



EUROPEAN SEMESTER THEMATIC FACTSHEET

TAXATION

1. INTRODUCTION

Although economic conditions have been improving recently, the European Union is still facing the legacy of the crisis, including a lack of investment and growing inequalities. As a result, many citizens throughout the EU are calling for more attention to social justice.

Taxation has a central role to play in shaping a fair society and a strong economy. It can help address inequalities, not only by supporting social mobility, but also by reducing market income inequalities.

Likewise, tax policy can have a major influence on employment decisions, investment levels and the willingness of entrepreneurs to expand¹, all leading to more growth.

Taxation policies are thus measured against four priorities:

- boosting investment,
- supporting employment,
- reducing inequalities,
- ensuring tax compliance.

This factsheet outlines the tax policy challenges EU countries face in these areas. Next, it presents policy levers which could help in addressing them. Finally, it examines the state of play in the countries

concerned on the basis of a set of indicators and recent tax reforms.

What this factsheet does not cover is the issue of tax avoidance, discussed in a separate factsheet. In addition, the analysis set out here should be read in conjunction with the thematic factsheets on:

- Research & innovation,
- Labour force participation of women,
- Undeclared work,
- Active labour market policies,
- Inequality,
- Social inclusion,
- Fight against corruption,
- Housing.

2. TAX POLICY CHALLENGES FACING EU GOVERNMENTS

2.1. Boosting investment

There are wide gaps in EU countries' levels of total taxation.

In 2017, the estimated tax-to-GDP ratio² is expected to vary within the EU28 between 24.1% in Ireland and 45.6% in Denmark (Figure 1).

Differences in the total level of taxation actually reflect differences in social preferences for public goods.

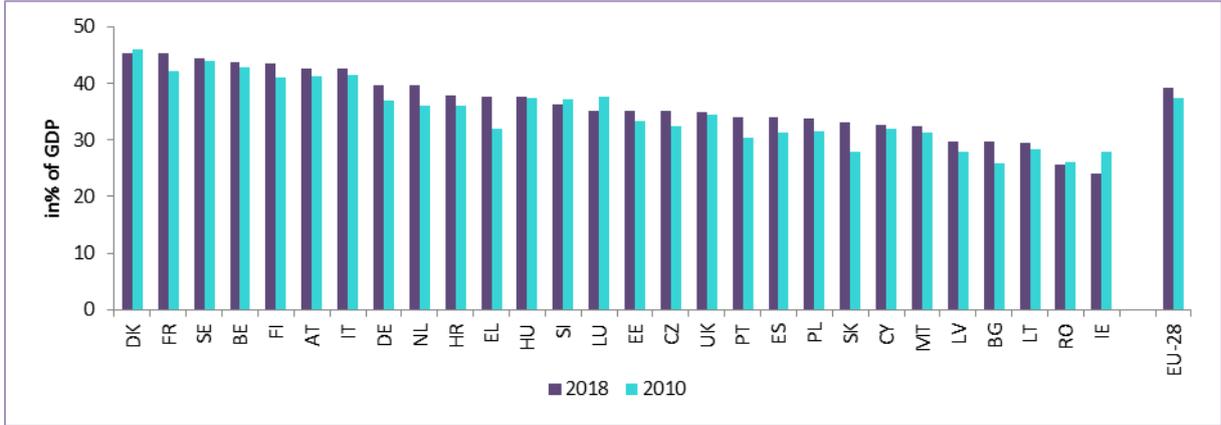
¹ For more information on the issues raised here, see: European Commission (2017), Tax Policies in the European Union: 2017 Survey, forthcoming.

² This measure includes social security contributions actually paid, but does not consider contributions deemed paid by some governments for civil servants by imputing them.

So far, there is no strong evidence of the impact on economic growth of the overall level of taxation. There is, however, a better understanding of how individual

components of the tax system affect growth through the channels of total factor productivity, the growth of the capital stock or labour supply.

Figure 1: Total tax burden in EU countries as a percentage of GDP, 2012 and 2018



Source: European Commission, AMECO.

It is well documented that taxes on corporate and personal income have impacts on growth and investment. Corporate income taxes affect both the location of businesses and domestic and foreign direct investment.

Tax rates, how the tax base is defined, and aspects of tax compliance are major determinants of the economic effects of taxation. The tax treatment of different sources of financing, the design of fiscal incentives and the time spent by businesses on tax compliance can influence productive investment.

Differences in corporate income taxes can trigger the shifting of profits by multi-

national companies from high to low-tax countries.

Effective tax rates capture a wide range of factors 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 investment is made (machinery, buildings, intangibles, inventory and financial assets).

The figure below illustrates the differences in effective average corporate tax rates, ranging from 38.4% in France to 9% in Bulgaria.

Figure 2: Effective average corporate tax rates of EU Member States in per cent, 2016



Source: ZEW (2016), Effective tax levels using the Devereux/Griffith methodology: intermediate report 2016. Project for the European Commission.

Note: (1) The effective average corporate tax rate measures the taxes paid by corporations on infra-marginal investments that produce profits above the normal return to capital. (2) To reflect the allowance for corporate equity in Cyprus, Belgium and Italy, the assumption is that the rates of these allowances equal the market interest rate in the model.

Decisions whether to invest less or more are influenced by the effective marginal tax rate, i.e. the tax burden on the last euro invested in a project that just breaks even (the 'marginal' investment).

The smaller the effective marginal tax rate the more conducive to investments the tax system.

There are several ways to decrease the EMTR and design a tax system supportive of investment. They include:

- providing faster depreciation schedules or immediate expensing,
- making equity costs deductible,
- improving conditions for loss carry forward,
- offering R&D tax incentives.

Figure 3: Effective marginal corporate tax rates of EU countries as percentages, 2016



Source: ZEW (2016), effective tax levels using the Devereux/Griffith methodology: intermediate report 2016. Project for the European Commission.

Notes: (1) The indicator is based on Devereux/Griffith model. (2) To reflect the allowance for corporate equity in Cyprus, Belgium and Italy, the assumption is that the rates of these allowances equal the market interest rate in the model.

2.2. Supporting job creation and employment

Labour taxes affect both individuals' decisions on whether and how much to work (labour supply) and employers' decisions to hire workers as they increase the cost of labour (labour demand)³. The labour supply of some groups of the population (low-skilled workers, youth, elderly and second earners) is particularly sensitive to taxes and social security contributions (SSCs)⁴.

The figure below depicts the rate of employment of the total population and of people with little education. This may indicate where a country faces a challenge in boosting overall employment or employment for specific groups.

While employment rates have improved in EU countries in recent years, the situation varies from one country to another. Likewise, the gap between employment rates for people with little education and total employment differs across countries.

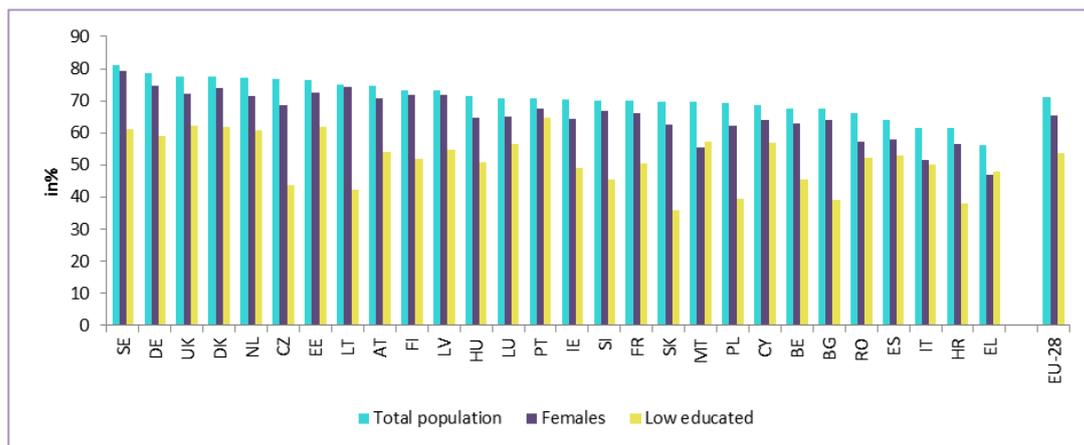
Slovakia has the widest gap between the two (33.9 percentage points) and Portugal the lowest (5.9 percentage points).

³ These decisions also depend on available social benefits received when not working, or working part-time. On further determinants of the impact of tax-benefit systems on labour supply, see the different indicators available through the Joint European Commission-OECD Tax & benefits indicators database.

⁴ See, for instance, Costas Meghir and David Phillips (2010), Labour Supply and Taxes, in Institute for Fiscal Studies (ed.), The Mirrlees

Review: Dimensions of Tax Design, Oxford University Press, pp. 202-274.

Figure 4: Level of employment of total population; female and low-skilled, 2016



Source: Eurostat, 2017

Note: (1) The age group is 20-64 years. (2) 'Low-educated' refers to levels 0-2 ISCED. (3) The employment rate for women is used as a proxy for second earners. It is recognised that these are not necessarily the same. (4) The employment rate is not measured in full-time equivalents.

The tax wedge measures the proportional difference between the costs of a worker to his/her employer and the employee's net (pocket) earnings. It therefore measures both incentives to work (labour supply side) and to hire employees (labour demand side).

Between 2010 and 2016, the tax wedge for people earning 50% of the average wage decreased on average in the EU. However, it is moving in different directions in different countries; it increased in 15 and decreased in 10).

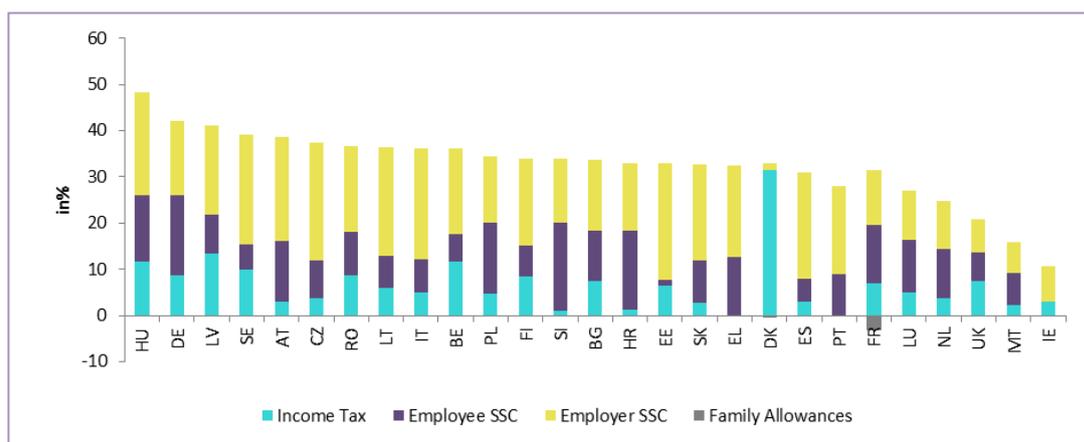
The composition of the tax wedge is important in the short run, as its various components can affect either labour demand or labour supply.

The figure below divides the tax wedge for a single worker earning the average wage into its separate components:

- personal income tax,
- employer social security contributions,
- employee social security contributions,
- family allowances⁵.

It shows the tax wedge for a single worker earning 50% of the average wage.

Figure 5: Composition of the tax wedge for a low earner in different EU countries, 2016



Source: European Commission tax and benefits indicator database based on OECD tax and benefits model, updated 10.4.2017.

Notes: (1) There is no recent data for Cyprus. (2) As the data is for single earners with no children earning 50% of the average wage.

⁵ Family allowances reduce the overall tax wedge in France and Denmark.

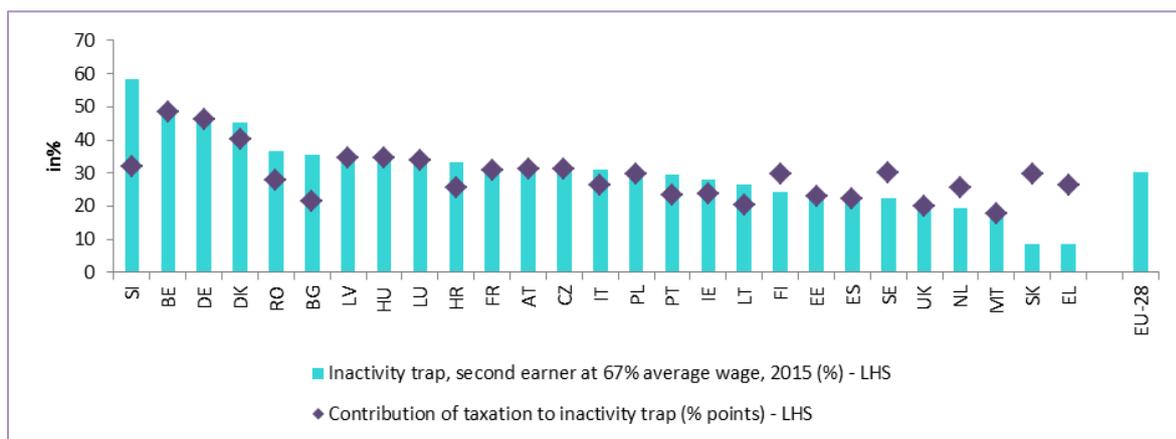
Tax system features such as transferable **tax credits and the degree of joint taxation**, alongside features of the benefit system, such the withdrawal of means-tested benefits, **can contribute to high marginal tax rates for second earners moving from inactivity into work, or increasing their earnings.**

It should be noted that other factors, such as the availability of affordable and high- quality formal care services, including, in particular, childcare, as well

as well-designed work-life balance policies, can affect decisions on whether to return to work, or to increase working hours.

The figure below shows the inactivity trap for second earners in EU countries⁶. In most countries, taxation makes a relatively high contribution to the trap for second earners, in cases where the other earner earns the average wage.

Figure 6: Inactivity trap for second earners in EU countries, 2015



Source: European Commission tax and benefits indicator database based on OECD tax-benefit model.
 Note: (1) 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). (2) 'Contribution of taxation' refers to the contribution made by taxation to the inactivity trap, in percentage points (other contributors being, for instance, withdrawn unemployment benefits, social assistance and housing benefits).

2.3. Correcting inequalities and promoting social mobility

The figure below shows **disposable income inequality** (after tax and benefits) according to the Gini index, alongside the percentage of the population **at risk of poverty** in different EU countries.

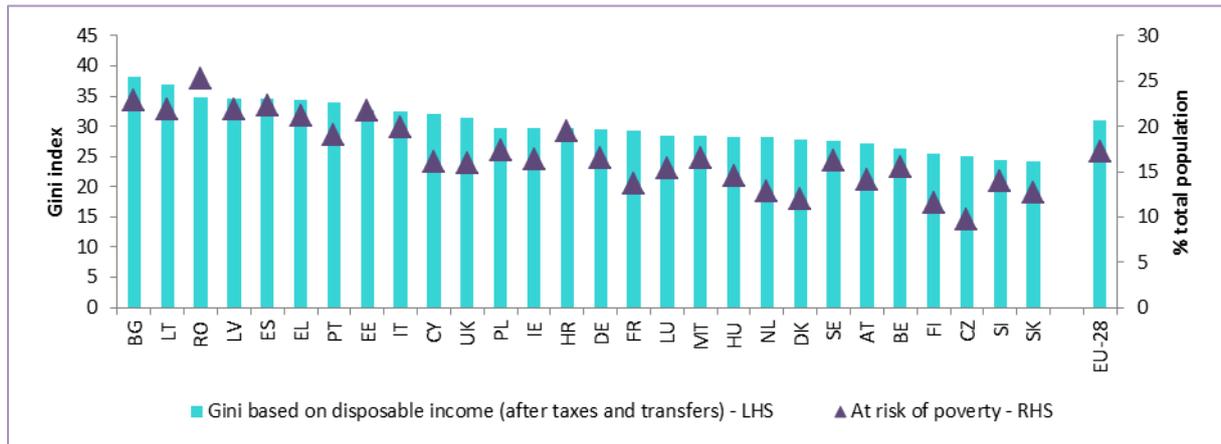
Although the EU has one of the world's most advanced systems of welfare

state, there are still some marked inequalities.

Lithuania, Romania, Bulgaria, Latvia and Estonia show the highest levels of income inequality after taxes and transfers.

⁶ 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 a case where an inactive person (not entitled to unemployment benefits but eligible for income-tested social assistance) takes a job. In other words, this indicator measures the financial incentives to move from inactivity (and social assistance) to employment.

Figure 7: Level of income inequality in EU countries, 2016



Source: Eurostat, EU-SILC, 2016

Notes: (1) Vertical axis: Gini coefficients. The scale ranges from 0 to 100. The value 0 corresponds to perfect equality (same income for everybody) while 100 corresponds to maximum inequality (all income distributed to only one person; everyone else has nothing). Pensions are included in social transfers. (2) Horizontal axis: at-risk-of-poverty rate as percentage of the total population. This indicator complements the Gini coefficient to provide a more accurate picture of social challenges in EU countries. It depicts the share of the total population earning less than 60% of the median equivalised income after social transfers. (3) 2016 data unavailable for IE, IT, LU. therefore 2015 data used. (4) EU-28 average is calculated as the population-weighted arithmetic average of individual national figures.

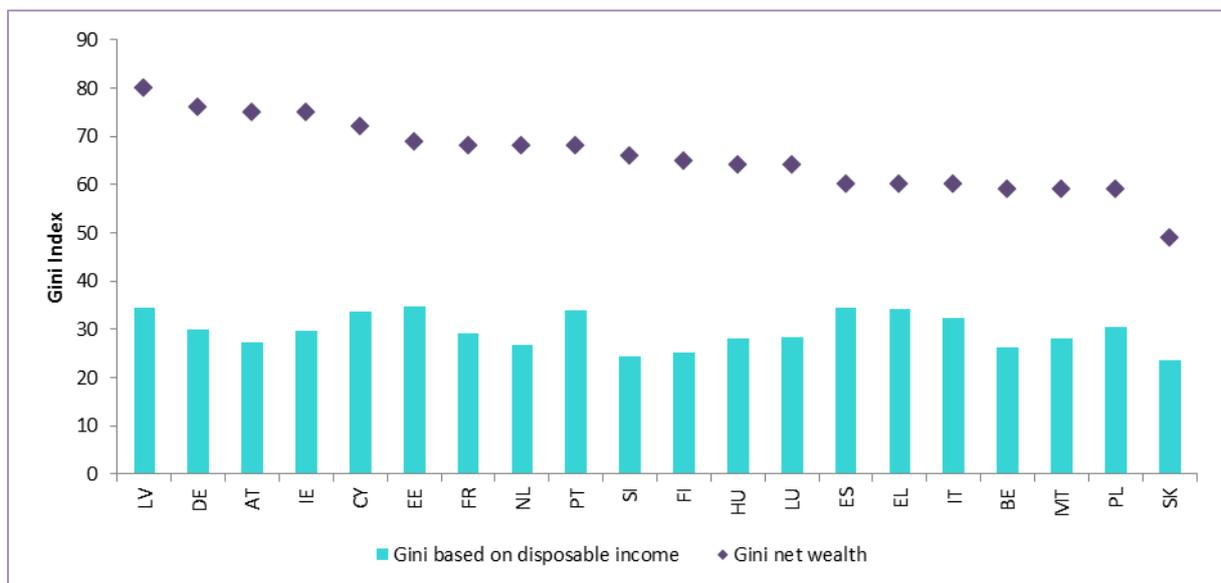
The increasing accumulation of private wealth in Europe over the past 40 years and the rise in inequality have sparked off an intense public debate on the fairness of existing tax systems.

recognition that inequality needs to be addressed from a joint income and wealth perspective.

Wealth inequality exceeds income inequality (Figure 7). This has led to the

The available data suggest that wealth inequality is a particularly important issue in Latvia, Germany, Austria and Ireland.

Figure 8: Level of income equality (2016) and wealth inequality (2014)



Source: European Commission computations based on ECB household finance and consumption survey, 2016 and Eurostat 2016.

Note: Net wealth is defined as the difference between households' total assets and their total liabilities.

Greater inequality is associated with less social mobility, as inequality shapes opportunity⁷. Social mobility can be both intra-generational and inter-generational.

Intra-generational mobility refers to the chance of moving up or down (for example along the income ladder) during one's life.

Intergenerational mobility refers to the extent to which people's socio-economic characteristics reflect those of their parents.

Intergenerational mobility is an important indicator of whether individuals can succeed in a society regardless of their socioeconomic background. It is closely linked with **equality of opportunity**.

Taxation has a role to play in supporting social mobility, for example:

- as a source of funding for quality education,
- as a means to reduce the transmission of privilege or disadvantage from one generation to the next,
- through the redistribution of income and — especially — wealth by incentivising behaviour that increases social mobility.

2.4. Tax compliance⁸

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.

Examples of tax evasion include the under-reporting of sales to reduce VAT payments. Another example is related to undeclared work, whereby personal income tax payments and social security contributions are not being paid.

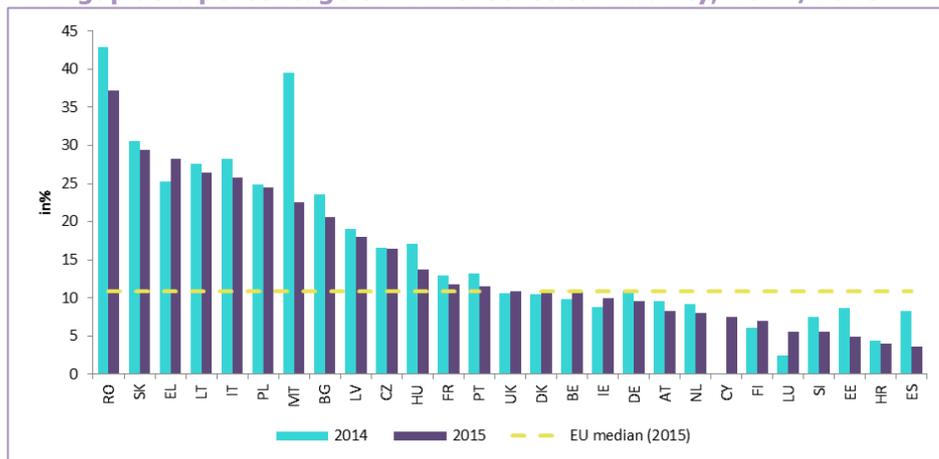
There are several estimates of how much taxes should be collected but eventually are not. However, the VAT gap is the only tax gap for which there are comparative estimates based on common methodology for all EU countries.

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.

The VAT gap is largest in Romania, Slovakia, Greece and Lithuania.

Figure 9: VAT gap as a percentage of VAT theoretical liability, 2014/2015



Source: CASE et al. (2017). *Study and Reports on the VAT Gap in the EU-28 COUNTRIES: 2017 Final Report, TAXUD/2015/CC/131*.

⁷ Corak, M. (2013), *Income Inequality, Equality of Opportunity, and Intergenerational Mobility*. IZA Discussion Paper No 7520.

⁸ The issue of aggressive tax planning and tax avoidance is discussed in a separated factsheet.

3. POLICY LEVERS FOR ADDRESSING TAX POLICY CHALLENGES

Key features to look at in assessing the fairness and efficiency of a tax system are the extent to which it

- encourages investment,
- supports job creation and employment,
- corrects inequalities,
- 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.

3.1. Boosting investment

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.

It is important to design a tax system that keeps the effective marginal tax rate low and thus avoids disincentivising profitable investment.

That does not mean that tax rates need to be cut. Instead, faster depreciation schedules, immediate expensing or allowing for the deductibility of equity financing costs brings down effective marginal taxation, even if this is offset by a change in tax rates.

Legal certainty, stable, predictable and simple tax rules matter to business and to investors taking decisions.

Distortions in the tax system could affect access to finance and discourage equity investments.

Taxation is one of the main tools at governments' disposal for encouraging entrepreneurship and innovation. Tax policies can help reduce entrepreneurial risk and the costs of carrying out entrepreneurial activity. Taxation helps correct market failure; examples include inadequate investment in R&D, risk finance and environmental externalities such as pollution.

A well-designed tax system could thus raise 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 more trust in organisations that are perceived as efficient and effective.

In addition to the costs of collecting taxes, one should also consider the costs associated with paying taxes. These are often referred to as **tax compliance costs**. These can discourage the creation of new businesses, encourage the underground economy, increase non-compliance and damage businesses' and countries' competitiveness.

3.2. Supporting job creation and employment

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).

Targeted labour tax reductions for vulnerable and more responsive groups, such as low income earners or second earners, can help raise employment levels while also reducing poverty and social exclusion.

Since only a few countries have enough fiscal space to be able to consider making labour tax cuts without any compensation, consideration needs to be given to how to finance such cuts.

Shifting taxation to other tax bases is one possible option. The potential room for a tax shift depends on the existing tax structure. Certain types of tax bases are considered less detrimental to growth, such as consumption taxes, recurrent housing taxes and environmental taxes.

However, recent economic literature draws attention to heterogeneous responses, non-linear effects and differences in amplitude between the short-term and

long-term effects. The detailed design of a tax is at least as important as the structure of the tax system.

Nevertheless, high levels of labour taxation, together with a relatively low tax burden in the form of consumption taxes, recurrent property taxes, or environmental taxes, may indicate that there is scope for shifting taxes away from labour. The distributional impact of increasing taxation in these areas also needs to be considered in its turn.

3.3. Correcting inequalities and promoting social mobility

Taxation plays a role in shaping a fair society, including by

- securing the right mix of revenues to finance public expenditure;
- mitigating inequalities; and/or
- supporting social mobility & inter-generational fairness.

Measures such as **equal access to quality education or healthcare are designed to increase equality of opportunity**. Taxation funds this public spending, relying on the right tax mix and actual compliance by all taxpayers.

Also, **tax-and-benefits systems can be powerful means of combating income inequality through redistribution**. 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.

Taxation can also be used to incentivise some types of behaviour.

The structure of the system plays a key role. Beyond income taxation and cash benefits, the overall structure of the tax system⁹ has a role to play in reducing both income and wealth inequalities and in fostering social cohesion.

⁹ Including VAT, property taxes, capital gains tax, inheritance tax, progressive nature of personal income tax.

It is important to ensure that the overall tax burden on citizens, which varies according to their sources of income, is progressive, and that the tax system is coherent and effective. Ideally, such a system can help correct market income inequalities. At the very least, it must avoid increasing them.

3.4. Tax compliance

Improving tax compliance and thereby securing tax revenues for public policies to finance education, healthcare, infrastructure, defence etc. is essential for creating a fair society.

To combat tax fraud and tax evasion, it is important to deploy a multichannel strategy¹⁰. Greater enforcement and control matter, but so does building trust and developing a culture of compliance.

There is a need for tax authorities to revise existing policies and legal frameworks or develop new strategies, to ensure that taxpayers meet their obligations — preferably voluntarily.

The cross-border nature of tax abuse and the integration of national economies across the EU call for a coordinated approach, not only through European initiatives but also through the coordination of national policies.

4. EXAMINING THE STATE OF PLAY

4.1. Boosting investment

Encouraging investment has been an important priority in recent tax reforms, especially in countries hit by the crisis. Efforts have also been made to simplify the business environment as regards taxation. However, national governments can do more to boost investment through their tax policies.

Most corporate tax systems provide firms with incentives to take on more debt, by allowing interest payments to be

¹⁰ The issue of aggressive tax planning and tax avoidance is discussed in a separate factsheet.

deducted, but do not grant similar treatment to equity.

Because a debt investment enjoys preferential tax treatment, the minimum pre-tax return required to make the investment worthwhile (the 'cost of capital') 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. As a result it aggravates financial stability risks and tends to lead to disproportionate levels of bankruptcy. It is particularly problematic for young and innovative companies that often have no access to external funding. They are placed at a disadvantage despite their relevance in generating future growth.

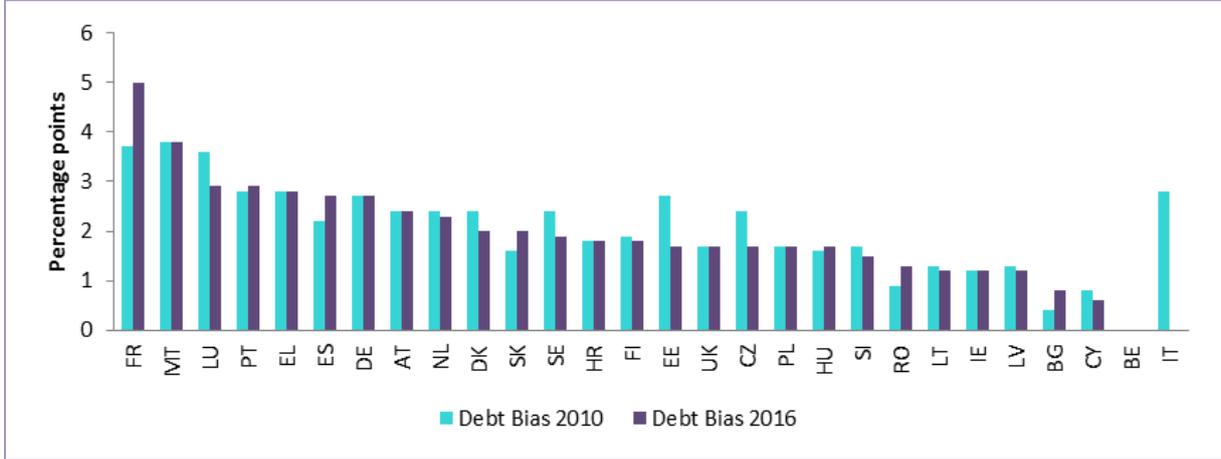
The asymmetric tax treatment of debt and equity is also exploited by some multinationals, to strategically organise their debt so as to reduce their overall tax burden.

The countries with the largest difference between the costs of capital for equity and debt-financing (the measure of the debt bias) are France, Malta, Luxembourg, Portugal and Greece.

The Commission's proposal for a **common consolidated corporate tax base (CCCTB) addresses the debt bias distortion by offering an Allowance for Growth and Investment (AGI)**. It would allow a tax deduction for companies that choose to increase equity for financing rather than take on debt. The deduction would be calculated by multiplying the change in equity by a fixed rate composed of a risk-free interest rate and a risk premium.

The AGI would be corroborated by strong anti-avoidance provisions. This would ensure that equity receives a similar level of tax benefits to debt, creating a more neutral and investment-friendly tax environment.

Figure 10: The debt-equity tax bias in corporate financing in EU countries, 2016



Source: ZEW (2016), effective tax levels using the Devereux/Griffith methodology: intermediate report 2016. Project for the European Commission.

Notes: (1) The figure 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%. (2) To reflect the allowance for corporate equity in Cyprus, Belgium and Italy, the assumption is that the rates of these allowances equal the market interest rate in the model. For Cyprus, there remains a small bias since the allowance does not apply to investments in financial assets.

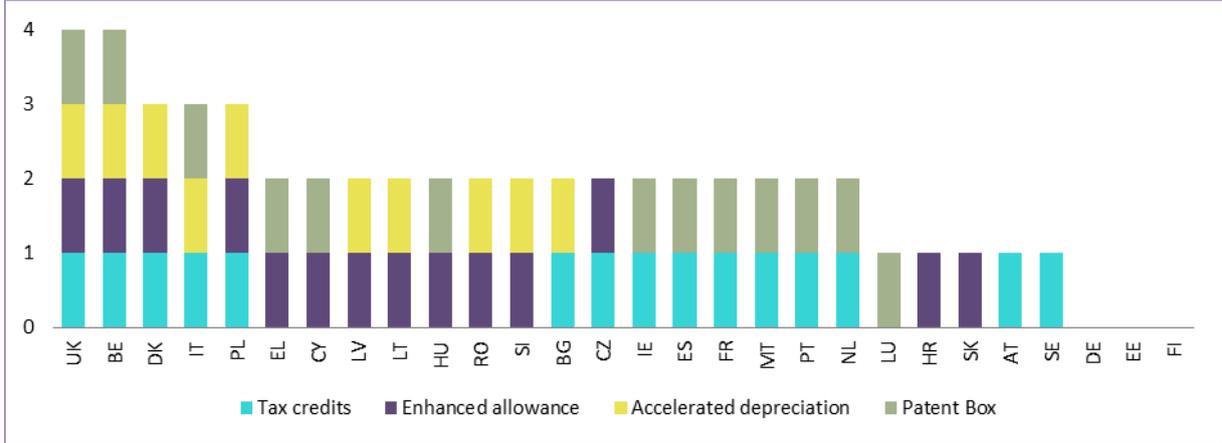
Well-designed R&D tax incentives stimulate R&D investment and innovation. Tax allowances or credits based on real R&D costs are considered good practice compared to output-based schemes such as patent boxes.

Patent boxes give a tax break on output from R&D activities. Research shows that they do not stimulate R&D and may,

rather, be used as a profit-shifting instrument, leading to high revenue losses.

A total of 25 EU countries are currently using fiscal incentives to encourage investment in R&D. The figure below shows which types of tax incentives are used in each country.

Figure 11: Number of R&D tax incentives in the EU countries, 2016



Source: CPB (2014) and update by the Commission services where available.
 Notes: (1) No R&D tax incentives in DE, EE and FI. (2) The incentive can apply to corporate and personal income taxes, social security contributions and payroll taxes. (3) The figure only depicts tax incentives. Direct support is not included.

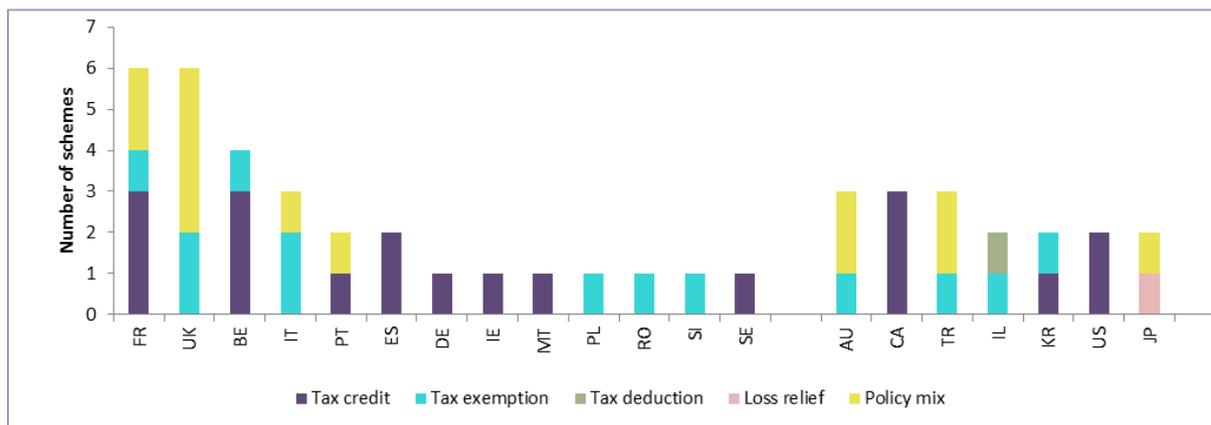
Tax incentives for venture capital (VC) and business angels (BA) have become an increasingly important part of the investment and innovation policy mix in the EU and beyond. Such tax incentives have been implemented by 13 countries, as shown in Figure 11.

While VC and BA investment generate job creation and productivity gains, a number of factors hinder its development. For example, these investments are very risky and information is often imperfect. Taxation can play a role in overcoming these barriers to investment.

A recent study¹¹ in the context of the Capital Markets Union identified desirable features in the design of VC and BA tax incentives. For example, tax incentive schemes could help lower the risk of investments in SMEs and start-ups by offering upfront tax credits or loss relief on a favourable basis. Tax relief on capital gains is a performance-related feature and would promote investment quality.

¹¹ PWC & IHS (2017), Effectiveness of tax incentives for venture capital and business angels.

Figure 12: Number of VC&BA tax incentives offered by EU countries and outside Europe.



Source: PWC & IHS (2017), *Effectiveness of tax incentives for venture capital and business angels, Final report. Study commissioned by the European Commission.*

Note: Policy mix means a combination of incentive types. The figure describes the situation in each country on 31 October 2016. More new tax schemes have since been set up in Cyprus and Hungary.

There are still large differences in tax compliance costs between EU countries. Complexity of tax systems, high compliance costs and lack of tax certainty take up productive resources and act as a barrier to business and investment. High tax compliance costs have a particular impact on SMEs.

Compliance costs mostly arise from time spent rather than being direct costs, such as those associated with bookkeeping.

Figure 12 shows the annual number of hours a medium-sized company needs to meet its tax obligations. Time spent includes the hours needed to deal with corporate income tax, value-added tax and taxes on employees, including taxes on wages and social security contributions. The time such firms need to comply with tax obligations can serve as a good proxy of how high tax compliance costs are in a given country.

To improve the business environment, tax systems could be reformed along three lines:

1. simplifying and reducing tax obligations, especially for aspiring entrepreneurs and smaller businesses,
2. broadening the range of e-services and making them available at one-stop shops,
3. raising awareness, informing and coaching business taxpayers to help them comply with tax rules, using channels including social media.

Harnessing new innovative business models is important in order to future-proof tax systems. EU countries increasingly rely on digital integration to facilitate tax compliance, and are encouraged to continue simplifying and clarifying the application of tax rules to the collaborative economy. They are also encouraged to facilitate and improve tax collection by exploiting the potential of collaborative platforms, which are encouraged to cooperate with national authorities.

Figure 13: Number of hours a medium-sized firm needs annually to meet its tax obligations, 2012 & 2015



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

4.2. Supporting job creation and employment

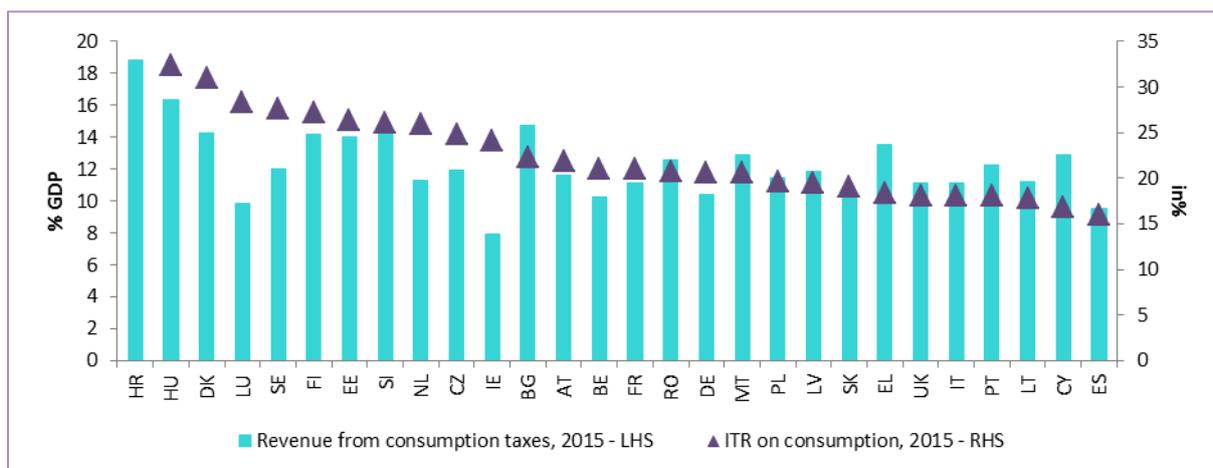
In recent years, many EU countries have cut overall taxation on labour. A few have cut labour taxes for low-wage earners and specific groups, while increasing labour taxes for higher-income groups.

However, there is no clear trend in the way these tax reductions have been addressed on the financing side.

When identifying alternative sources of revenue, it is also important to consider the potentially regressive distributional impacts of increasing taxation in these areas.

The figure 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 EU countries. This is defined as the ratio of revenue from all consumption taxes to households' final consumption expenditure.

Figure 14: Tax revenues from consumption taxes and implicit tax rate (ITR) on consumption, 2010-2015



Source: European Commission (2017), *Taxation trends in the European Union: 2017 edition*, based on Eurostat Data

Note: Implicit tax rate on consumption not available for HR.

Recurrent property taxation is a second type of taxation which could be considered as a means to offset cuts in labour taxation.

The figure below shows revenue from recurrent property taxes as a percentage of GDP in EU Countries.

Recurrent property taxes remain low in a majority of EU countries 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 gains¹². An in-depth analysis can be found in the thematic factsheet on the housing market.

Figure 15: Tax revenues from property taxes as a percentage of GDP, 2015



Source: European Commission (2017), Taxation trends in the European Union: 2017 edition, based on Eurostat Data

Note: Data does not include personal income tax on imputed rents.

A third type of taxation that could be considered as a means of compensating for labour tax cuts is **environmental taxation**. This can also contribute to fairness by pricing in the negative externalities of polluting or other damaging activities and helping to incentivise behavioural change.

The figure below shows revenue from environmental taxes - taxes on energy, transport, pollution and resources - as a percentage of GDP.

Revenue from environmental taxation has slightly risen as a share of GDP since

2010, although it has fallen slightly as a proportion of total taxation.

Environmental taxation revenues account for around 2.4% of GDP on average and around 4.1% in the country (Croatia) with the highest revenue relative to GDP.

Changes in environmental tax revenue are driven not only by changes in tax rates, but also by changes in the tax base. It is notable that over the same period both gross inland and final energy consumption have fallen.

¹² Transaction taxes tend to discourage transactions that would allocate properties more efficiently, thereby making the market thinner. These taxes also have a negative impact on labour mobility given the high transaction costs incurred by changing property.

Figure 16: Environmental tax revenue, 2015



Source: European Commission (2017), *Taxation trends in the European Union: 2017 edition*, based on Eurostat data.

Note: Environmental taxes fall into four main categories — energy, transport, pollution and resources. Energy taxes include taxes on energy products used for both transport and stationary purposes. Transport taxes include taxes related to the ownership and use of motor vehicles. They also include taxes on other transport equipment such as aircraft and on related transport services. Pollution taxes include taxes on measured or estimated atmospheric emissions (except taxes on carbon dioxide emissions) and water, on waste management and on noise. Resource taxes include any taxes linked to the extraction or use of a natural resource.

4.3. Correcting inequalities and promoting social mobility

Taxation has a role to play in mitigating inequalities and supporting social mobility, be it through pre-distribution, redistribution, or correcting or incentivising behaviours.

There are different social models in Europe, and the amount of public money necessary to finance them varies.

Securing sufficient funds to finance public expenditures should rely on:

1. the right mix of taxes, taking into account investment, and employment considerations; and
2. ensuring that each member of society pays his or her fair share.

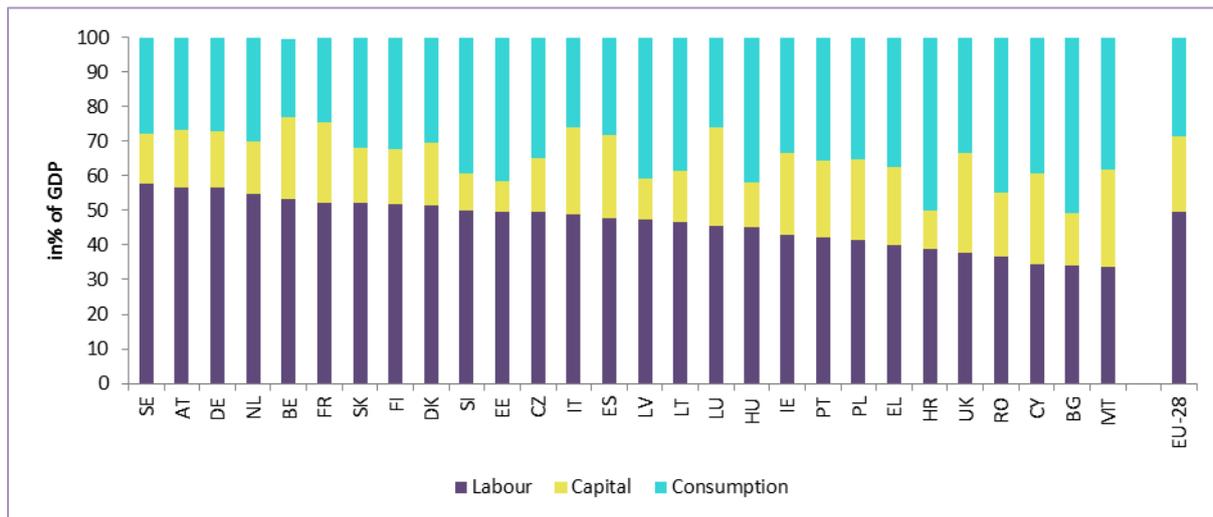
EU countries differ in the design of their tax systems as regards tax rates and the choice of which activities to tax.

Figure 17 shows the structure of taxation by economic function in EU countries, illustrating the variation between countries.

Capital taxation may be an appropriate means to improve fairness in opportunities and distribute wealth more equally, with due consideration to efficiency aspects.

However, there are practical difficulties in enforcing tax compliance with capital taxation.

Figure 17: Structure of taxation by economic function of the tax base, 2015



Source: European Commission (2017), *Taxation trends in the European Union: 2017 edition*, based on Eurostat data.
 Note: For the purpose of this figure, 'capital' taxation includes all other categories not classified as labour or consumption.

Progressive personal income taxation is one important redistributive measure of tax and benefit systems.

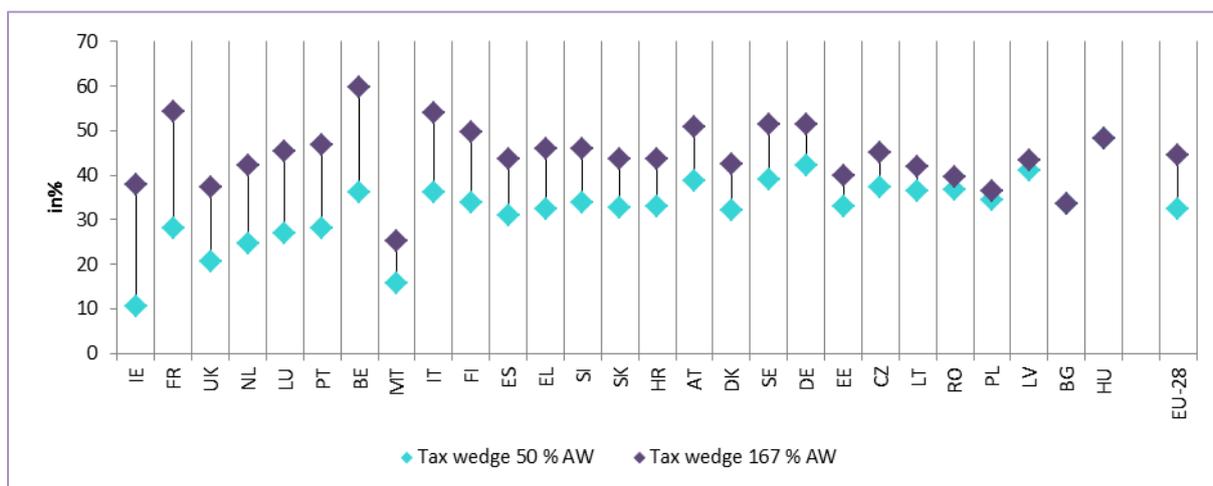
The figure below shows the degree of progressiveness of labour income taxation by comparing the tax wedge on high income and low income earners.

The degree of progressiveness is theoretical, based on standard rates. It does not reflect tax fraud, avoidance or evasion.

The progressiveness of the income tax systems, especially the tax burden on low earners, is also relevant to job creation, which provides a way out of poverty and social exclusion.

Ireland, France, the UK and the Netherlands have the most progressive labour income tax systems. Hungary, Bulgaria, and Latvia have the least progressive labour income tax systems.

Figure 18: Degree of progressiveness of labour income taxation in EU countries, 2016



Source: European Commission Tax and benefits indicator database based on OECD data.
 Note: (1) The data on the tax wedge are for a single earner with no children. (2) There are no recent data on Cyprus. (3) Countries are ranked in descending order by the magnitude of the ratio of the tax wedge at 167% average wage compared to the tax wedge at 50% average wage. (4) 2016 data not yet available for MT, HR, LT, RO, BG.

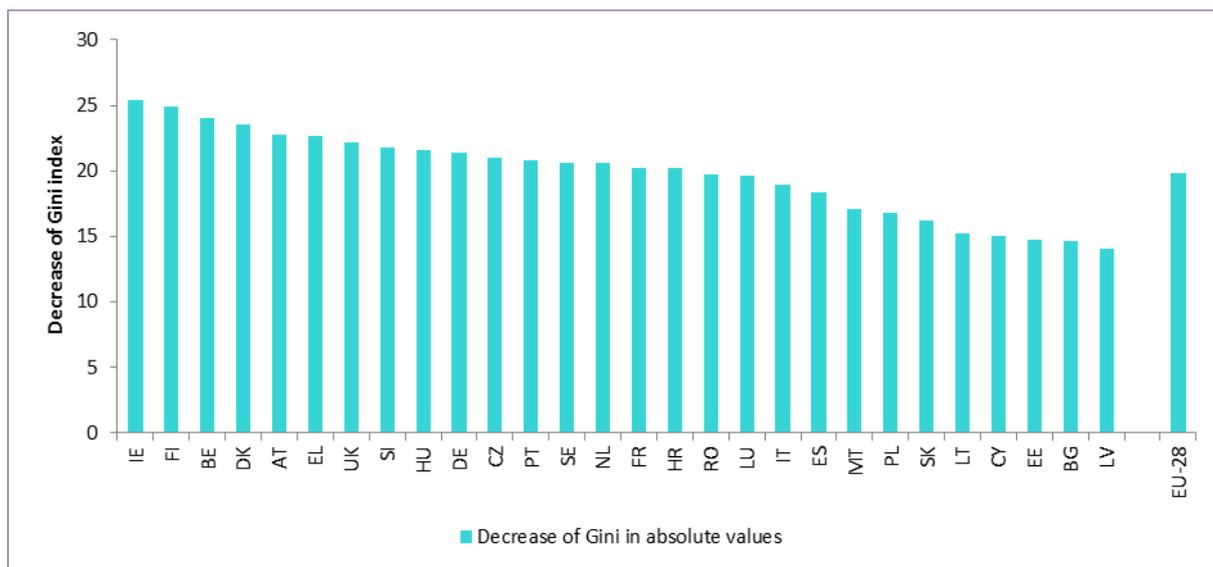
The figure below depicts the **corrective power of tax and benefit systems** by comparing the Gini coefficient of market income with the Gini of disposable income (both in absolute and relative terms).

It illustrates that whilst tax-and-benefit systems act to combat income inequalities in all EU countries, the scale of their effect differs.

Income inequality remains high in certain EU countries, including some where the redistributive effect of tax and benefits is relatively low.

The strongest redistributive effects, expressed in the relative reduction of the Gini index, are shown by Finland, Belgium and Denmark.

Figure 19: Corrective power of the tax and benefit systems in EU countries



Source: Eurostat, 2016

Note: (1) 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). Income data are adjusted for household size (equalisation). (2) 2016 data unavailable for IE, IT, and LU, 2015 data used instead.

4.4. Tax compliance¹³

Enforcement has been and remains a crucial tool for making tax systems fairer. It is about using the power of public authority to its fullest to compel taxpayers to do the right thing. This includes cross-border cooperation, effective audits and access to information and intelligence as well as speedy recovery procedures.

Furthermore, **it is essential to promote trust, transparency and a culture of tax compliance through various means:**

- Communicating effectively to taxpayers the value delivered through

tax revenues; monitoring and showing the results of tax authorities' performance.

- Encouraging taxpayers to behave more ethically in paying their taxes, using communication and education campaigns to explain why it is important that everyone pay their fair share. These should target young people in particular – tomorrow's taxpayers.
- Cooperating with businesses to improve tax compliance while using behavioural economics insights to nudge taxpayers to do the right thing at the right time.

In 2016-17, EU countries continued to take action to improve their systems, continuing the trend from recent years.

¹³ The issue of aggressive tax planning and tax avoidance is discussed in a separate factsheet.

However, despite reforms and progress achieved, tax evasion and fraud continue to pose a major challenge for Europe. Therefore, the fight against tax evasion remains a priority of the Commission as is reflected by the numerous initiatives in this area.

One of those is the modernization of the VAT system, contributing to the fight against fraud. The Commission adopts in 2017 and 2018 a comprehensive package on VAT reform with the objective to fight the growing risk of tax fraud, as well as to simplify VAT obligations for companies and provide greater flexibility to Member States in defining what products should be taxed at reduced rates.

5. USEFUL RESOURCES

- European Commission, Tax policies in the European Union: 2017 Survey, forthcoming
- European Commission, Taxation Trends in the European Union: 2017 Edition, Luxembourg, 2017

Date: 28.9.2017