

Tax policies for inclusive growth in a changing world

OECD report to G-20 Finance Ministers and Central Bank Governors, July 2018

Executive Summary

Globalisation and technological change, including digitalisation and advances in automation, have generated substantial increases in quality of life for many households, and have reduced poverty rates in many emerging economies. Global integration, new technology and flexible work arrangements create benefits for society and offer significant opportunities to improve well-being. Consumers face a wider range of consumption goods of higher quality at cheaper prices. Flexible work arrangements can provide workers with opportunities to better reconcile work and broader life priorities across the life-cycle. Equally, businesses face increased opportunities to innovate and sell their goods and services to a global market.

While these changes have resulted in increased incomes and increased opportunities, these benefits have not been shared equally. Despite recent improvements in economic performance, many economies continue to experience low productivity growth and often stagnating wages, as well as increased levels of inequality. Moreover, technological changes may shift labour demand towards jobs that will require greater use of cognitive skills for which many workers are not currently adequately trained. This may lead to increased gaps in wages, access to stable and secure work and life opportunities between those with high, medium and low skills. New technologies may also facilitate the rise of non-standard employment and the "gig economy", challenging traditional work arrangements and social protection systems. These factors may further exacerbate inequality.

Policymakers face challenges in simultaneously addressing the problems of low productivity growth and rising inequality. These challenges arise in a context of increasing fiscal pressures as a result of ageing populations and climate change. The mobility of capital (and increasingly, of labour) in a globalised and rapidly innovating world raise the efficiency costs of using taxes on labour and capital to further domestic equity goals. Technological change and its implications for the future of work challenge traditional social protection systems and require adjustment mechanisms to help individuals navigate the transition.

It is sometimes argued that tax policy can support equity or efficiency but not both (Okun, 1975_[1]). Trade-offs between equity and efficiency objectives often exist, whereby policies that reduce inequality may be harmful to growth, and growth-friendly policies can increase inequalities. Similarly, reducing taxes may be beneficial to growth and sometimes to equity, but may conflict with the core objective of the tax system, which is to raise public revenue.

However, this paper argues that in many countries, governments can achieve tax and transfer policies for inclusive growth while also supporting the revenue-raising capacity of the tax system and ensuring the sustainability of public spending. Achieving this will not be the result of any single policy, but a careful balance of policy choices and trade-offs. Individual parts of the tax and transfer system may be well-designed, but looking in isolation at, for example, one type of tax can lead to poor tax policy choices and sub-optimal economic and social outcomes (Slemrod and Gillitzer, 2014_[1]). More broadly, tax and transfer policy should be considered as part of a broader framework of structural reforms for inclusive growth.

That many such reforms are politically challenging does not make them less necessary. New challenges require new responses. This paper highlights reforms to adapt tax systems to globalisation and technological change, particularly with respect to the changing world of work. Raising the quality of public spending is also essential as it gives taxpayers the highest value for their tax money. While comprehensive reform can be difficult, and the ways in which the future will impact the tax system and the economy are uncertain, there is still much that can be done.

A "one-size-fits-all" tax system to facilitate inclusive growth does not exist. Countries differ in the challenges they are facing and have different preferences in terms of the kinds of societies they want. Differing countries also have tax systems that are designed differently. Countries therefore face different reform priorities. Reforms that may be effective in stimulating inclusive growth in one country may be less effective in another country.

This paper is organised around five key topics.

- Section 2 focuses on the impact of the tax system on the market distribution of income, by supporting employment, skills investments, and labour market formality.
- Section 3 considers how shifting tax mixes towards growth-friendly taxes can be combined with measures to improve progressivity, particularly through base-broadening and through removing inefficient and regressive tax expenditures.
- Section 4 deals with ways in which personal income taxes and social transfers can foster inclusive growth by raising the efficiency and equity of labour and capital income tax
- Section 5 examines how tax policy can foster business dynamism and productivity, including through support for investment and innovation, and can raise efficiency by continuing to combat BEPS.
- Section 6 considers how tax capacity can be raised, and how tax administration can be strengthened, including through international cooperation.

1. Taxation, inequality and growth: The current state of play

1.1. The current challenges in fostering inclusive growth

- 1. The global economy is undergoing a period of significant change that is affecting both the rate of economic growth as well as the distribution of the growth dividend. Within-country inequality has increased in many OECD and G20 countries since the mid-1990s (OECD, 2015_[2]). In the aftermath of the financial crisis, some countries have seen continued increases in income inequality.
- 2. While inequalities of income and wealth within countries have increased, inequalities between countries in the OECD and G20 has fallen, as have poverty rates across the world, though large numbers of people continue to live in poverty. Catch-up growth of many middle income countries has led to converging living standards (OECD and World Bank Group, $2017_{[3]}$).

□2007 to 2010 ■ 2010 to 2014 ◆ 2007 to 2014 50% 40% 30% 20% 10% 0% -10% -20% -30% -40% -50%

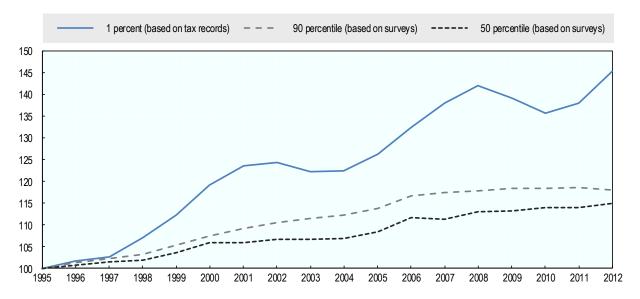
Figure 1. Growth in real median disposable income in OECD countries, 2007-2014

Source: OECD Income Distribution Database

- Globalisation and technological change have generated substantial increases in the quality of life for many, and have fostered growth and well-being (OECD, 2018₍₄₎). Globalisation has helped increase the size of the global economic pie. It has increased aggregate global wealth, lifted more than a billion people out of extreme poverty and provided one of the strongest convergences in per-capita incomes between countries in the world's history. Command over new production technologies also provides the opportunity for greener production, safer jobs (with some hazardous work performed by robots), new and more customised goods and services, and faster productivity growth (OECD, 2017_[5]).
- These forces have also changed the dynamics of employment, with major reallocations between activities, skills and regions and a hollowing out of middle-skill jobs. The pace of structural change in the global economy is expected to intensify in the years to come, increasing the mobility of businesses and individuals and giving rise to continuing changes in demand for different skills (OECD, 2018[6]).

5. Despite the potential of new technologies to boost long-term productivity, **productivity growth has been slowing,** resulting in stagnant wages for many in OECD countries (see Figure 1, as well as OECD $(2017_{[7]})$ and OECD $(2015_{[8]})$) and **growing inequality between workers**. Even the modest productivity increases that have occurred have not resulted in higher wages for most workers (OECD, $2016_{[9]}$). Figure 2 shows evidence from tax records that highlight substantial increases in the income share of the top 1% in many OECD countries. The top 1% gained 45% more during 1995-2011 in real wages; three times above the average growth in real median wages in OECD countries. In addition to inequalities in wages, there have also been increases in wealth inequality in many OECD countries, which suggests that non-wage inequalities may be rising as well.

Figure 2. Wages of top 1% of income earners diverged from the average, the median and the 90th percentile for select countries



Note: Indices based on unweighted average for nine OECD countries: Australia (1995-2010), Canada (1997-2000), Spain (1995-2012), France (1995-2006), Italy (1995-2009), Japan (1995-2010), Korea (1997-2012), Netherlands (1995-1999) and US (1995-2012), for which data on wages of the top 1% of income earners are available. All series are deflated by the same total economy value added price index.

Source: OECD Earnings Database, Schwellnus et al. (2017).

- 6. In many advanced countries **globalisation and offshoring** have led to net job growth overall, but with significant job losses, often concentrated in certain geographic locations and involving a reallocation of jobs between sectors and types of skills (Kovak, Oldenski and Sly, 2017_[10]). Expanding global value chains have facilitated strong catch-up growth in many emerging economies, though increased automation may create challenges for this kind of growth in the future by eroding their cost advantage in manufacturing.
- 7. Technological changes also have fundamental consequences for the distribution of the benefits of economic growth (Guellec and Paunov, $2017_{[11]}$). New production technologies will **change the world of work**. New and more productive jobs will be generated, but many existing jobs will disappear and some skills will become obsolete (Rodrik, $2016_{[12]}$; Felipe, Mehta and Rhee, $2014_{[13]}$). This has led to growing wage gaps between those with high and low skills (OECD, $2018_{[6]}$).

- These trends are transforming the global economy fundamentally, and in doing so are altering the recipients of the benefits of economic growth, creating new social pressures and social risks. Increasing discontent, disenchantment and anxiety about the future are generating new social and political cleavages, including across genders, generations, and regions, between those with in-demand-skills and those without, and between those with high levels of labour market security and those without. There is no objectively "correct" level of inequality, and the optimal level of inequality is subjective and contested and will differ between countries. In addition, there are trade-offs between addressing these differing and interacting inequalities as well as other competing policy objectives, which will inevitably require some degree of prioritisation of objectives (Persson and Tabellini, 1994_[14]). Nonetheless, governments can play an important role in facilitating change and social inclusion. Managing these trade-offs generates complex challenges for policymakers and the answers to these complex and interrelated challenges may vary from one country to the next.
- Increases in inequality not only undermine perceptions of well-being, but can also have potentially negative consequences for growth, especially where inequality is already high. High levels of income inequality can reduce growth through diminished productivity and those with low levels of income and wealth might face insufficient opportunities for skills investments. Where levels of inequality become too high, public perception that the returns to growth are not fairly shared may create increased disquiet among citizens as to the merits of globalisation, generating political tensions in some countries.
- Increased levels of job obsolescence and social risk also undermine well-being and may create increased pressure on public finances. In advanced economies, where economic shocks hit particular regions or sectors, public finances may be placed under strain by demands for expanded social protection in response to the new or changing social risks. In emerging economies, a large part of the poor remain outside social safety nets despite the sizable scale-up of social protection systems in many countries in recent decades. In these countries, increasing automation may heighten the need to scale up social safety nets by increasing their scope and the amount of benefits the poor receive; however, the major challenge is to do so in a fiscally sustainable manner.
- 11. These pressures on public finances are exacerbated by demographic change in advanced economies, in particular population ageing and migration. In some emerging economies, population ageing is a key concern, but ensuring that citizens, especially young people, have access to skill development and jobs is a competing public finance pressure.

1.2. Tax policy in a changing environment

12. Structural changes in the economy present challenges for tax policy from efficiency, equity and revenue perspectives. These global trends raise new challenges for policymakers and also affect the tools they have to deal with them. Trade-offs between policy options become more challenging in some instances (see Table 1). Many aspects of tax systems have been designed for the economy of the past and may not always be fit for purpose to support inclusive growth today or in the future. Each country faces differing sets of tax policy and other challenges; reforms that are appropriate for one country may be less relevant in other countries. Reform packages need to be tailored, and sequenced carefully to ensure success (Brys, 2011_[15]).

Key trends	Challenges for inclusive growth	Challenges for tax policy		
Low productivity growth	Low productivity growth holds back real wage growth, exacerbates difference between firms and can exacerbate inequality	Stagnant productivity makes pro-growth tax policy more important, which can create equity trade-offs, at least in the short run		
Increased inequality	Increased inequality can mean that more workers may be left behind by growth, with detrimental impacts for skills investment, health, and well-being	Increased inequality increases calls to use the tax system to sustain policies to reduce income and wealth inequality, which also creates efficiency trade-offs		
Changing world of work	Some existing jobs will disappear and some skills will become obsolete, potentially leading to wider income gaps by skill level and need for life-long learning	Increasing non-standard work may lead to increased ease of re-characterising labour as capital income, less revenue through SSCs, and reduced benefit entitlements; but potentially more job flexibility		
Globalisation	Job growth overall, but often substantial job losses concentrated in certain locations and rapid reallocation of jobs from sector to sector	Increasing mobility of companies, capital and individuals increases tax competition and can lead to opportunities for BEPS behaviours and tax evasion as well as larger spill-over effects of tax policy from country to country		

Table 1. Trends presenting challenges for tax policy and inclusive growth

- 13. Declining productivity growth in many developed countries has sparked continued debate about how **tax policy can be used to foster economic growth**. Policymakers have noted the existence of significant trade-offs between equity and efficiency in certain aspects of tax policy, raising the issue as to how tax policy could advance both equity and efficiency objectives at the same time. While tax policy is often a second-best solution in advancing inclusive growth, OECD work on the productivity-inclusiveness nexus has provided new insights into how efficiency and equity objectives of tax policy can be mutually reinforcing for growth (OECD, 2016_[9]; OECD, 2018_[4]). The challenge is to consider *ex-ante* both objectives in policy design, for example through policies that encourage skills investments and innovation (Brys et al., 2016_[16]).
- 14. Globalisation, digitalisation and increased mobility of tax bases have increased pressures on tax systems. Over the last decades, countries have sought to reduce top CIT and PIT rates, noting their detrimental impacts on incentives to work, save, and invest. Increased labour mobility, especially for those with high skills, can lead to increased tax competition for highly-skilled workers. As corporate tax rates have fallen, large gaps have opened up between personal and corporate tax rates in many countries, which can lead to incentives to incorporate and re-characterise wage income as corporate and capital income. These and other factors have exerted downward pressure on labour income tax rates, and as a result tax progressivity has fallen over recent decades, especially in the upper-part of the income distribution (Causa and Hermansen, 2017_[17]; OECD, 2014_[18]).
- 15. New OECD research shows that globalisation has contributed to reducing the redistributive effect of personal income taxes in some countries, and that declining progressivity of personal income taxes, especially at the upper end of the distribution, has contributed to reduce overall income redistribution in some countries (Causa and Hermansen, 2017_[17]). Policymakers should carefully evaluate the costs and benefits of reductions in progressivity; while reduced progressivity can result in increases in income inequality in a given period, it can also raise incentives to save and invest in human capital and so potentially result in increases in lifetime incomes and reductions in lifetime inequality.

- Changes to the structure of labour markets, including an increasing number of nonstandard 'gig' jobs, raise complexities for tax collection, and the equity and efficiency of the tax system. The increased prevalence of non-standard work may lead to challenges in some countries where this non-standard work is subject to different rates under tax and SSC systems. Increases in non-standard work may lead to increased re-characterisation of labour income as business income. A greater number of self-employed workers may generate problems for tax remittance revenue-raising across various tax bases, especially where third-party reporting levels may decrease. A further challenge for tax policy is to ensure low compliance burdens for new non-standard workers to minimise the likelihood of them drifting into the informal economy. Emerging economies will face continued challenges due to informality, increasing the negative efficiency consequences of implementing progressive tax systems. Finally, changes in labour markets also present challenges in adjusting social transfers to address increasing numbers of workers in non-standard work arrangements.
- However, changes in the global economy present opportunities as well as risks for tax policymakers. New technologies present new prospects for tax administrations to combat evasion and BEPS behaviours in more sophisticated ways, including in terms of taxing informal and 'gig' income more effectively. Increased data storage capacity and digitalization of transactions further increase the potential for efficiency, efficacy, and ease of tax computation and collection. Expanded cross-border information will also be increasingly available to tax authorities, whether on bank information, transfer pricing, tax rulings, or through country-bycountry reporting. Improvements in information technology also present opportunities to make social transfers more effective, especially in emerging economies (World Bank Group, 2016[19]). These initiatives all present new opportunities for countries to raise revenue in a fair and efficient manner.

1.3. Taxes and public spending

- 18. Changes in the structure of the economy also create new pressures on spending. The expansion of non-standard work raises challenges in designing social protection systems that can meet the needs of these workers. In addition, social protection spending is often already placed under pressure from population ageing. If jobs move overseas or workers' skills are rendered obsolete, there may be increased pressure for higher spending to reduce inequality, to invest in education and training, to upgrade obsolete skills, and to address new and emerging forms of insecurity. In many emerging economies, more spending may be required to invest in the infrastructure, education and research and development (R&D) in order to move to more capital intensive or skills based production.
- Inequality in market incomes can have many costs, including the costs of providing income support or poverty relief to those with low market incomes, as well as the costs of alleviating the negative impacts on health and well-being that result from poverty. This means that there is a strong case for employing public policies to reduce poverty, and reducing market income inequality may help. . In this context, increasing the quality of public spending is essential in delivering inclusive growth (see Box 1). This includes focusing on public investment that can raise productivity and wages, including spending on raising educational attainment levels and improving infrastructure. Spending in the form of public subsidies for certain goods can add to economic distortions while at the same time being an inferior way to reduce income inequality. High quality public spending can also have positive effects on tax revenue, in part by increasing trust in governance institutions, and as a result, on tax morale (Akgun, Cournède and Fournier, 2017_[20]).

Box 1. Raising the quality of public spending

Raising the quality of public spending is crucial for ensuring that public finances foster inclusive growth. OECD research points to a potential equity-efficiency trade-off with respect to the size of government, suggesting that larger governments are associated with both lower long-term growth and reduced levels of inequality (Fournier and Johansson, 2016_[21]). However, the research suggests that the adverse growth effect of large government can be offset if countries have well-functioning governments (see Figure 3). Regardless of government size, quality spending, regulatory, and policy settings can mean that a government sector can be smaller and still achieve better, more inclusive growth outcomes.

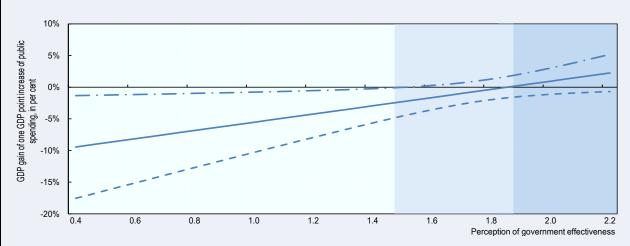


Figure 3. Government size and effectiveness

Note: The dashed lines indicate the 95% confidence interval. Light shading indicates a negative not significant size effect and darker shading indicates a positive not significant size effect. *Source*: Fournier and Johansson, 2016

Improving education is a key way that public spending can raise growth and reduce inequality, as well as prepare future workers for a changing workplace. Education reform that encourages education completion can decrease income inequality through a reduction in inequality of education outcomes.

Increasing the share of public investment in total government spending is associated with large growth gains. These gains are particularly strong for investment in public infrastructure. Raising public investment is also a way for public spending to increase growth without negatively affecting inequality.

OECD research also suggests that the growth-enhancing effects of public spending can be increased in ways that limit the negative consequences for equality. Such policies include reducing the share of pension spending (particularly when this spending is targeted at the top of the income distribution), reducing public subsidies, and regressive tax expenditures (see Section 4). Shifting spending towards family benefits and child care, away from other spending, reduces disposable income inequality as these benefits also tend to be worth comparatively more for lower income families. Such spending shifts can raise growth through positive impacts on second earners' participation in the labour market.

- Rapid and continuing changes in the world of work create new pressures on social **protection spending.** Shorter job tenure and rising shares of self-employment can put increasing numbers of workers outside the scope of traditional social insurance programmes that are available to those in some other forms of employment. These same factors may reduce SSCs, and in doing so potentially reduce the sustainability of SSC-financed social protection systems, or require increased financing of SSCs from other revenue sources.
- 21. These various spending pressures highlight the importance of securing the revenueraising capacity of the tax system. Many middle income countries currently raise insufficient levels of revenue to meet their emerging expenditure needs. These include spending that can unlock higher levels of growth. Further increasing participation in and completion of education for children from poorer households would help to improve social mobility, as can investments in school building. Infrastructure provision - both in quality and quantity - is also very poor in many emerging economies, pointing to the need for increased public investment (OECD, 2017_[7]). Infrastructure spending in emerging economies can also improve inclusiveness and wellbeing, including by providing access to public transport, reliable energy, clean water and sanitation. While the size of government may vary from country to country, raising revenue efficiently, effectively, and equitably in order to address these challenges remains a key policy goal.
- 22. Securing sustainable tax revenue is required to finance inequality-reducing social transfers. OECD research shows that, within a given time period, inequality at the bottom of the income distribution is generally reduced more by transfers than by taxes. The decline in income redistribution since the mid-1990s in advanced countries has been principally driven by a decline in transfer redistribution while taxes have played a less important and more heterogeneous role in this decline. In some countries, the decline in redistribution has contributed to increases in disposable income inequality (Causa and Hermansen, 2017_[17]).

1.4. Future-proofing the tax system

- New challenges require new responses. This paper highlights reforms to adapt tax 23. systems to globalisation and technological change, particularly with respect to the changing world of work. Different countries have different tax systems reflecting differing stages of development, social preferences, and other policy priorities. There is no single 'best approach' to fostering inclusive growth through the tax system, and so different countries will respond to global trends in different ways. While comprehensive reform is challenging, and the ways in which the future will impact the tax system and the economy are uncertain, there is still much that can be done.
- 24. The remainder of this paper is organised around five key topics.
 - Section 2 focuses on the impact of the tax system on the market distribution of income, by raising employment, wages, and formality.
 - Section 3 considers how shifting tax mixes towards growth-friendly taxes can be combined with measures to improve progressivity, particularly through base-broadening and through removing inefficient and regressive tax expenditures. Through an increased reliance on taxes with less mobile tax bases, including property and environmental taxes, progressivity and growth can be advanced, through targeted use of the accruing revenues and other reforms outside of the income tax system.

- Section 4 deals with ways in which personal income taxes and social transfers can foster inclusive growth by raising the efficiency and equity of labour and capital income tax systems.
- Section 5 examines how tax policy can foster business dynamism and productivity, including through support for investment and innovation, and can raise efficiency by continuing to combat BEPS.
- Section 6 considers how tax capacity can be raised, and how tax administration can be strengthened, including through international cooperation.
- 25. This report does not proceed on a tax by tax basis. Tax design that can adapt to continued economic change requires a systematic approach (Brys et al., 2016_[16]). Individual parts of the tax system may be well-designed, but looking in isolation at one tax provision or even one type of tax can lead to poor tax policy choices and sub-optimal economic and social outcomes.
- Tax policy should be considered inside a broader framework of structural reforms for 26. inclusive growth. Taxation is often a second-best policy instrument in achieving inclusive growth policy design. In many cases, inclusive growth challenges are best tackled at source. For example, inefficiencies stemming from market power can be addressed through competition policy as opposed to tax policy. Investing in education and skills can be addressed through public spending instead of tax incentives. Where tax policies are used, they should be deployed as part of broader set of structural reforms to deliver inclusive growth.

¹ Country examples of a systems approach to tax analysis include Birch Sørensen (2010_[78]), and Mirrlees et al. (2011_[79]).

2. Raising employment, wages, and formality

27. A key channel though which inclusive growth can be enhanced in the face of digitalisation and globalisation is by increasing the number of high-quality jobs and boosting workforce participation in the formal sector. Raising market incomes for all as the nature of jobs and skill demand evolve also requires workers to constantly upgrade and improve their skills over their lifetime. Changes in labour markets may see increased numbers of workers engaging in non-standard work arrangements. These arrangements can provide benefits to workers: many such arrangements offer increased flexibility, and can provide opportunities to engage in productivity-enhancing work. However, non-standard work arrangements can also raise risks if non-standard workers are more likely to engage in informal work, are less likely to invest in their skills, face greater labour market insecurity or become more vulnerable to exploitation. Policymakers need to ensure that the tax system is neutral across different kinds of labour contracts (i.e. between traditional employment relationships and non-standard work types). Tax policy also has a role to play in helping policymakers manage changes to labour markets. This can involve removing barriers to participation in the formal labour market and incentivising investments in human capital.

2.1. Reducing barriers to employment

- A key priority for many countries should be to facilitate active participation in the labour 28. market by making work pay including for those with low skills. There is increasing evidence of the positive benefits of in-work transfers on labour market participation, and on broader measures of well-being, including health (Hoynes, Miller and Simon, 2012_[22]). Financial disincentives can be the result of low wage-earning potential, a high tax burden on low-wage earners, or out-of-work benefits whose design does not reward job-search or employment. Many countries have reduced their average tax rates on low income labour over recent years, but they remain high in some countries. Policymakers can strengthen (and in many countries already have strengthened) work incentives through an expansion of in-work benefits such as earned-income tax credits (EITCs) or related types of in-work benefits. Substantial in-work benefits can, however, create other policy challenges, including weak incentives, or even disincentives, to increase work hours.
- **In-work benefits** have been found to have a particularly strong impact in countries where earnings inequality is high, and can have broader positive impacts on health and well-being of those groups benefiting from them (Markowitz et al., 2017_[23]; Immervoll and Pearson, 2009_[24]; Immervoll et al., 2007_[25]). However, they can be challenging to implement and can entail deadweight losses where targeting reduces horizontal equity or raises administrative costs. This can be particularly problematic for emerging economies where administrative capacity may be lower. These costs can potentially be reduced for both in-work benefits and other conditional cash transfers through use of big data by tax administrations (World Bank Group, 2016_[19]).
- 30. Workers in a number of OECD countries would benefit from reductions in payroll taxes and SSCs, which could be financed by shifting the burden of social protection financing away from SSCs to other tax bases. In addition to raising employment, reductions in effective tax rates at low incomes can also provide benefits to those firms who employ large numbers of lowskilled workers, benefiting these workers in turn (Saez, Schoefer and Seim, 2017_[26]). SSC reductions should be considered as part of broader social insurance reform, and work best when

combined with broader structural policies to encourage labour market activation, including policies to incentivise skill investments by the low-skilled (see Section 2.3).

31. Many OECD and G20 countries can also raise employment by **reducing policy barriers to female labour market participation** (Thomas and O'Reilly, $2016_{[27]}$). Many advanced countries need to focus on reducing the tax wedge on second earners, which is often higher than the wedge for single workers (see Figure 4), disproportionately affecting the labour market participation of women. In evaluating tax and transfer policy reforms countries should include consideration of the gender impact as a core element in design and monitoring outcomes. Countries could consider mitigating the high marginal tax rates created on second earners by dependent spouse tax credits and allowances, and through reform of tax credits and benefits. Reform action has been high in this area across OECD countries, but care should be taken to address potential trade-offs between equity and efficiency in moving from family-based to individual taxation. A key component of increasing labour market participation of second earners is enhancing access to high-quality and affordable childcare, especially for disadvantaged families; as well as other policies that may encourage a sharing of family responsibilities, such as paternity leave (OECD, $2017_{[28]}$).

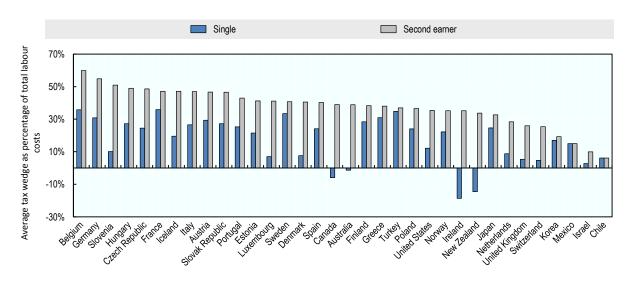


Figure 4. Tax rates on second earners relative to primary earners, 2015

Note: Tax wedge for a single and second earner at 67% of the average wage, with two children. In the second earner case, the primary earner is assumed to earn 100% of the average wage. *Source*: Thomas and O'Reilly, 2016.

2.2. Incentivising investment in people

32. Improving skills is essential for workers to adapt to the skill needs of the future and share in the benefits of technological change through higher productivity and higher wages. Investment in the skills or human capital of workers is as important as investment in physical capital. OECD governments currently provide a variety of CIT expenditures to increase investment in physical and intangible capital, such as accelerated depreciation allowances and R&D tax credits. There is similar merit in well-designed tax expenditures that encourage skills investment. OECD research suggests that, on average, human capital investments at the tertiary level may be at least partially self-financing from the governments' perspective in terms of additional PIT and other forms of revenue.

- Many existing tax and financial incentives to invest in skills benefit those with high incomes most. Since low-income and low-skilled workers have a lower propensity to engage in skills development, incentives could be targeted at low-income and low-skilled groups to reduce inequality and foster labour productivity. Such targeting, however, may pose trade-offs with respect to both administrative feasibility as well as horizontal equity. Incentives could include CIT and PIT credits for skills investments, though direct spending could be effective as well.
- Raising skill levels can also increase employment levels and reduce the overall distortions due to tax systems. Those with higher skills are more likely to earn higher wages and to participate in the labour market. This means that investing in skills can lift labour market participation, and thus reduce the negative impact of taxation on employment. Those with a stronger attachment to the labour market are less likely to reduce labour supply in response to taxation, reducing the efficiency losses from income taxes. This can mean that raising skill levels offers significant benefits for the economy. This highlights the importance of incentivising skills investments especially for those that have less labour market attachment, including single parents, and both younger and older workers.
- The changing world of work creates a necessity for innovative solutions to support training for the low-skilled, including through the provision of financial incentives. Some workers face a greater risk than others that their jobs will be shifted offshore or rendered obsolete by automation, highlighting the need to incentivise lifelong learning, especially for those with low skills.
- Reforms to financial incentives to invest in skills should also take account of increases in non-standard work, shorter periods of employment, and rising shares of self-employment, to ensure that those with non-standard work arrangements are given opportunities to invest in skills. At present, workers in many countries receive adult education through their employer. While this is beneficial, it can exacerbate differences in access to training between those in standard and non-standard work arrangements. Reforms to alleviate this may include shifting training credits from jobs to providing support to individuals' skills investments through individual learning accounts, as recently proposed in France and the Netherlands (see, for example, OECD (2017_[29])). Other financing options such as income-contingent loans and expanded scholarships and grant support can also support investment in skills, potentially with fewer distortions than would be the case with respect to support through the tax system. In all cases, financial incentives to foster skills investments should be rigorously evaluated to assess the effectiveness of measures as many tax incentives and other programmes suffer from significant deadweight losses (OECD, 2017_[30]).

2.3. Combatting labour market informality

- Labour market informality is a key policy challenge, which can disproportionately affect vulnerable socioeconomic groups and may jeopardise the sustainability of the tax-benefit system (OECD, 2017_[31]). Informal employment can leave entire segments of the population without access to social protection. Informality can compromise productivity, as informal sectors are typically characterised by limited access to training and lower levels of human capital accumulation (Hsieh, 2015_[32]), as well as lower managerial skills and a lack of access to finance that compromise their ability to invest in and adopt new technologies.
- For emerging countries, addressing labour market informality is a matter of **urgency.** The negative impacts of informality in terms of social benefit coverage, poverty, job quality and productivity are all significant for emerging economies. High levels of informality can also undermine confidence in government, institutions and the rule of law more generally.

- Labour informality can be addressed through a systematic approach that combines tax policy and tax administration initiatives. A well-designed tax system can also contribute to reducing informality (OECD/CIAT/IDB, 2016_[33]). In particular, avoiding high labour tax wedges on low-paid workers, who are at the highest risk of working in the informal economy, can restore the incentives to formalise. Changes to tax policies can be complemented by tax administration measures including targeted audits, simplified worker registration, and presumptive taxation. Some aspects of the digital transformation such as e-payments and mobile payments may encourage businesses to formalise. Equally, making the receipt of transfer payment conditional upon formal registration and the better use of data matching across government departments can have an impact on informality.
- Non-tax policy approaches are complementary to tax policy approaches in addressing informality. These can include enhancing employability through continued investment in skills and the reform of social benefits including through the increased use of conditional cash transfers, including in-work benefits.

3. Shifting the tax mix towards well-designed taxes on less mobile tax bases

- 41. Globalisation and the changing world of work continue to have profound impacts on the distribution of income and the ability of tax systems to promote stronger and more inclusive growth. In this context, priority should be given to smart tax design that supports inclusive growth. OECD research has found that taxes on income (PIT and CIT) are associated with lower economic growth (Akgun, Bartolini and Cournède, 2017_[34]).
- 42. OECD research has highlighted the need to shift the tax mix away from income taxes towards taxes that have less negative impacts on economic growth, including taxes on property and on consumption, while also noting the importance of environmental taxes for internalising external costs related to health, climate, and the environment. A tax mix shift towards taxes on less mobile tax bases can ensure that the tax system becomes more resilient and is less vulnerable to the effects of globalisation. Income taxes, especially CIT, are taxes that are imposed on a relatively mobile tax base. The CIT, which is levied at source, has been found to be associated with lower levels of growth, especially in open economies (OECD, 2010_[35]; Akgun, Bartolini and Cournède, 2017_[34]). By contrast, taxes on immovable property, taxes on natural resource rents, and VAT have less mobile bases. In the case of VAT, it is levied on a destination basis which means that the base of the tax is less vulnerable in a globalising economy, and taxes on rents are less distortionary.
- 43. In globalising and rapidly transforming economies, rebalancing the tax mix should be a policy priority. While different countries at different levels of development will have different priorities, tax mix shifts can mitigate the negative impacts of PIT and SSCs when levied on the top and bottom ends of the income distribution (see Section 2). At the bottom of the income distribution, PIT and SSCs can have negative impacts on employment, labour market activation, and skills development. At the top of the income distribution, PIT and SSCs can result in increased distortions through lower risk-taking and entrepreneurship, increased mobility of high income earners and increased income shifting across income periods, the form of compensation and the legal form through which the taxpayer earns their income (as discussed in Section 2). Capital income taxes can have negative impacts on incentives to save and invest (Yagan, 2015_[36]). By contrast, VAT and property taxes rely upon much less mobile tax bases and are less distortive and more beneficial for growth compared to other taxes in the tax mix. Increases in these taxes can finance reductions in taxes on employment and human capital investment. This can have positive efficiency and potentially equity consequences for the economy, if these reductions are targeted in a progressive way.
- However, shifting towards taxes that have less negative impacts on economic growth can also raise trade-offs between equity and efficiency because greater reliance on some of these taxes may reduce the overall progressivity of the tax system. This may be a particular challenge in developing and emerging economies that tend to rely heavily on certain indirect taxes, especially consumption taxes (Lustig, 2017_[37]). A key question then becomes how to use good tax design to shift the tax mix with minimal negative equity consequences.
- While income taxes, particularly the PIT, have been seen as central to ensuring the progressivity of the tax system, policymakers may need to look beyond income taxes to raise the inclusiveness of the tax system. This requires examining the progressivity of the entire tax and benefit system, rather than focussing on the progressivity of any one tax. OECD research has shown that taxes other than income taxes can have beneficial distributional consequences while

minimising the negative growth and efficiency implications associated with income taxes. For example, some taxes imposed on relatively immobile tax bases such as property taxes may raise overall tax progressivity.

- The distributional consequences of tax mix shifts should also be examined in concert with the public spending mix. Greater reliance on taxes that may be regressive (such as VAT and SSCs in some instances) may actually increase the amount of overall redistribution due to the tax and transfer system if the spending associated with the reform has progressive effects. For example, the VAT, which is generally recognised to be either proportional or slightly regressive in its distributional impact, may increase the overall progressivity of the tax and transfer system if VAT revenues are used to finance spending targeted at those on lower incomes or other initiatives that seek to redress inequality. Maintenance of progressivity will then require continued coexistence of the tax and redistribution components of the reform therefore a key issue in this respect is the need to mobilise sufficient domestic resources in order to meet the countries existing and emerging expenditure needs. This means that there may be a variety of ways to reach a given level of progressivity or redistribution.
- The distributional impact of the tax system should also be considered from a lifetime perspective. Some taxes such as income taxes may be highly progressive when (Levell, Roantree and Shaw, 2015_[38])considered in a given period, but may be less progressive from a lifetime perspective, as many of those who may have low incomes at one time may have higher incomes later in life. Much of the redistribution carried out by the tax system is in fact distribution over the lifecycle. The lifetime impact of the tax system should also be considered through the impact of the tax system on incentives to save, work and invest in physical capital and skills.
- 48. Tax mix shifts are challenging to implement, and need a simultaneous focus on tax design issues to yield optimal benefits. While in some respects, countries have made strides in making growth-oriented tax mix shifts, further progress can be made. Figure 5 shows that SSCs have increased steadily across the OECD, while property taxes remain comparatively low as a share of the overall tax mix. There is also substantial variation across countries (see Figure 6). This suggests that opportunities remain for countries to implement tax mix shifts that enhance both equity and efficiency (for example, by shifting from income taxes to recurrent taxes on immovable property).

Personal income taxes - Social security contributions Taxes on goods and services Corporate income taxes Property taxes 45% Tax revenue as a share of total tax in OECD countries 40% 35% 32.8% 30% 26.7% 25% 20% 15% 8.5% 10% 5% 5.6% 0% 1965 1985 2015 1975 1995 2005

Figure 5. Changes in the tax mix in OECD and selected G20 countries, 1965-2016

Source: OECD Revenue Statistics, 2017.

The positive efficiency characteristics of the VAT are one of the reasons why VAT has expanded across the G20 and beyond over recent decades (see Figure 7). The implementation of VAT through the destination principle and its relatively immobile tax base means that a broad based VAT effectively taxes international trade and commerce in a relatively neutral fashion. Moreover, new international standards - the OECD International VAT/GST Guidelines - have led the way in ensuring the ability of VAT to adapt to the challenges of globalisation. Several countries have made key VAT reforms in recent years, especially some emerging economies.² Reform of VAT should continue, in terms of expanding the VAT base while compensating those who lose from base broadening reforms. Reforms can focus on increasing VAT revenue by raising compliance, in particular by expanding the use of electronic invoicing. Work to strengthen the implementation of the destination principle should also continue (OECD, $2016_{[39]}$).

² For example, effective 1 July 2017, India introduced a single Goods & Services Tax (GST). On 1 May 2016, China expanded its VAT to real estate and construction, financial services and insurance, and "lifestyle services" (including hospitality, food and beverage, healthcare, and entertainment).

Figure 6. The tax mix in OECD and selected G20 countries, 2015

Note: Countries are grouped according to the largest tax type of Personal Income Taxes, Social Security Contributions, or Value Added Taxes.

Source: OECD Revenue Statistics, 2017.

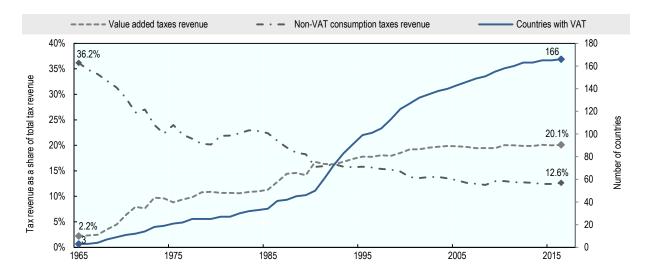


Figure 7. Expansion of VAT in OECD and worldwide, 1965-2016

Source: Consumption Tax Trends (OECD, 2016_[39]). Consumption and VAT revenue data are based on OECD countries only.

50. Recurrent taxes on immovable property also have positive efficiency and equity consequences. Recurrent taxes on property have been found to be among the least detrimental to growth and are difficult to evade due to the immobility of the tax base. Recurrent taxes on property are also more efficient than transaction taxes on property, as they do not distort labour mobility and are less sensitive to volatility in the housing market, although transaction taxes can also lessen excessive price increases due to market speculation.

- Recurrent taxes on immovable property are also progressive, as those with high levels of income are more likely to have more housing wealth (O'Connor et al., 2015_[40]). The fairness of the tax can be maintained through regular re-valuation to enable the tax base to properly reflect the market value of residential property. The efficiency and equity characteristics of recurrent property taxes are especially beneficial to middle-income countries, where other progressive taxes can be difficult to implement (Blöchliger, 2015_[35], Norregaard, 2015_[36]).
- Despite these advantages, revenue from recurrent property taxes remains low in most countries (see Figure 8). Raising increased revenue from property taxes presents political economy challenges for many policymakers, in part due to the high salience of property taxes. This salience stems from the fact that property taxes are typically paid as a lump sum once a year or through a small number of periodic instalments and the taxpayer is responsible for remittance. Through well-designed recurrent taxes on immovable property, governments could prevent overinvestment in housing by aligning the tax burden on housing with the tax burden on other savings vehicles. Governments could potentially also raise higher property tax revenue by spreading payments throughout the year, by addressing liquidity constraints for some taxpayers through deferral, or through special credits for the elderly or others who are likely to be liquidity constrained. (Blöchliger, 2015_[41]). Regular valuation of properties is also important; in many countries valuations are out of date, which presents significant administrative and political challenges in terms of updating them; which may be a factor in keeping revenues low.
- 53. In some cases fiscal decentralisation can also play a role in keeping property tax revenues low. Property taxes are largely levied by sub-central governments, which tend to raise a small portion of total tax revenue, and can have difficulties in raising revenue due to local tax competition-or as a result of the increased sensitivity to the political implications of these taxes that comes with being the level of government that is closest to the taxpayer. Certain types of reform of fiscal arrangements across levels of government may permit central governments to raise more revenue from property taxes, while continuing to enable sub-central governments to retain an important source of revenue.
- 54. There can be other reasons for keeping property taxes low, particularly with respect to the principal residence. Home ownership has been shown by some studies as having positive side effects (Dietz and Haurin, 2003_[42]). It also may have a favourable effect on saving: controlling for anterior savings and other relevant covariates, homeowners have been found in some studies to accumulate significantly higher wealth than renters (Turner and Luea, 2009[43]). Home ownership may also be a way for retirees to maintain their standard of living. Furthermore the burden of property taxes may also be borne by tenants which could increase costs of living. Where labour markets are tight, landlords may shift the burden of the tax to tenants. For these reasons, some governments may choose to continue to provide tax concessions for home ownership, however, care should be taken to avoid the negative efficiency and equity consequences of such policies outlined above.

Total Recurrent taxes on net wealth Recurrent taxes on immovable property Estate, inheritance and gift taxes Taxes on financial and capital transactions 9% 8% Tax revenue as a share of total tax revenue 7% 6% 5% 4% 3% 2% 1% 1985 1995 2005 2015

Figure 8. Evolution of property tax revenues as a share of total taxation, OECD average, 1965-2016

Source: Revenue Statistics (OECD, 2017). OECD average includes all countries that are currently members of the OECD, regardless of when membership began.

- 55. There is also a case to **re-examine inheritance taxes from an inclusive growth perspective**. Twenty-six of the 35 OECD countries had taxes on wealth transfers in 2017 (OECD, 2018_[44]). The general trend for these taxes has been a move away from estate taxes which are levied on the deceased donor, towards inheritance and gift taxes that are levied on the beneficiaries. However, revenues from inheritance, estate, and gift taxes have been very low and have been declining over time. On average across the OECD, revenues from taxes on wealth transfers have declined from 1.1% of total taxation in 1965 to 0.4% today. Low revenues reflect the fact that inheritance, estate, and gift tax bases are often narrowed by numerous exemptions and deductions, and avoidance opportunities are widely available, especially for families with high levels of high income and wealth. Wealth taxes can mitigate income and wealth inequality and can promote social mobility and equality of opportunity.
- 56. Environmental taxes, including carbon taxes, offer a potential source of expanded revenue. Environmentally-related taxes could comprise approximately an additional 2% of GDP in most countries if carbon taxes are included, resulting in a total revenue share of between 4 and 5% of GDP on average (OECD, 2016_[45]). Many countries price carbon emissions, either through taxes or through emission trading systems, although there is a significant variation in effective carbon tax rates across countries (see Figure 9). The highest effective tax rates on carbon in most countries are imposed on roads (see Figure 9). Taxes on carbon emissions can have negative distributional consequences, but where they occur these can be offset through compensating transfers (Flues and van Dender, 2017_[46]; Flues and Thomas, 2015_[47]). Moreover, pollution and climate change disproportionately impact those on low incomes, suggesting that policies to reduce carbon emission can be beneficial for inclusive growth.

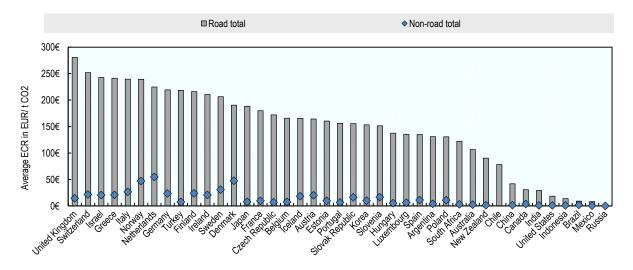
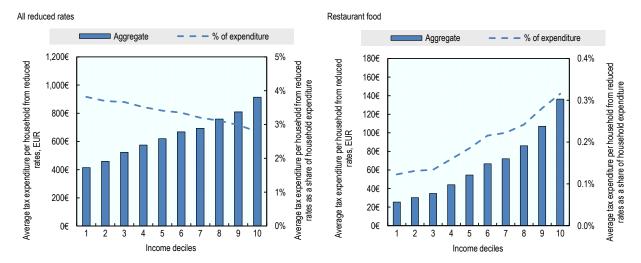


Figure 9. Effective carbon tax rates, 2012

Source: Effective Carbon Rates in the OECD and Selected Partner Economies (OECD, 2016_[45]).

- 57. One way to shift the tax mix while maintaining inclusiveness is to remove regressive tax expenditures and broaden tax bases. Base broadening that focuses on the removal of tax expenditures disproportionally benefitting higher income earners can increase efficiency and equity at the same time. These include VAT expenditures, particularly with respect to nonessential goods and services such as hotels, restaurants, and certain cultural products (see Figure 10). VAT expenditures are often aimed at other non-tax policy goals, such as promoting labour intensive services and reducing tax evasion and aggressive tax avoidance pressures in some industries that might be subject to informality concerns. However, in many of these cases reduced VAT rates are not the first-best option. For example, targeted reduction of social security contributions can be more effective in raising employment in labour-intensive industries, and tax administration approaches (such as expansion of electronic invoicing) can be effective in some sectors with informality risks.
- 58. Some studies indicate that the use of regressive fuel subsidies should be curtailed, especially in middle income countries, where they can be used as a poor means of poverty reduction (Arze del Granado, Coady and Gillingham, 2012_[48]). These targeted rate reductions also raise administrative costs and compliance burdens. Where base broadening makes households worse off, the affected individuals and households should be adequately compensated. For example, in emerging economies especially, the removal of fuel subsidies could be combined with an expansion in support for those with low incomes to address poverty concerns (IMF, 2017_[49]).
- Ensuring tax bases remain as broad as possible requires that countries continually evaluate the distributional and efficiency implications of tax expenditures. Tax expenditures can favour the politically connected, especially where governance is weak. Tax expenditures can be subject to reduced scrutiny and poor evaluation, particularly where their impacts are not measured in a transparent way. Such an evaluation could be an integral part of a yearly tax expenditure report that presents the costs of tax expenditures in terms of revenue foregone, although producing such a report could increase administrative burdens.

Figure 10. The value of VAT tax expenditures across the income distribution - average tax expenditure per household from reduced rates (EUR), 2010



Source: The Distributional Effects of Consumption Taxes in OECD Countries (OECD/KIPF, 2014_[50]).

Note: Unweighted average for Austria, Belgium, Czech Republic, Estonia, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Slovakia, Slovenia, Spain, Turkey, and United Kingdom. Figures are from 2010 for all countries except Austria (2009), Germany (2008), Ireland (2004), and Netherlands (2004).

4. Supporting the efficiency and equity of personal income tax and transfer systems

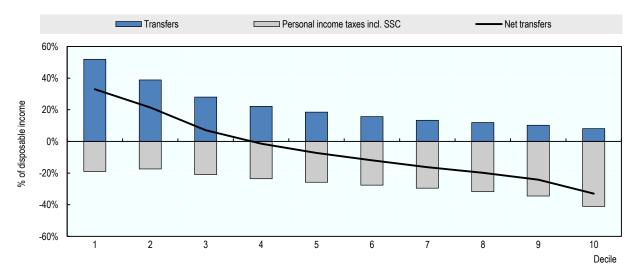
60. **Income taxes have a crucial role to play in fostering inclusive growth**, both in raising revenue and delivering progressivity in the tax system, but due to the relatively mobile tax base of income taxes, they may be particularly affected by increased tax competition from globalisation. In addition, changes in the nature of work may place this tax base under increasing pressure if the importance of non-standard employment arrangements rises significantly. OECD research has suggested that income taxes have a negative impact on growth and a positive impact on income redistribution. OECD research shows that the redistributive impact of income taxes and transfers has declined under increased globalisation (Causa and Hermansen, 2017_[17]). A key question for policymakers is how to design personal income taxes and transfers to boost growth and make them more inclusive, while maintaining their capacity to raise revenues. In some countries reforms are needed to support the progressivity of taxes and transfers, to reduce tax distortions across different forms of work, and to strengthen the taxation of capital income at the personal level.

4.1. Improving the effectiveness of taxes and transfers

- Overall, labour income tax progressivity has fallen across the OECD over the last thirty years, though it has increased modestly in the post-crisis period. This overall result has been driven by reductions in taxation at the top of the income distribution, though it has been partly offset by reductions at the bottom. Taxes have increased in the middle of the income distribution. There is also substantial variation in the degree of change in labour income tax progressivity across countries. Overall, the decline in tax progressivity (at the top) has contributed to a reduction in income redistribution across OECD countries over recent decades (Causa and Hermansen, 2017_[17]).
- High tax rates at the top of the income distribution can carry well-known efficiency costs, reducing investment, entrepreneurship and labour supply, and also providing strong incentives for individuals to reduce their tax liability (OECD, 2010_[35]). High-income taxpayers can respond through avoidance (e.g. the re-characterisation of income), evasion (e.g. concealing assets and income offshore) and mobility (e.g. shifting tax residency).
- However, some studies have argued that increased personal taxation of those with high levels of income and wealth can be beneficial from an efficiency perspective. Higher income taxes at the top of the distribution can be effective where top incomes are due to economic rents (Piketty and Saez, 2012_[51]), market failure (Bivens and Mishel, 2013_[52]), or where responses to taxation result in shifts in the form of compensation but not reductions in effort (Rubolino and Waldenström, 2017_[53]; Goolsbee, 2000_[54]).
- In middle income countries, many income tax systems contribute a relatively small share of overall revenues and do not play a very significant role in reducing inequality, due to high tax-free thresholds and generous tax allowances as well as widespread informality and evasion. These thresholds should be reduced, but the reduction should be combined with expansions in tax capacity and initiatives to reduce informality, improved administration and expanded third-party reporting.
- Transfers do more to reduce inequality than taxes and are an important source of income support at the bottom of the distribution (see Figure 11). Over the last decades,

income tax and transfer systems have become less redistributive across OECD countries (Causa and Hermansen, $2017_{[17]}$). This has been largely due to reductions in the generosity of insurance-based transfers, though in some cases this effect has been mitigated by increases in assistance transfers.

Figure 11. Transfers are an important source of income support among low-income households, 2014



Note: Transfers received and personal income taxes paid across deciles, OECD average. Data based on the working-age population, 2014 or latest available year. Data are based on average equivalised household disposable income components by decile. The working-age population include individuals aged 18-65. The average is computed across 32 OECD countries, excluding Hungary, Mexico and Turkey for which information on personal income taxes are not available.

Source: Causa and Hermansen, 2017.

- 66. The overall change in advanced economies in the inequality-reducing effect of taxes and transfers reflects a variety of policy reforms, a number of them aimed at increasing work incentives. In particular, many advanced countries have implemented a gradual shift from out-of-work transfers to in-work transfers, including through reductions in PIT for low-income workers. Transfers have become more work-contingent and more targeted, in particular with respect to groups with a weaker labour market attachment such as women and those with low skills. Many countries have tightened the eligibility criteria with respect to unemployment insurance, and a greater emphasis on the pairing of insurance and assistance with labour market activation measures. These measures have the benefit of encouraging labour market participation and also reducing in-work poverty, both of which foster inclusive growth. While these policies are beneficial, they may also have the potential to generate negative distributional consequences (Causa and Hermansen, 2017_[44]).
- 67. A coherent and integrated approach is needed to avoid the creation of policy silos that can lead to poor design of tax schedules affecting the bottom of the income distribution. In many countries PIT schedules, SSC schedules and the withdrawal of various social benefits are designed separately and implemented by different ministries. Sudden increases in marginal tax

wedges at certain income levels can result when various PIT or SSC increases or rates of benefit withdrawal are not coordinated, which in turn can lead to poverty traps.³

4.2. Labour income taxation and the future of work

- A challenge for the taxation of labour income in a rapidly changing economy is the increasing proportion of the workforce earning some or all of their income outside of traditional employee-employer relationships, though the share of the population engaged in non-standard work arrangements is currently low (OECD, 2015_[2]). While such changes are not negative developments as such, they need to be managed to ensure that they do not result in other negative outcomes for workers and firms such as increased economic insecurity and increased inequality.
- The incentives of firms to hire workers outside of traditional employer-employee work arrangements may be substantial in many OECD countries (Jackson, Looney and Ramnath, 2017_[55]). Non-standard work arrangements often offer cost advantages for firms, some of which are directly linked to the tax system, such as reduced SSCs, or none at all. This means that tax factors may be driving sub-optimal changes in labour contract choice. This is particularly relevant in sectors that have been more deeply affected by digitalisation, which has ushered in dramatic growth in the number of firms providing services through online platforms. An increasing number of jobs traditionally performed by employees are now performed by selfemployed contractors.
- 70. These changes may create particular challenges for social protection systems substantially financed through SSCs. These systems provide both an important insurance role through collective saving, and also support pension provision in ageing societies. However they face challenges. First, entitlements to social protection may diminish if individuals' SSC contribution histories become irregular, reducing their entitlements and lowering social protection, for example with respect to unemployment, disability and retirement (OECD, 2015_{121}). This would have the effect of reducing the insurance role that SSC-financed social insurance plays in many societies.
- 71. Second, reduced contributions may undermine the fiscal sustainability of social insurance systems. Potential increases in self-employment as a result of changes in the labour market could result in a narrowing of the SSC base. In many countries self-employed workers pay SSCs at lower rates compared to standard employees. Increases in self-employment have the potential to substantially lower SSC revenues in the absence of policy changes. Where workers are engaged through online platforms, there may be tax administration challenges in levying SSCs on cross-border labour income, further reducing revenue collected. Further international cooperation may be needed to addresses these challenges (see Section 6.1). The fiscal sustainability challenges of social insurance systems will be exacerbated by population ageing.
- Increases in SSC rates can be used to expand access to social insurance or to strengthen the financial position of SSC systems. However, these high SSC rates reduce labour

A "trap" refers to a situation where an increase in gross earnings fails to translate into a net income increase that is felt by the individual to be a sufficient return for the additional effort.

⁴ The impact of digitalisation on CIT and VAT are discussed further in the Interim Report of the Task Force on the Digital Economy and so are not addressed in detail in this note.

demand, particularly for workers with low incomes, and may also increase the incentives for informal arrangements. High SSCs can also widen the difference in tax wedges between those in standard jobs and those in non-standard jobs. Despite these issues, SSC rates have risen over recent years, and account for a large part of the increase in the tax-to-GDP ratio across the OECD over the past 50 years.

- The future of work also requires new approaches to financing social insurance due to the fact that the coverage of social protection schemes will need to be expanded to adapt to the changing world of work. Workers on 'flexible' labour contracts or other forms of non-standard work often have limited or no access to certain forms of social protection, such as workplace accident and unemployment insurance, and they may not be covered by basic labour market regulations. This also means extending the reach of social protection to new forms of work as much as possible, which would likely require additional government revenues.
- 74. Financing social insurance from general taxation revenue instead of SSCs could raise labour market participation, reduce labour market dualism and boost growth, while at the same time extending welfare support to a larger fraction of society. This could allow more of the burden of social insurance financing to come from less distortive taxes such as taxes on consumption and property (see Section 4.1). This could also have the benefit of reducing tax differentials between standard and non-standard work arrangements. In many emerging economies, high SSC rates at low incomes significantly reduce the progressivity of tax systems. The case for expanded social insurance financing is strongest for those benefits that are weakly linked to the amount of SSCs made, including housing allowances and cash transfers to support families with children.
- 75. Reform to the way social protection is financed need not result in reductions in social transfers that are important in reducing inequality. Reducing SSCs in particular can present challenges for governments where SSC contributions are closely tied to receipt of social benefits. Rather, reform to social insurance financing can be an opportunity to expand social protection coverage to those in non-standard work, the self-employed, and other groups who may not have regular patterns of social security contributions such as migrants. At the same time, there is a case for encouraging retirement savings by better linking social benefits to social contribution payments. However, care needs to be taken to ensure that these reforms do not increase inequality.
- 76. In general, a better understanding of the links between the transformation of work and tax and spending policies is required. While SSCs may be lower for some nonstandard work categories, other taxes may apply instead (e.g., CIT or VAT for services rendered). This makes it challenging to assess the tax burden across different legal forms, highlighting the need for further analysis. Achieving tax neutrality requires the reduction in gaps in effective tax rates on different employment forms, though this may be difficult in practice.

4.3. Effectively taxing capital and wealth

77. Strengthening the progressivity and efficiency of the tax system could also occur through more effective taxation of capital income at the personal level. Wealth inequality has been shown to be higher than income inequality, and there are widespread calls for raising capital taxation in response to increasing income and wealth inequality. Recent advances in the theoretical economic literature highlight the importance of effective capital taxation as part of the overall tax mix (Stantcheva, 2014_[56]; Saez and Stantcheva, 2017_[57]). Recent OECD research suggests that the decline in the taxation of capital income at the personal level has contributed to the decline in income redistribution across the OECD (Causa and Hermansen,

2017_[17]). Capital taxation can have negative impacts on incentives to save and invest, and so countries need to carefully balance efficiency and equity considerations. While countries do not necessarily need to tax capital at higher statutory rates, there are strong arguments for broadening the base of capital taxation to raise both efficiency and equity.

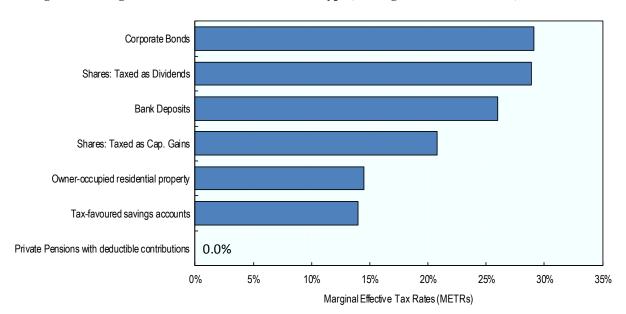


Figure 12. Marginal effective tax rates across asset types, average across 40 countries, 2016

Note: METRs are based on a taxpayer earning the average wage, holding an asset for ten years. Inflation rates are set at the OECD average level. The average is calculated for Argentina, Australia, Australia, Belgium, Bulgaria, Canada, Chile, Colombia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

Source: Taxation of Household Savings (OECD, 2018).

- In practice, the taxation of income from savings generally lacks coherence in most OECD and G20 countries (OECD, 2018_[58]). Figure 12 shows substantial tax differentials across assets, which are likely to result in significant distortions to the allocation of savings, as well as expanded opportunities for tax planning. This means that current approaches to the taxation of capital is leading to both serious economic inefficiencies as well as regressivity (Aghion et al., 2017_[59]). There are opportunities for countries to increase coherence and consistency of capital taxation across assets and thereby improve both the efficiency and fairness of their tax systems.
- 79. For example, tax expenditures and subsidies associated with residential property in many OECD countries have adverse distributional effects. This is particularly true of mortgage interest deductibility which is uncapped in some OECD and G20 countries. In general, owner-occupied residential property is taxed at concessionary rates, often without any limitations on these concessions. This has a regressive impact as those with higher levels of income and wealth are more likely to invest in residential property. In addition, concessionary rates can distort incentives to invest in other housing tenures (e.g. rental housing) and can put upward pressure on housing prices. Equally, where tax incentives are provided to residential property investors compared to owner-occupied housing, these incentives are likely to favour higher income earners who are more likely to have the means to make such investments. These effects

can have further adverse distributional impacts (OECD, 2018_[4]). Exemptions of residences from capital gains tax could be curtailed, especially for expensive properties or for capital gains above a certain threshold, although such exemption curtails mobility.

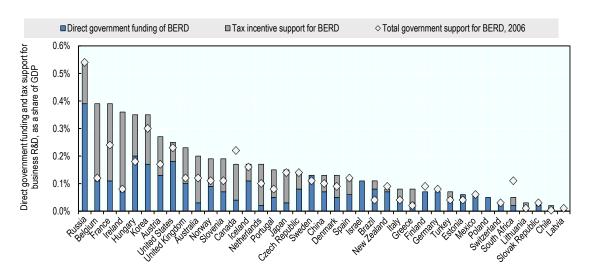
Net wealth taxes have been increasingly cited in the public debate as an answer to addressing the increase in inequality of wealth and income. However, when combined with personal income tax on capital income they can result in extremely high effective tax rates being imposed on certain assets and can have an adverse impact on growth. Implementing wealth taxes can also present challenges, especially where assets are illiquid, and may be costly to administer. Wealth taxes can be an effective policy substitute in instances where a country, for other policy reasons, does not have a broad-based capital income tax, including a tax on capital gains, and a well-designed inheritance tax (OECD, 2018_[44]). However, in the presence of these taxes, the case for net wealth taxes is less strong.

5. Using the tax system to foster business dynamism

5.1 Boosting business productivity whilst maintaining the integrity of the tax system

81. In spite of rapid technological change, many G20 countries have experienced a slowdown in productivity growth, which is a key cause of low growth in OECD countries. Incomplete and uneven technology adoption across firms has limited the productivity dividends of technological breakthroughs. The 2000s saw labour productivity at the global technological frontier increase at an average annual rate of 3.5% in the manufacturing sector, compared to just 0.5% for non-frontier firms (OECD, 2016[9]). Support for business R&D can help to foster innovation and boost productivity. Investment in new technologies can also be supported through more generous depreciation deductions or immediate expensing.

Figure 13. Financial support for Business Enterprise R&D (BERD), selected OECD and G20 economies, 2015



Source: OECD Productivity Statistics Database.

Note: Bars in the chart refer to government support for BERD though tax incentives and direct support in 2015. The diamonds refer to total BERD support in 2006. Details of the indicators are provided at http://www.oecd.org/sti/rd-taxdefinition-and-measurement.htm.

82. At the same time, support for innovation and productivity growth needs to be carefully designed to ensure support is also extended to small and young firms. Support for R&D should focus on "expenditure-based" (i.e. input) incentives instead of "profit-based" (i.e. output) incentives (see Figure 13). Such incentives should be characterised by a mix of spending support and tax incentives. Making R&D tax credits refundable can ensure that they do not create a more valuable benefit to incumbent firms than new entrants. Policymakers should also consider the impact of R&D policies on market concentration (Guellec and Paunov, 2017_[11]). As is the case in other areas, tax incentives for R&D may be second-best solutions to the policy challenges of incentivising R&D, so these policies need to be rigorously evaluated and carried out in concert with other aspects of the policy mix such as adequate contract enforcement and legal regimes that robustly protect intellectual property rights (Brown, Martinsson and Petersen, 2017_[60]). This is particularly important given that market concentration can have

negative consequences for the distribution of income (De Loecker and Eeckhout, 2017_[61]). Market concentration appears to be increasing in some areas of the "gig" economy.

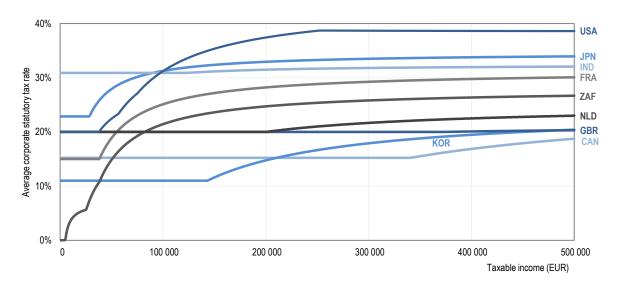
- 83. Supporting productivity has equity benefits. Diverging productivity developments across firms can explain a significant part of the increased earnings inequality in many OECD economies (Berlingieri, Blanchenay and Criscuolo C., 2017_[62]) since divergence in productivity between firms is linked to wage divergence between employees of those firms. This suggests that reductions in productivity gaps can support wage growth and inclusion across G20 economies $(OECD, 2016_{[9]}).$
- OECD research has also suggested that biases for debt over equity financing can be more likely to discriminate against innovative fast-growing firms, because they may invest more heavily in intangible property and thus have less access to debt financing and are more reliant on equity financing (Brown, Martinsson and Petersen, 2013_[63]; Adalet McGowan, Andrews and Millot, 2017_[64]). Debt bias can also result from tax systems, and removing or reducing tax-related incentives for debt financing could foster increased productivity diffusion.
- Adapting the business tax system to continuing trends of globalisation and digitalisation also means addressing base erosion and profit shifting (BEPS). Tax evasion and BEPS behaviours place burdens on tax revenues, and diminish trust in tax systems. In addition to the challenges posed by BEPS for tax revenues and effective tax administration, BEPS behaviours can also generate benefits that accrue to large incumbent firms over smaller firms and new entrants and in doing so reduce business dynamism. This means that providing support for businesses should be combined with effective measures to address BEPS behaviours and ensure the integrity of the tax system. Tackling aggressive tax avoidance should include implementing the four minimum standards of the OECD/G20 BEPS project on combatting harmful tax practices, preventing tax treaty abuse, enhancing the effectiveness of dispute resolution, and implementing greater transparency through Country-by-Country Reporting. The BEPS Project has established clear limits for income-based support schemes such as intellectual property regimes so that they are not harmful and therefore do not create tax-avoidance opportunities.

5.2 Supporting growth of SMEs

- The tax treatment of SMEs and new businesses is crucial in terms of raising competition that can drive dynamic and inclusive growth. While not all SMEs are innovative, new and small firms are often the driving force behind innovations that are important for economic growth (OECD, 2010_[65]).
- 87. The tax treatment of SMEs varies across legal forms. Business income of unincorporated SMEs is typically taxed under the PIT; incorporated businesses are taxed under CIT and then separately or under PIT when wages and/or dividends are distributed or capital gains are realised. Some countries have special tax rules for closely-held corporations or for passthrough entities that can affect SMEs. Businesses may face tax-induced incentives to change their legal form (e.g. to incorporate), reducing the efficiency and horizontal equity of the tax system and potentially creating hurdles for business growth.
- Some aspects of the tax system can inadvertently disadvantage SMEs relative to larger enterprises, such as the fixed costs associated with tax and regulatory compliance. However, many countries use reduced CIT rates to support SMEs, which may discourage SMEs from expanding for tax reasons (see Figure 14). Efforts to support SMEs should be provided in ways that do not impede their growth, such as through simplified or presumptive taxation and efforts to reduce compliance and administrative burdens as opposed to reduced rates. Competition policy is often a more targeted means of promoting competition than tax policy. It is

also essential that efforts to support SMEs are subjected to rigorous evaluation to ensure their effectiveness (OECD, 2015_[66]).

Figure 14. Average statutory CIT rates under small-business rates at different levels of business income, 2014



Source: Taxation of SMEs in OECD and G20 Countries (OECD, 2015[66]).

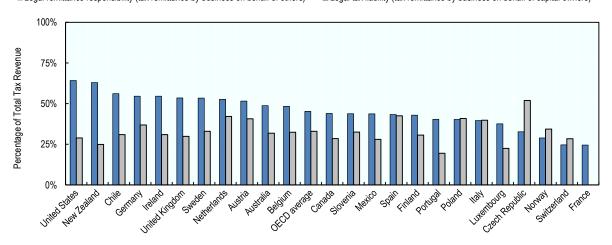
6. Strengthening tax administration and co-operation

6.1. Increasing tax raising capacity through better tax administration

89. The transformation of the economy will present new opportunities and challenges from a tax administration perspective. These include how to effectively tax the 'sharing' and 'gig' economies. OECD research involving a group of 24 OECD countries, highlighted that businesses play a key role in tax administration, on average, being legally liable for 33.5% of total tax revenue in 2014 (including property taxes and employers' SSCs) and also remitting a further 45.3% of total tax revenue on behalf of others (see Figure 15). Increased non-standard work will mean that more small businesses and individual filers will be remitting tax to tax administrations, raising compliance burdens for tax administrations and taxpayers. This may also reduce the amount of third-party reporting, which could exacerbate tax evasion (OECD, 2017₁₆₇₁; OECD, 2015₁₆₆₁).

Figure 15. Legal remittance responsibility and legal tax liability by business, % of total taxation, 2014

■ Legal remittance responsibility (tax remittance by business on behalf of others) ■ Legal tax liability (tax remittance by business on behalf of capital owners)



Source: (Milanez, 2017_[68]).

90. While any shift towards more non-standard work could lead to a decline in third-party reporting, it is possible that tax administrations will be able to require the provision of data from new categories of economic actors. For example, the use of data could extend to sourcing **information on non-standard workers from online platforms, which could aid tax administrations in their efforts to collect taxes.** This could be facilitated by legal requirements on platforms to report payment and identification data of platform users to tax administrations. Domestic legal requirements may not be effective where the platform is located in a jurisdiction other than the jurisdiction of the non-standard worker, which may require enhanced international cooperation (OECD, 2018_[69]).

⁵ These figures are unweighted averages across 24 OECD countries (Milanez, 2017_[68]).

Governments seeking to lift the levels of tax compliance should also focus on simplifying compliance, especially for individual filers, those with low incomes and low levels of education, and for small businesses. Simplification efforts can be combined with programmes to strengthen social norms such as voluntary disclosure programmes and taxpayer education initiatives, to encourage self-reporting (OECD, 2017_[67]). The costs and benefits of such programs will need to be carefully evaluated. Simplification efforts should focus on making the communication and payment processes smoother and less cumbersome. Big data and new technologies offer new opportunities for tax administrations. Machine learning approaches can be used to identify tax risks, and to simplify taxpayer compliance by making online tax portals and other services work more efficiently (OECD, 2016_[70]).

6.2 Supporting progressivity through international tax co-operation

- 92. Tax evasion and BEPS behaviours can undermine both the integrity and the progressivity of the tax system (OECD, 2015_[71]). Where large companies can engage in BEPS behaviours with ease, trust in the tax system is undermined which can have negative impacts on tax morale more broadly across the economy (Luttmer and Singhal, 2014_[72]). As some tax planning opportunities are more likely to be available to those with high levels of income and wealth, aggressive tax avoidance and evasion also undermine the progressivity of the tax system. Tax evasion is a particularly acute problem for countries with weak governance and low tax capacity. Even where top tax rates on income are relatively low, efforts to make the income tax system more progressive can lead to greater distortions if it remains easy to conceal income or assets in offshore jurisdictions.
- 93. There have been important advances in international tax co-operation. Significant progress has been made in the areas of BEPS implementation, through the work of the Global Forum on Transparency and the Exchange of Information for Tax Purposes (Global Forum), and the implementation of the OECD International GST/VAT Guidelines. Initiatives such as Tax Inspectors Without Borders, the Platform for Collaboration on Tax, and the Forum on Tax Administration have also been working to raise tax capacity, particularly in developing countries. This progress has had beneficial impacts on equality and efficiency by making public revenues more sustainable and by reducing BEPS and international tax evasion. It is important that international efforts to tackle BEPS are maintained, including by implementation of the recommendations of the OECD/G20 BEPS project and the International VAT/GST Guidelines. In addition, the members of the OECD/G20 Inclusive Framework on BEPS continue to work towards a consensus-based solution to the tax challenges arising from the digitalisation of the economy (OECD, 2018_[69]).

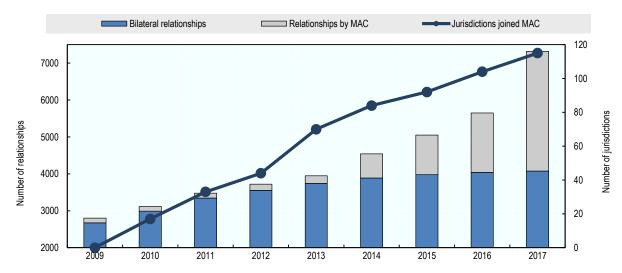


Figure 16. Expansion in the coverage of exchange of information networks

Source: Global Forum on Transparency and the Exchange of Information for Tax Purposes

- 94. The ongoing work of the Global Forum and the global agenda on tax transparency remain important. The enhanced Exchange of Information on Request (EOIR) standard and the work toward developing terms of reference for the evaluation of Automatic Exchange of Information (AEOI) demonstrate progress on tax transparency (see Figure 16). There must be a **continued focus on furthering implementation of these standards through the Global Forum peer-review process.**
- 95. Continued work is required to ensure that information exchange is as effective as possible and that tax authorities have the capacity to use the information being exchanged to effectively tackle tax evasion. Policymakers also need to be vigilant in preventing efforts to frustrate or circumvent new systems for exchanging information on tax matters and in particular could consider putting in place mechanisms to disclose schemes designed for this purpose.
- 96. Taxpayers may also respond to information exchange by appearing to shift their tax residency. Some jurisdictions may offer means for taxpayers to shift residency with ease, in ways that may hamper the effective taxation of these taxpayers. Such means can involve providing incentives for taxpayers to relocate to another country, or they can involve providing means for the taxpayers to appear to shift residency for tax purposes only, thereby allowing them to conceal residency in other jurisdictions. Increased international cooperation may be required to address efforts by some taxpayers to claim residency in low or no-tax jurisdictions for the purposes of avoiding tax.

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