).

Proposal for a Council Directive amending Directive 2011/16/EU as regards access to anti-money-laundering information by tax authorities (COM(2016) 452 final).

CPB (2014). A Study on R&D Tax Incentives. Final Report. Study commissioned by the European Commission. Taxation Working Paper 52, 2014.

Dover et al. (2015). Bringing transparency, coordination and convergence to corporate tax policies in the European Union. European Parliamentary Research Service. PE 558.773

European Commission (2004). European Employment Observatory Review, Spring 2004

European Commission (2007). European Employment Observatory Review, Spring 2007

European Commission (2015a). Communication from the Commission to the European Parliament and the Council - A Fair and Efficient Corporate Tax System in the European Union: 5 Key Areas for Action, COM(2015) 302 final.

European Commission (2015b). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Action Plan on building a Capital Markets Union – COM(2015) 468

European Commission (2015c). Taxation Trends in the EU 2015, Brussels.

European Commission (2016a). 'Impact Assessment Accompanying the document: Proposals for a Council Directive on a Common Corporate Tax Base and a Common Consolidated Corporate Tax Base (CCCTB)'. SWD(2016) 341 final.

European Commission (2016b). Taxation Trends in the European Union: Data for the EU Member States, Iceland and Norway. Edition 2016.

European Commission (2016c). Communication from the Commission to the European Parliament and the Council on an External Strategy for Effective Taxation, COM/2016/024 final

European Commission (2016d). Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on an action plan on VAT - Towards a single EU VAT area - Time to decide, COM(2016) 148 final.

Fiscalis 2020 tax gap project group (2016). The Concept of Tax Gaps: Report on VAT Gap Estimations, (FPG/041)

OECD (2012). Working Party on National Accounts: Summary of the OECD Survey on Measuring the Non-Observed Economy. OECD Publishing.

OECD (2013), Tax Administration 2013: Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing, Paris

OECD (2015a). Tax Administration 2015, Comparative Information on OECD and Other Advanced and Emerging Economies, OECD Publishing.

OECD (2015b). Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance, Action 5 – 2015 Final Report, OECD Publishing.

Ramboll Management Consulting and Corit Advisory (2015). Study on Structures of Aggressive Tax Planning and Indicators, Taxation Papers, No 61, Publications Office for the European Union, Luxembourg.

World Bank (2016). Doing Business 2017: Equal Opportunities for All. Washington, DC: World Bank.

ZEW (2015). Effective Tax Levels Using the Devereux-Griffiths Methodology: Intermediate Report 2015. Project for the European Commission. TAXUD/2013/CC/120

ZEW (2016a). The Effects of Tax Reforms to Address the Debt-Equity Bias on the Cost of Capital and on Effective Tax Rates, Taxation Papers 64, Publications Office for the European Union, Luxembourg

ZEW (2016b). The Impact of Tax-planning on Forward-looking Effective Tax Rates, forthcoming in Taxation Papers, Publications Office for the European Union, Luxembourg.

Annex A: Notes

Choice of indicators

The indicators in *Tax Policies in the EU: 2016 Survey* are drawn from various sources. The indicators presented provide a useful tool for identifying areas where policies could be improved. However, these results will always need to be interpreted alongside in-depth country analysis before any conclusions can be made as to appropriate policies. This type of in-depth analysis is beyond the scope of this report; it is instead carried out as part of the European Semester.

The Tax Policies in the EU survey does not claim to be comprehensive and there are inevitably other indicators that could have been used. Factors taken into account in the choice of indicator include completeness (wherever possible, data is presented for all 28 Member States), clarity and reliability. Choosing indicators is a particular challenge in certain areas – for example, it is by definition difficult to estimate how much money is lost to tax fraud, evasion and avoidance. Despite the measurement challenges, this report looks into indicators which are generally considered as relevant and which can help to better understand the size or relevance of the features or phenomena examined.

Where available and relevant, the average for the EU-28 is presented alongside the country-specific data. This is intended to assist readers in understanding the relative levels in different Member States and should not be interpreted as suggesting that the EU average represents an ideal level.

State Aid

Member States must ensure the compliance of all their tax measures with EU State aid rules and notify to the Commission all relevant measures, to the extent they are not covered by the General Block Exemption Regulation²⁰ and the De Minimis Regulation²¹. This report is without prejudice to a possible State aid assessment of national tax measures by the Commission.

²⁰ Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187, 26.6.2014, p.1-78

²¹ Commission Regulation (EC) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid, OJ L 352, 24.12.2013, p.1-8