Chapter 1. **Sustain growth that benefits all**

The upswing in the global economic outlook creates opportunities to make economic growth beneficial to all. This chapter charts the outcomes of growth for people to understand better whether economic growth is being translated into rising living standards across different groups of population in terms of income, gender, age and region of residence.

Despite recent improvements in some countries, more progress is needed to transform productivity gains and job creation into increased living standards for all. Income and wealth inequality remains at high levels in some OECD countries and the spread is growing. The bottom of the distribution remains at high risk of falling further behind, while the top 1% are pulling further ahead. Gaps emerge and are growing in other areas too. These trends are also prevalent across regions and indeed, age-groups, which is of particular concern given ageing societies, principally in developed countries.

Responding to these challenges requires an emphasis on policies that put inclusive growth at the centre, with an emphasis on: product and labour market policies and educational policies that are key for equitably sharing productivity gains; fair and efficient redistribution systems; ensuring the finance sector works for everyone in society; promoting regional catching up, and providing youth with a strong start to their educational and working lives.

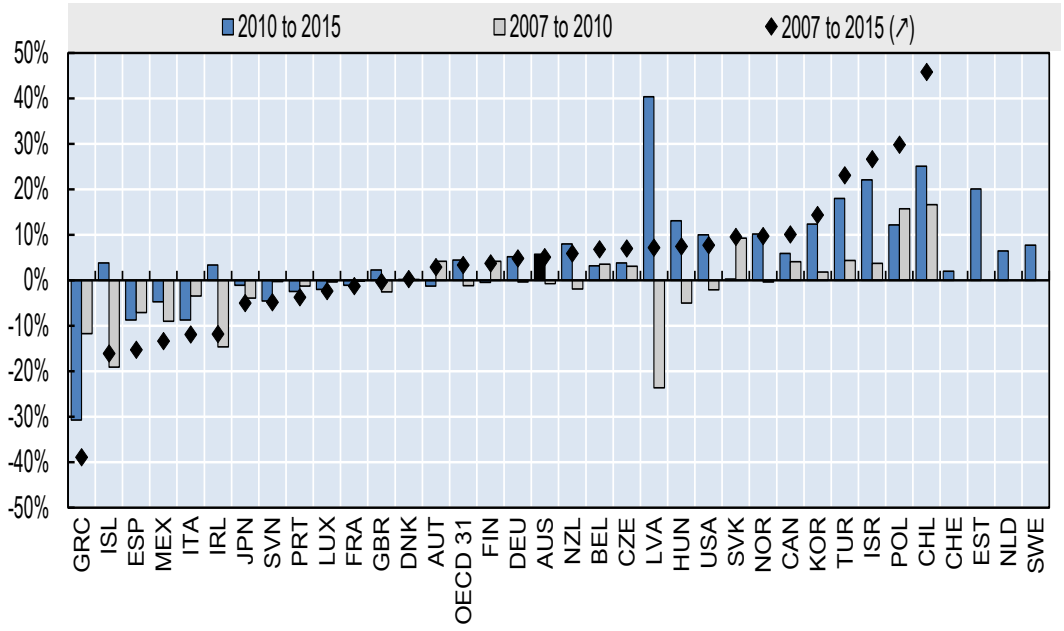
Charting growth outcomes for people

Trends in median income and inequalities of income and wealth

Real median income has stagnated. Real median household disposable income remains at or below pre-crisis levels in many OECD countries, despite a recent recovery in most OECD countries. During 2007-2010, median disposable incomes decreased by an average of 1.3% in OECD countries (Figure 1.1), although countries faced uneven patterns over this period. In recent years, real median disposable incomes increased by an average 3.5% in the OECD area but continue to remain below 2007 levels in Greece, Spain, Iceland and Mexico. Even in the countries where real median disposable incomes have been on a positive trend in recent years; those improvements often fell short of GDP per capita trends (Figure 1.2). This suggests that the benefits of recent economic recovery have not been shared equally in terms of income distribution. However, the measurement of household's income distribution raises important issues. In particular, more work is needed to integrate survey-based data with tax record-based data to improve the measurement of income and income inequality.

Figure 1.1 Growth in real median disposable income

OECD countries, 2007-2016 or latest, %



Notes: Data for 2015 refer to 2016 for Finland, Israel, the Netherlands, Sweden and the United States; 2014 for Australia, Hungary, Iceland, Ireland, Italy, Luxembourg, Mexico, New Zealand and Switzerland; and to 2012 for Japan. Data for 2010 refer to 2013 for Estonia, Sweden and Switzerland; 2011 for Chile, Israel, the Netherlands, New Zealand, and Turkey; and to 2009 for Hungary, and Japan. Data for 2007 refer to 2008 for Germany, Australia, Chile, France, Norway, Israel, and Mexico; and to 2009 for Switzerland. 2016 data for the Netherlands are provisional. The OECD average excludes Estonia, the Netherlands, Sweden and Switzerland due to a break in the time series for these countries.
Source: OECD Income Distribution Database, OECD National Accounts database.

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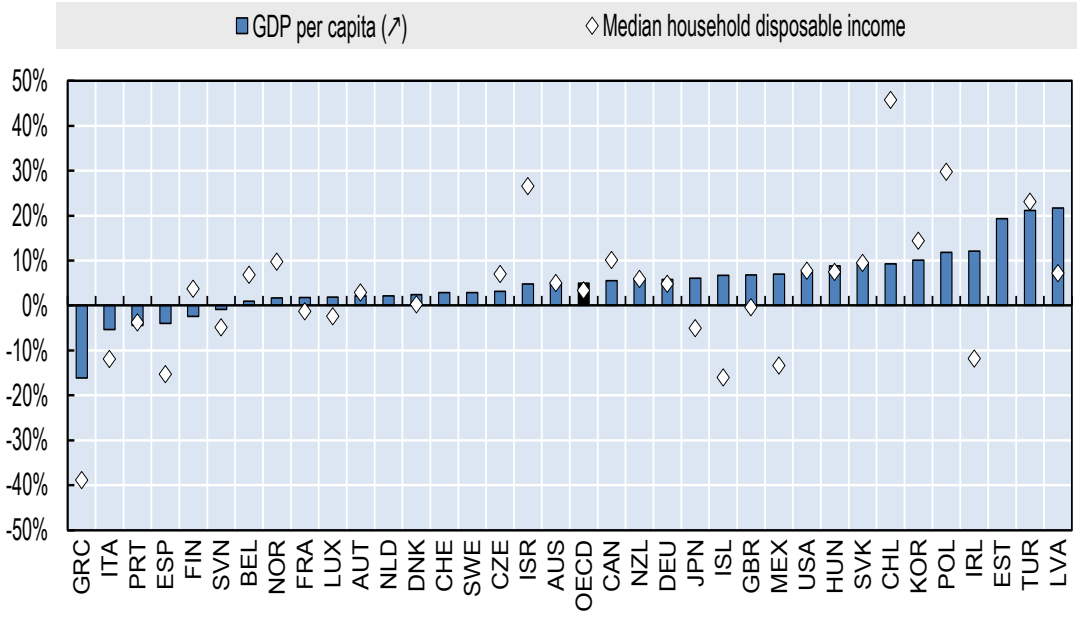
Figure 1.2 Growth in GDP per capita and real median disposable income

OECD countries, 2010-2016 or latest, %



Notes: Median disposable income data for 2015 refer to 2016 for Finland, Israel, the Netherlands, Sweden and the United States; 2014 for Australia, Hungary, Iceland, Ireland, Italy, Luxembourg, Mexico, New Zealand and Switzerland; and to 2012 for Japan. Data for 2007 refer to 2008 for Germany, Australia, Chile, France, Norway, Israel, and Mexico; and to 2009 for Switzerland. 2016 median disposable income data for the Netherlands are provisional. The OECD median disposable income average excludes Estonia, the Netherlands, Sweden and Switzerland due to a break in the time series for these countries.
Source: OECD Income Distribution Database, OECD National Accounts database.

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Labour productivity improvements have not led to significant improvements in wages. Aggregate labour productivity growth has decoupled from real median compensation growth in most OECD countries over the last two decades. In the long run, raising productivity is critical to improving living standards as real wages are the most direct and most important mechanism through which the benefits of productivity growth are transferred to workers. In the last couple of decades, however, this mechanism has proved particularly weak (Figure 1.3A). Decoupling of real median wages from labour productivity can be explained by declines in labour income shares and declines in the ratio of median to average wages. Excluding sectors which are driven by changes in commodity and housing prices (primary and real-estate sectors) and reflect imputations in the national accounts (non-market sectors) only marginally decreases the contribution of lower labour income shares to decoupling (Figure 1.3B).[4]

Box 1.1. OECD and national initiatives for improving the measurement of the income distribution

The measurement of household's income distribution from survey data raises three important issues: i) there is a discrepancy between household disposable income as measured from household surveys (micro data) and through the lens of Systems of National Accounts (macro data); ii) the measurement of income inequality can be improved by integrating household surveys and administrative data; iii) due to differences in local prices, income imperfectly proxies the concept of living standards, and complementary measures such as consumption inequality can be useful. This box describes the OECD and national initiatives that address these three issues.

The OECD and Eurostat launched a joint Expert Group on Disparities in National Accounts (EG DNA) in 2011 - followed up by an OECD Expert Group in 2014 - to develop a methodology for the compilation of distributional measures of household income, consumption and saving within the framework of National Accounts. National accounts data are taken as a starting point, while micro information from surveys and administrative data are used for breaking down the household sector of the national accounts into income quintiles and other socio-demographic groups, such as those based on main source of income or household type. So far, the expert group has engaged in two exercises to compile experimental distributional results on the basis of the methodology as developed by the group, one of which has been finalised in 2012 (Fesseau and Mattonetti, 2013) and the other one in 2015 (Zwijnenburg et al., 2017).

While several countries (e.g. Australia, Canada, the Netherlands and the United Kingdom) have already started publishing distributional results on the basis of this methodology, the expert group is further improving the methodology to broaden country coverage and to improve the timeliness of the results. Furthermore, EG DNA also develops a methodology for the compilation of the distribution of household wealth in order to obtain a comprehensive overview of distributional results for the household sector. Looking at the results of the exercises, EG DNA shows that inequality in consumption is indeed lower than on the basis of income, probably related to smoothing of individual consumption over time as explained by the life-cycle hypothesis and the permanent income hypothesis. This also explains some of the negative savings results for specific household groups as obtained in the exercise.

The measurement of income inequality can be improved by linking several databases. Household surveys have a number of limitations when it comes to the representation of both the very top and bottom of the income distribution. These include issues related to sampling (under-representation of the very rich), data collection (under- or non-reporting of different forms of income including investment income and social transfers, survey non-response and other measurement errors), and data preparation (top coding trimming or censoring, provision of subsamples). For the estimation of income inequality, having good data on both top incomes and those at the bottom of the distribution is crucial. Data from tax files are well suited to capture the incomes of the very rich, although they are not without limitations.

First, many countries face problems of tax evasion and tax avoidance, leading to the under-declaration of income. Second, tax-exempt income, such as fringe benefits or imputed rent, is left out of analysis based on tax data (e.g. if a growing share of capital

income is tax exempt or subject to a withholding tax, this can affect the analysis of top income shares). Third, tax-return data may provide an accurate picture for top incomes but remain mute about how top incomes fit into the overall distribution. Similarly, administrative data can potentially provide more accurate and complete information on social transfers provided by the state than can be obtained from household surveys, but on their capacity to tell us anything about the distribution of income on their own is limited. For these reasons, there is increasing interest in the potential to combine both survey and administrative data to produce income inequality estimates, thereby drawing on the strengths of each source, rather than relying on either on their own. The extent to which statistical compilers are able to do this depends on a number of factors, in particular the national legislative environment with respect to access to and linking administrative records.

However, even where access to record-level administrative data is not possible, statistical compilers can supplement survey data. For example in the UK, survey data are treated with a 'SPI adjustment', which involves replacing income values for 'very rich' individuals in the survey by the mean income of a corresponding group of individuals obtained from tax data, as well as recalibrating the survey weights (DWP, 2017). This approach has been built upon in a number of recent academic papers (e.g. Burkhauser et al., 2018). Where national legislation allows, more ambitious approaches may be possible. For example, facilitated by recent UK legislation (Digital Economy Act, 2017), UK statisticians are now working to move beyond the approach described above, to develop data on the distributions of income, consumption and wealth based on linked survey and non-survey sources (including tax and other administrative records). Under this approach non-survey data will not only be used to replace some information currently collected by survey, but also to improve survey sampling, imputation and weighting, thereby improving both the representation and precision of the tails of the distribution and as a consequence, the estimation of inequality. Linking tax record data to a survey data set can on the one hand improve cross-national comparisons of the US and UK in the top income literature by comparing like-to-like in terms of sharing unit and unit of analysis and on the other hand improve UK measures of income inequality in the survey based literature based on the entire income distribution.

Standard economic theory suggests that living standards are better reflected through consumption than income (Blundell and Preston, 1998). Individuals are better able to smooth consumption rather than income over their lifetimes, making consumption a more informative indicator of current and lifetime well-being. Unlike income, consumption remains relatively steady throughout life since individuals can borrow during years with low income and save in high-income years (Hassett and Mathur, 2012). Despite this conceptual case for studying consumption data, household well-being indicators (such as poverty and inequality measures) are typically based on income rather than consumption. This is partly due to a widespread presumption that household income is easier to measure than expenditure, at least in OECD countries (Browning, Crossley and Winter, 2014).

Findings about trends in consumption inequality are significantly influenced by methodological issues. Early studies based on the US Consumer Expenditure Survey (CEX) found that consumption inequality had grown more modestly than income inequality (Krueger and Perri, 2006; Slesnick, 1994; Hassett and Mathur, 2012). More recently, studies correcting for measurement problems afflicting the CEX, using alternative data sources, or measuring consumption in alternative ways, have found that

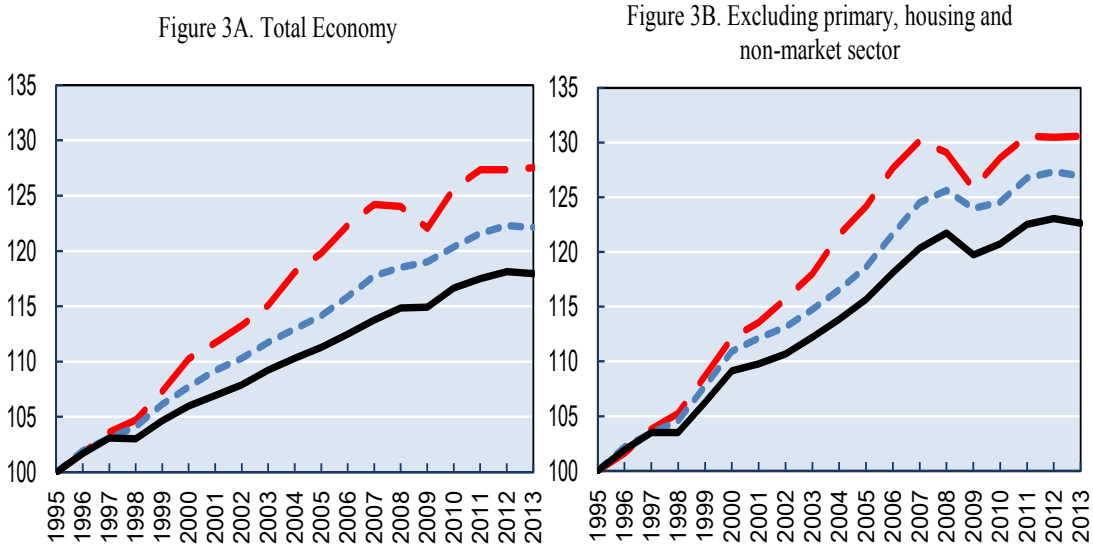
consumption inequality (particularly in nondurables and services) has increased more and tracked the rise in income inequality (Aguiar and Bils, 2015; Attanasio and Pistaferri, 2016). An emerging literature is also creating consumption-based poverty measures (Meyer and Sullivan 2013, Meyer et al., 2015), which find distinct patterns for income and consumption inequality. For example, studies have tended to find that consumption inequality has risen less than income inequality in recent decades (Krueger and Perri 2006; Meyer and Sullivan 2013), some studies find that the rise has been fairly similar (Attanasio, Hurst, and Pistaferri 2012).

Furthermore, Larrimore et al. (2016) make an effort to link additional administrative records and survey data to unit record tax data to address the issue of tax record data's inability to capture non-taxable income. This paper is among the first using tax record data as a base to make clear that "taxable realized capital gains" as used in most studies based on tax record data alone produce results that are quite different from those using "accrued capital gains" with these same tax record data. As Larrimore et al. (2017) point out, this issue is not entirely solved by Piketty, Saez, and Zucman (2018), which attempts to address some of these same issues within a National Accounts framework. There are increasing calls for improving existing survey data or complementing them with newly collected survey data. Technological change has moreover opened up new possibilities for the collection of consumer expenditure data, such as from credit card companies or handheld scanners (Browning, Crossley and Winter, 2014; Pistaferri, 2015). Currently, the OECD is collecting and analysing consumption expenditure data from several countries in order to study the consumption patterns of the middle class.

Sources: Aguiar, M. and M. Bils (2015), "Has Consumption Inequality Mirrored Income Inequality?", American Economic Review, Vol. 105/9, pp. 2725-2756, http://dx.doi.org/10.1257/aer.20120599; Attanasio, O. and L. Pistaferri (2016), "Consumption Inequality", Journal of Economic Perspectives—Volume, Vol. 30/2, pp. 2016-3, http://dx.doi.org/10.1257/jep.30.2.3; Attanasio, O., E. Hurst, and L. Pistaferri (2012), "The Evolution of Income, Consumption, and Leisure Inequality in The US, 1980-2010." National Bureau of Economic Research Working Paper 17982.; Blundell, R. and I. Preston (1998), "Consumption Inequality and Income Uncertainty*", The Quarterly Journal of Economics, Vol. 113/2, pp. 603-640https://doi.org/10.1162/003355398555694.; Browning, M., T. Crossley and J. Winter (2014), "The Measurement of Household Consumption Expenditures", Annual Review of Economics, Vol. 6/1, pp. 475-501, http://dx.doi.org/10.1146/annurev-economics-080213-041247.; Burkhauser R.V., N. Hérault, S.P. Jenkins and R. Wilkins (2018), "Survey under-coverage of top incomes and estimation of inequality: what is the role of the UK's SPI adjustment?", Fiscal Studies , Vol. 00, No. 0, pp. 1-28.; Digital Economy Act, 2017 – Available at: http://www.legislation.gov.uk/ukpga/2017/30/contents/enacted; DWP (2017) - Households Below Average Income (HBAI): quality and methodology information report, 2015/16; Fesseau, M. and M. Mattonetti (2013), "Distributional Measures across Household Groups in a National Accounts Framework: Results from an Experimental Cross-country Exercise on Household Income, Consumption and Saving", OECD Statistics Working Papers, No. 2013/04, OECD Publishing, Paris.; Hassett, K. and A. Mathur (2012), "A New Measure of Consumption Inequality", AEI Economic Studies, https://www.aei.org/wp-content/uploads/2012/06/-a-new-measure-of-consumption-inequality_142931647663.pdf (accessed on 22 February 2018).; Krueger, D. and F. Perri (2006), "Does Income Inequality Lead to Consumption Inequality? Evidence and Theory1", Review of Economic Studies, Vol. 73/1, pp. 163-193.; Meyer, B., A. Bee and J. X. Sullivan (2013), "Consumption and Income Inequality and the Great Recession", American Economic Review, Papers and Proceedings, May 2013, 178-183.; Meyer, B., A. Bee and J. X. Sullivan (2015), "The Validity of Consumption Data: Are the Consumer Expenditure Interview and Diary Surveys Informative?" in Improving the Measurement of Consumer Expenditures, Christopher Carroll, Thomas Crossley, and John Sabelhaus, editors. University of Chicago Press, 2015, 204-240.; Piketty, T., E. Saez and G. Zucman (2018), Distributional National Accounts: Methods and Estimates for the United States, Quarterly Journal of Economics, 2018, 133(2): 553-609.; Pistaferri, L. (2015), "Household consumption: Research questions, measurement issues, and data collection strategies", Journal of Economic and Social Measurement, Vol. 40/1-4, pp. 123-149.; Slesnick, D. (1994), "Consumption, Needs and Inequality", International Economic Review, Vol. 35/3, pp. 677-703.; Zwijnenburg, J., S. Bournot and F. Giovannelli (2017), "Expert Group on Disparities in a National Accounts Framework: Results from the 2015 Exercise", OECD Statistics Working Papers, No. 2016/10, OECD Publishing, Paris.

Figure 1.3 Decoupling between labour productivity and wages

OECD countries, 1995-2013, Index 100=1995



Note: The trends reflect the declines in labour income shares and increases in wage inequality. Macro-level decoupling between compensation growth of the typical worker and labour productivity growth can be decomposed into (1) the growth differential between average labour compensation and labour productivity, which is fully accounted for by evolutions in the labour income share, and (2) the growth differential between median and average wages, which is a partial measure of wage inequality (Panel A). Unweighted average of 24 OECD countries; 1995-2013 for Austria, Belgium, Germany, Finland, Hungary, Japan, Korea, United Kingdom; 1995-2012 for Australia, Spain, France, Italy, Poland, Sweden; 1996-2013 for Czech Republic, Denmark; 1997-2012 for Canada, New Zealand; 1997-2013 for Norway, US; 1998-2013 for Ireland; 1995-2010 for Netherlands; 2001-2011 for Israel; 2002-2013 for Slovak Republic. In Panel A, all series are deflated by the total economy value added price index. In Panel B, all series are deflated by the value added price index excluding the primary, housing and non-market sectors. The sectors excluded in panel B are the following (ISIC rev. 4 classification): (1) Agriculture, Forestry and Fishing (A), (2) Mining and quarrying (B), (3) Real estate activities (L), (4) Public administration and defence, compulsory social security (O), (5) Education (P), (6) Human health and social work activities (Q), (7) Activities of households as employers (T), and (8) Activities of extraterritorial organisations and bodies (U). "Wage inequality" refers to total economy due to data limitations.
Source: OECD National Accounts Database, OECD Earnings Database, Schwellnus et al. (2017).

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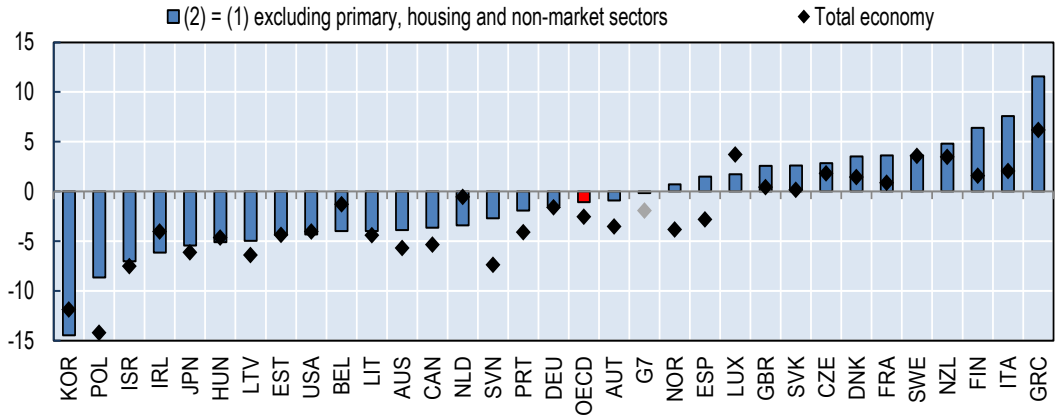
Labour shares have declined in most OECD countries, while the ratio between median to average wages has decreased in all but two. Labour share developments have been very heterogeneous across OECD countries, but around two-thirds saw a decline (Figure 1.4). Most of the decline occurred prior to the crisis, while in the immediate aftermath the labour shares picked up (partly reflecting the business cycle). However, in the most recent years the labour shares have broadly stabilised with large differences across countries depicted by first and third quartiles of countries (Figure 1.5).

Figure 1.4 Labour income share evolutions

OECD countries, 1995-2014, % points



Note: Three-year averages starting and ending in indicated years. OECD and G7 refer to un-weighted averages for the relevant countries included in the Figure; 1995-2013 for Australia, France, Korea and Portugal; 1995-2012 for New Zealand; 1997-2012 for Canada; 1997-2014 for United Kingdom; 1998-2014 for Ireland and US. Increases in wage inequality have contributed to aggregate decoupling by reducing the ratio of median to average wages in a wide range of OECD countries. The average decline in the ratio of median to average wages was around 2 percentage points over the period 1995-2014, but for a number of countries, including the Czech Republic, Hungary, Korea, New Zealand Poland and the US, declines in this ratio were significantly more pronounced. Only Chile, Italy and Spain bucked the trend of increasing wage inequality. These results derive from the OECD Earnings Database; available for 23 OECD countries.
Source: OECD National Accounts Database, Schwellnus *et al.* (2017).

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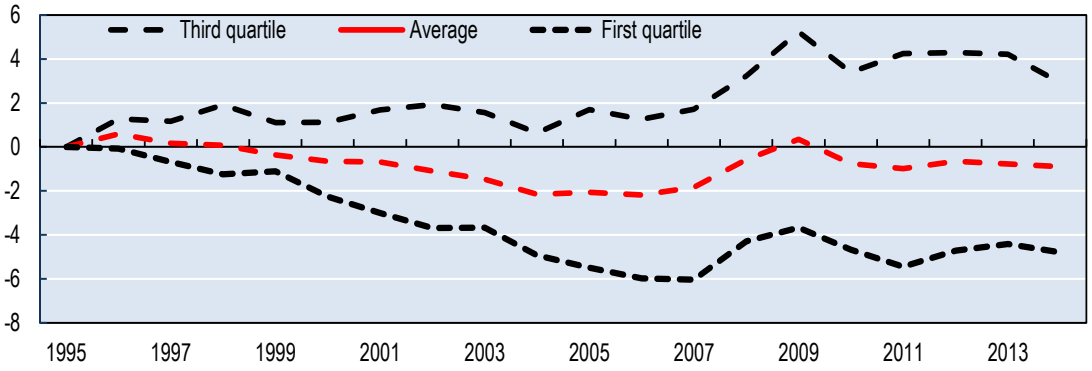
Figure 1.5 Trends in labour income share evolutions

Unweighted average of 31 OECD countries, % points



Note: 1995-2014 for Austria, Belgium, Czech Republic, Germany, Denmark, Spain, Estonia, Finland, France, United Kingdome, Greece, Hungary, Israel, Italy, Japan, Lithuania, Latvia, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia and Sweden; 1995-2012 for New Zealand; 1995-2013 for Australia and Korea; 1997-2012 for Canada; 1998-2014 for Ireland and US. Labour income share evolutions are presented in OECD average, first and third quartiles that refer to groups of 31 OECD countries to show dispersion across countries.
Source: OECD National Accounts Database.

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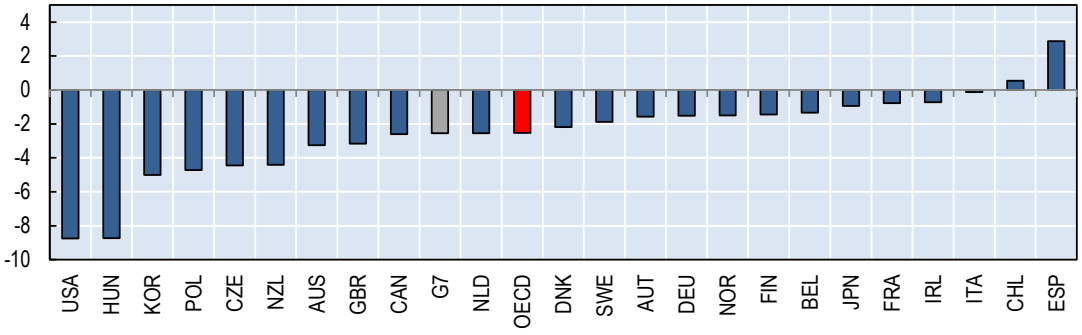
The decline in the ratio of median to average wages is driven by high wage growth of top earners. The increase in wage inequality as measured by the decoupling between median from average wage growth reflects disproportionate wage growth at the very top of the wage distribution. This is supported by Alvaredo et al. (2016) that show that the most striking development over the past two decades has been the divergence of wages of the top 1% of income earners from both the median and the 90th percentile (Figure 1.6; Figure 1.7).

Figure 1.6 The ratio of median to average wages has declined

OECD countries, 1995-2013, % points



Note: Three-year averages starting and ending in indicated years. OECD and G7 refer to unweighted averages for the relevant countries included in the Figure. 1996-2013 for Chile, Czech Republic, Denmark; 1995-2012 for Australia, Spain, France, Italy, Poland, Sweden; 1997-2013 for Norway, New Zealand; 1998-2013 for Canada; 1995-2010 for Netherlands.
Source: OECD Earnings Database, Schwellnus et al. (2017).

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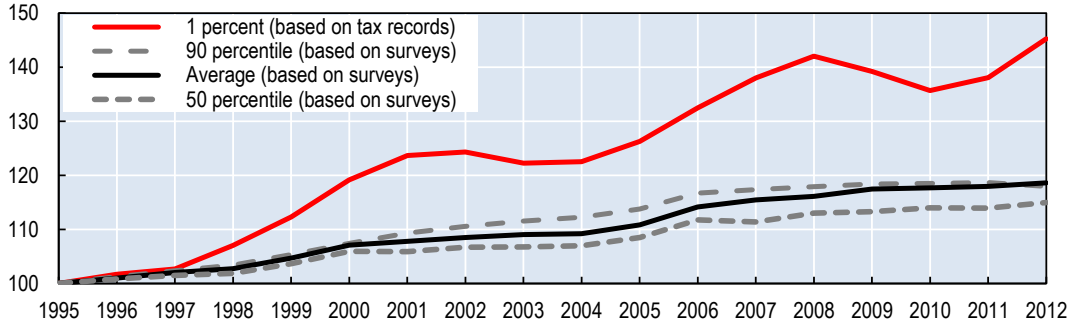
Figure 1.7 Wages of top income earners diverged from the average and median

Unweighted OECD average of 9 countries, 1995-2011, Index 1995=100



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, Alvaredo et al. (2016), Schwellnus et al. (2017).

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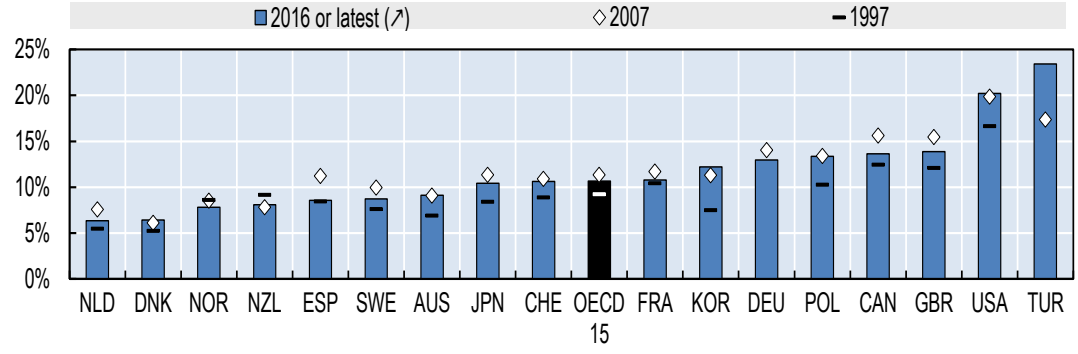
The share of the top 1% has increased since 2007. The Gini coefficient is commonly used to measure overall income inequality; however, it cannot reveal the extent to which

the wealthy few are pulling ahead of the rest of the population. The latest evidence from tax records depicts substantial increases in the income share of the top 1% in many OECD countries (Figure 1.7)

The wage growth has lagged behind the labour productivity growth in emerging and developing countries. Most of the post-crisis period has seen an overall decline in the wage growth: from 2.5% in 2012 to 1.7% in 2015 globally, and from 6.6% in 2012 to 2.5% in 2015 in emerging and developing countries in Asia and the Pacific (ILO, 2017). This trend only partly reflects differences among workers and firms. In most countries, wages spiked for the top 10%, particularly for the top 1% earners (ILO, 2017). In Europe, the highest-paid 10% receive about one quarter of the total wages; and further more in the emerging market economies like Brazil (35%), India (43%) and South Africa (49%). Altogether, these trends mean that although workers have become increasingly productive across the world, the benefits of their work have increasingly accrued to those at the top of the income distribution. For example, the income share of the richest 1% rose from 7.5% to 11.2% in Korea and from 16.6% to 19.9% in the US between 2007 and 2014 (Figure 1.8). While the income share of the top 1% fell in many OECD countries in 2010, it reverted to pre-crisis levels in the US, Australia, Poland and a few others. By contrast, in Turkey and Korea, the income share of the top 1% has continued to rise beyond 2007 levels in 2014.

Figure 1.8 Income share of the top 1%

Selected OECD countries, 1997, 2007 and 2016 or latest, %



Note: The latest available year refers to 2016 for Turkey; 2015 for Poland; to 2014 for New Zealand, France, the United Kingdom and the US; to 2013 for Sweden; to 2012 for the Netherlands, Spain and Korea; to 2011 for Norway and Germany; and to 2010 for Denmark, Japan, Switzerland and Canada. The OECD average is the simple average of the countries shown in the chart with available data for all three periods (i.e. excluding Turkey and Germany).
Source: World Wealth & Income Database.

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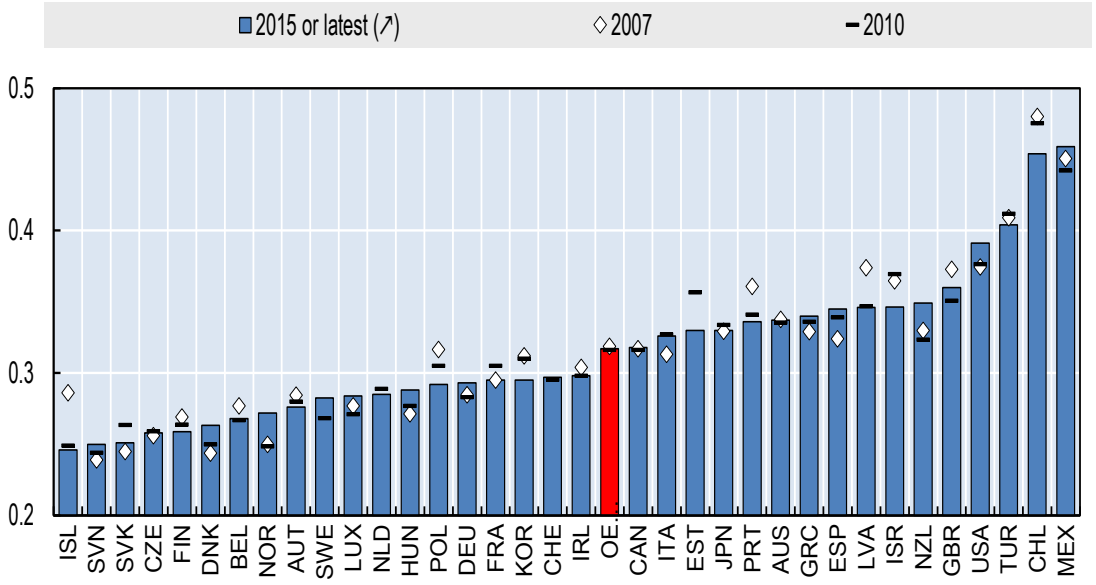
Overall market income inequality stalls at record levels; and remained one of the highest between 2007 and 2015. In terms of disposable income before taxes and benefits, income inequality has risen in several countries since 2007 (Figure 1.9), including the US (2% points) and Spain (2% points), while it has fallen by more than 2% points in Iceland, Chile and Latvia.

Wealth is concentrated in the hands of a few, regardless of how it is measured. Wealth held by the average household in the top 10% is 15 times that of the median household in OECD countries (Figure 1.10, left vertical axis); it is much higher in the US (68 times), the

Netherlands (58 times) and Denmark (30 times), partly reflecting the fact that in each of these countries the source data provides comprehensive coverage of very wealthy households, which are often under-sampled in conventional household surveys. By contrast, the difference between the wealth of the median household and the average wealth of households in the bottom quintile of the distribution is 1.3 in the OECD area (Figure 1.10, right axis), about twelve-times smaller. Inequality in the lower half of the distribution is the largest in Denmark and the Netherlands (partly because the source data captures better the very wealthy).

Figure 1.9 Gini coefficient of disposable income

Total population, OECD countries, 2016 or latest, 2010 and 2007



Note: Data for 2015 refer to 2016 for Finland, Israel, the Netherlands, Sweden and the United States; 2014 for Australia, Hungary, Iceland, Ireland, Italy, Luxembourg, Mexico, New Zealand and Switzerland; and to 2012 for Japan. Data for 2010 refer to 2013 for Estonia, Sweden and Switzerland; 2011 for Chile, Israel, the Netherlands, New Zealand, and Turkey; and to 2009 for Hungary, and Japan. Data for 2007 refer to 2008 for Germany, Australia, Chile, France, Norway, Israel, and Mexico; and to 2009 for Switzerland. 2016 data for the Netherlands are provisional. The OECD average excludes Estonia, the Netherlands, Sweden and Switzerland due to a break in the time series for these countries.
Source: OECD Income Distribution Database.

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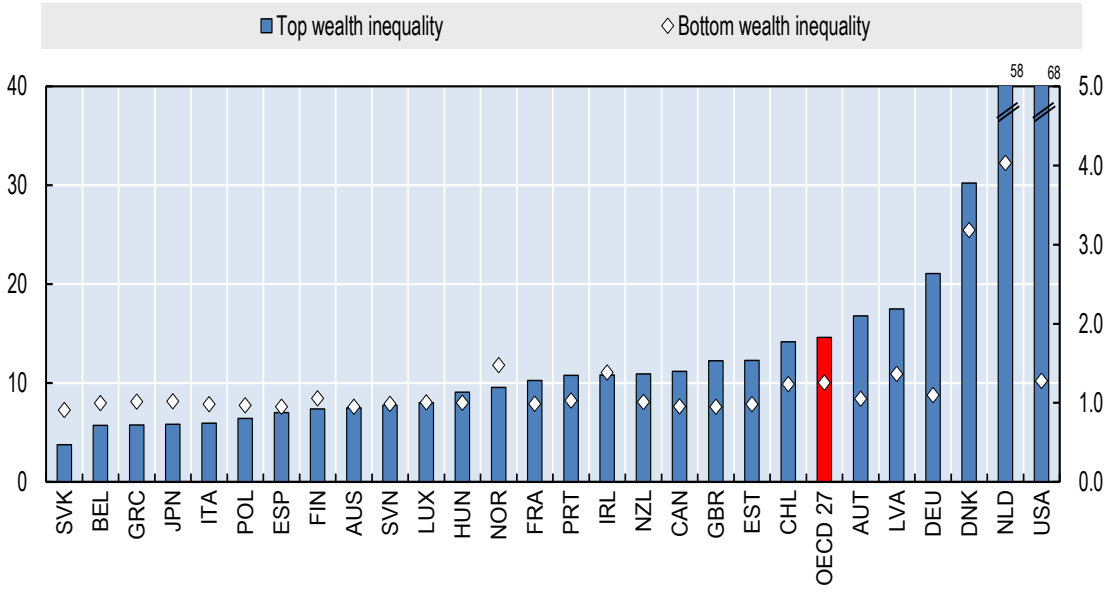
The wealthiest 5% held more than one third of wealth; the wealthiest 1% held nearly one fifth of the wealth.[5] As shown in Figure 1.11, wealth inequality is the highest in the Netherlands and the US (with, respectively, 52% and 68% shares in terms of the top 5%, and 28% and 42% in terms of the top 1%) and the lowest in the Slovak Republic and Greece (with respectively, 23% and 29% shares in terms of the top 5%, and 7% and 8% in terms of the top 1%). In the OECD average country, wealth inequality remained around the same levels between 2010 and 2014 (in terms of 1% and 5% metrics) while it increased in the US, United Kingdom and Greece and fell in Luxembourg, Canada, Italy and Portugal.

The post-crisis rebound in the financial markets has brought less benefit to the young and less-educated. The growth in net wealth since the financial crisis has been lower for

households with a younger and a less educated head. In Canada, median net wealth has increased more rapidly than in the upper percentiles of the distribution, lowering wealth inequality at the top of the distribution (Figure 1.11**Error! Reference source not found.**), at least, in part, reflecting better performance of the young (Figure 1.12), whose growth in average net wealth outpaced that of aged. Wealth growth of the highly skilled, however, significantly outpaced that of the lower skilled. In Australia on the other hand, growth in wealth of the median household was significantly outpaced by that of the top 10%, in part reflecting growing disparities between the young and old. In Italy, median net wealth decreased at a slower rate than the wealth of the top 10%, lowering wealth inequality, as net wealth of the highly skilled fell at a faster pace than that of lower-skilled but, at the same time, net wealth among the young contracted at a significantly higher pace than of the old. Conversely in the United Kingdom and the US, where median net wealth also fell, net wealth of the top percentiles increased; mirrored by contractions in net wealth of the young and increases in the old. Inequalities within the bottom end of the wealth distribution remained fairly stable in all countries except the US, where it increased.

Figure 1.10 Top and bottom wealth inequality

OECD countries, 2016 or latest available year



Note: Top wealth inequality refers to the difference between the mean wealth of the top 10% and the median wealth, divided by the median wealth. Bottom wealth inequality refers to the difference between median wealth and the mean wealth of the bottom quintile, divided by the median wealth. Data refer to 2016 for the US; to 2015 for Denmark, the Netherlands, and the United Kingdom; to 2013 for Estonia, Ireland and Portugal; and to 2012 for Canada and Spain. Data for 2010 refer to 2013 for Korea; to 2012 for Norway; to 2011 for Australia, Austria, Chile, Germany, Italy, Luxembourg, and the United Kingdom; and to 2009 to France, Greece and Spain. In Denmark and the Netherlands the share held by the bottom 60% of households is negative reflecting that, on average, these households have liabilities exceeding the value of their assets. In Norway and Ireland it is the share held by the bottom 40% to be negative.
Source: OECD Wealth Distribution Database.

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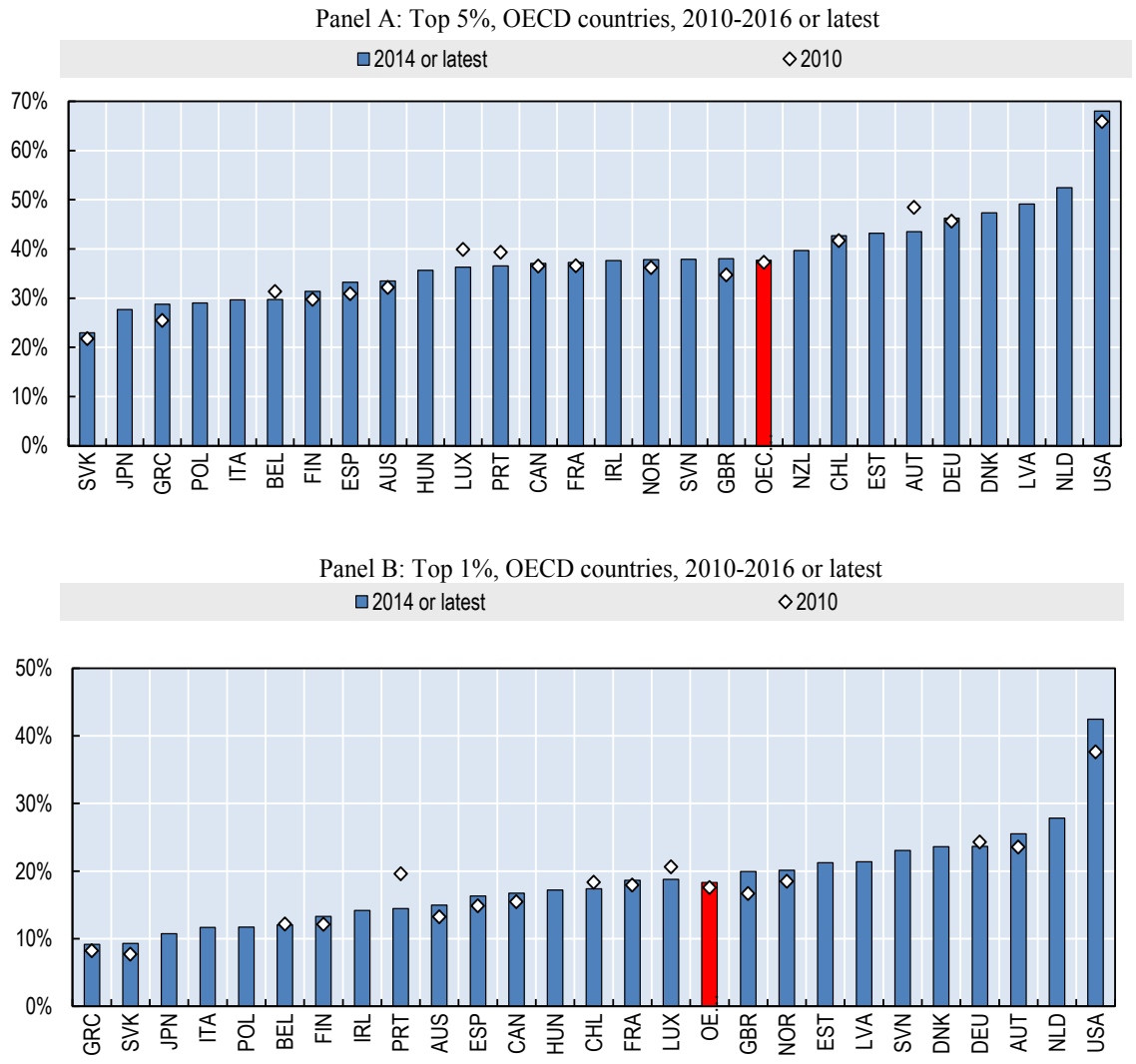
Figure 1.11 Wealth shares of top percentiles of the net wealth distribution



Note: In each Panel, countries are ranked in ascending order of the wealth share of the top 5% in 2014. Data for 2014 refer to 2016 for the US; to 2015 for Denmark, Korea, the Netherlands and the United Kingdom; to 2013 for Estonia, Ireland and Portugal; and to 2012 for Canada and Spain. Data for 2010 refer to 2013 for Korea; to 2012 for Norway; to 2011 for Australia, Austria, Chile, Germany, Italy, Luxembourg and the United Kingdom; and to 2009 to France, Greece and Spain. In each Panel, the OECD average is the simple average of the countries with available data in both 2010 and 2014. For countries in grey, data are based on registers or surveys that typically better capture the very rich and which are often under-sampled in conventional household surveys

Source: OECD Wealth Distribution Database.

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Table 1.1. Changes of net wealth at different points of distribution

Selected OECD countries, between 2006 and 2016 or latest, annual percentage change.

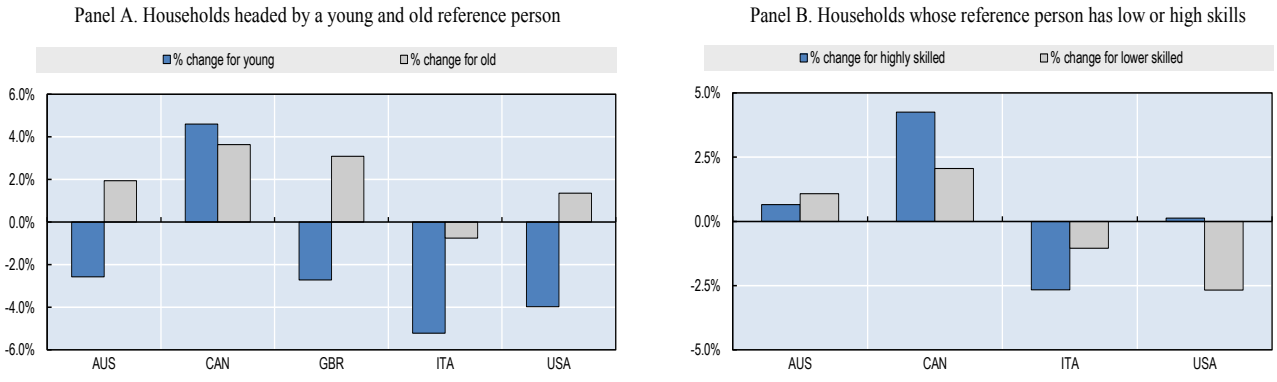
	Mean	Median	Bottom quintile	Middle three quintiles	Top quintile	Top 10%	Top 5%	Top 1%	Top wealth inequality	Bottom wealth inequality	Observed period
Australia	0.9	0.2	-2.5	-0.1	1.1	1.1	0.8	-0.6	3.9	0.0	2006-2014
Canada	3.2	3.5	4.4	3.4	3.1	2.9	2.6	1.9	1.5	-0.2	2005-2016
Italy	-1.4	-1.0	1.3	-1.2	-1.6	-1.8				0.0	2006-2014
United Kingdom	1.7	-1.5	0.7	-1.1	2.8	3.1	3.4	5.4	9.5	-0.2	2007-2015
United States	0.7	-3.3	-9.9	-3.2	1.3	1.6	1.6	2.4	8.4	2.0	2007-2016

Note: Top wealth inequality refers to the difference between the mean wealth of the top 5% and the median wealth, divided by the median wealth. Bottom wealth inequality refers to the difference between median wealth and the mean wealth of the bottom quintile, divided by the median wealth.
Source: OECD Wealth Distribution Database

Income and wealth inequalities have also increased in emerging and developing countries. Since 1980, income inequality has increased rapidly in China, India, and Russia. Inequality has stabilised in Latin America and the Caribbean, although remained at high levels. Globally, the poorest 50% are estimated to receive less than 9% of the world's income and the richest 1% above 20% of the world's income (World Inequality Report, 2018). Most of the world's poorest live in Africa and Asia (around 70% of the world's poorest 10% in terms of per capita incomes; not including China). In terms of wealth, about 50% of the world's wealth is owned by the richest 1%, largely driven by the unequal ownership of capital and shifting balance between private and public wealth (UNDP, 2014).

Figure 1.12 Change of mean net wealth between 2006 and 2016 or latest

Selected OECD countries, annual percentage change



Note: 1. Young household heads are those under 34 years of age, while the old heads are those above 65.
2. The low education group refers to household heads with lower secondary education or below (ISCED 0-2), while the high education group refers to household heads with tertiary education (ISCED 5 & 6).
Figures for 2006 relate to 2005 for Australia and Canada, and 2007 for the United Kingdom and United States.
Figures for 2014 refer to 2015 for the United Kingdom and to 2016 for Canada and the United States.
Source: OECD Wealth Distribution Database.

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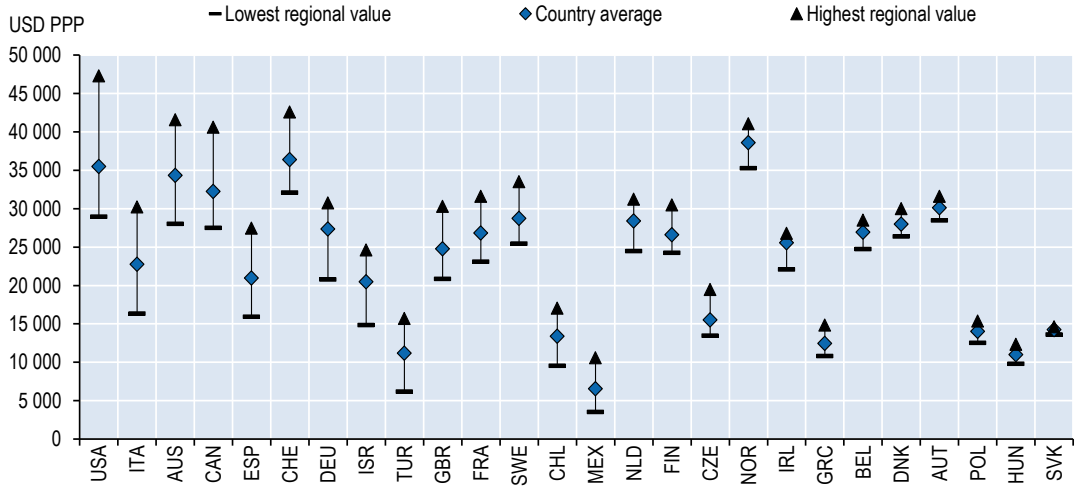
Trends in regional disparities

There are large economic differences across regions within the same country. The income disparities within regions of the same country are now larger in some countries than the disparities between OECD countries. In many OECD countries, citizens in the richest regions have a significantly higher disposable income than households in the poorest regions. In the US, Italy, Turkey, Spain or Mexico, disposable household incomes in the richest region are between 30 and 50% higher than in the respective country's poorest region (Figure 1.13). The most prosperous region in the US, the District of Columbia, recorded a mean disposable income of USD 47 320, significantly above the income level of USD 28 967 in Mississippi, the least prosperous region in the US.

Regional convergence or divergence in disposable household income is context-specific. There has been no clear overall trend in regional disparities in disposable household income per capita during 2010-2014 across OECD countries. In roughly half of them, income disparities between the richest and poorest regions increased, especially in Greece, Canada and the Netherlands (Figure 1.14). Disparities decreased in a few other countries, most notably in Chile, Portugal and Slovenia. In countries with decreasing regional disparities, the income convergence was predominantly driven by faster growth in the bottom regions than in the top regions. Analogously, a divergence in regional income disparities was driven by larger decreases in disposable income in the poorest regions. In Greece, for example, income in relatively poor Eastern Macedonia (Thrace) declined more than in the more affluent region Attiki.

Figure 1.13 Regional disparities in mean disposable household income

OECD countries, 2013 or latest year available, USD PPP



Note: The figure shows the equalised mean disposable household income in the richest and poorest regions (large TL2 regions) in OECD countries, 2013 or latest. Data are expressed in USD constant prices, PPP (reference year 2010). Ceuta and Melilla regions are not included in Spanish regions.
Source: OECD Regional Statistics database.

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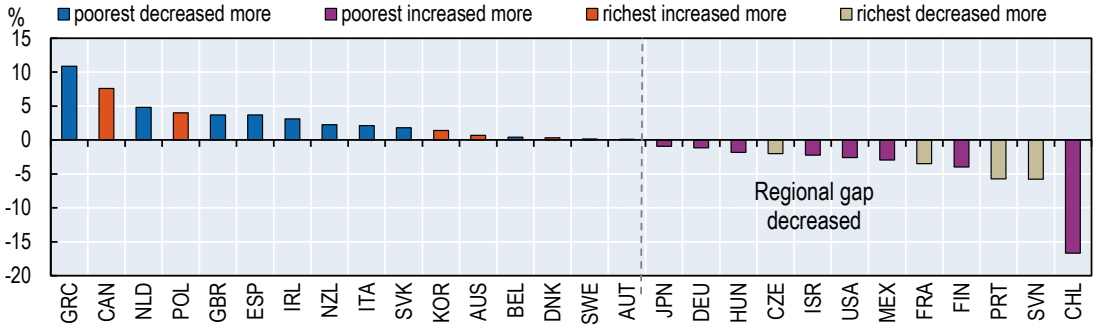
Figure 1.14 Change in disposable income regional disparity

OECD countries, 2010 to 2014, %

Evolution of the ratio top 10% over bottom 10% region in each country, and reason of the change



Note: The figure shows the change between 2010 and 2014 in the ratio of average disposable income per capita of the richest 10% and poorest 10% TL2 regions. Richest and poorest regions are the aggregation of regions with the highest and lowest income per capita and representing 10% of national population. Ceuta and Melilla regions are not included in Spanish regions

Source: Authors' calculations based on OECD Regional Statistics (database), http://dx.doi.org/10.1787/region-data-en.

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Widening productivity gaps across regions resulted in higher output inequality. Differences in income inequalities across regions are driven by differences in labour productivity growth (Figure 1.15). Indeed, countries where regions that were catching up to their country's frontier were the major contributors to total productivity growth (Type I) retained fairly constant interregional income inequality while countries where the contribution to productivity growth was concentrated in regions that were already more productive than the rest of the country (Type II) experienced an increase of inter-regional inequality in terms of per capita GDP between 2000 and 2014 (OECD, 2018a).

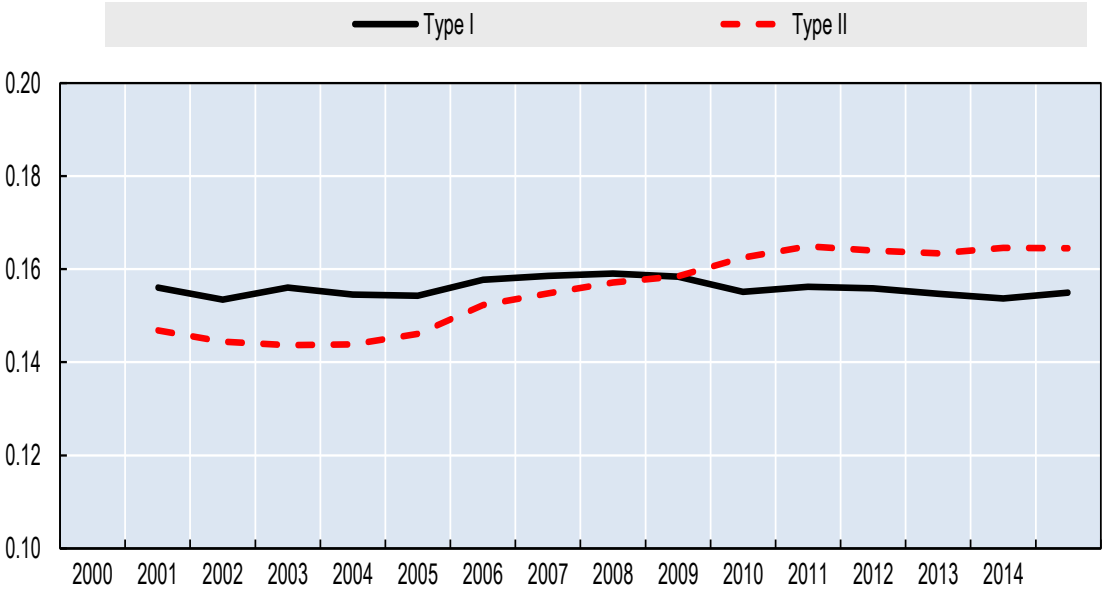
Some regions risk falling further behind if the productivity gap is not closed. If productivity growth rates do not change, catching-up regions will close the gap to their frontier, on average, by 2050. However, without a change, this also means that during the same period diverging regions will have fallen to about 50% of the productivity frontier. To close the gap in the next 34 years, diverging regions would need to outgrow their frontier by about 1.2% points. Put differently, the average labour productivity growth in diverging regions would need to increase to 2.8% per year, quadruple the current rate (OECD, 2016a; OECD, 2016b).

Firms and workers in larger cities are generally more productive than in smaller cities or rural regions. A variety of channels create this productivity benefit. One of them is the concentration of highly educated workers. These workers are not only more productive themselves, but create additional "human capital spillovers"; that is, a higher percentage of highly educated workers increases productivity (measured by individual earnings) for all workers (Moretti, 2004). In a sample of five OECD countries (Germany, Mexico, Spain, the United Kingdom and the US) a 10 percentage point increase in a city's share of university graduates, is associated with productivity increases of about 3% (Ahrend et al., 2017). In addition, knowing that there are greater returns to education provides an incentive for further investment in one's education, creating a virtuous circle. Spillovers are not limited to highly educated workers. Co-location of workers and firms, in general, creates

"agglomeration economies". Agglomeration economies confer a productivity "bonus" to workers that depends on the size of the city.

Figure 1.15 Inequalities grow when regions fail to catch up

Per capita GDP inequality (Gini coefficient) in TL3 regions, OECD countries, 2000-14



Note: Type I countries are those with strong regional catching up dynamics in terms of labour productivity across regions, while Type II countries experienced divergence of most regions and the productivity advantage in the most productive "frontier" regions increased. Type I countries are AUT, CZE, DEU, ESP, ITA, POL, PRT, and ROU; Type II countries are BGR, DNK, FIN, FRA, GBR, GRC, HUN, NLD, SVK, and SWE. Per capita GDP inequality with GDP measured in USD at constant 2010 prices and purchasing power parities.
Source: OECD (forthcoming), Bachtler et al. (2017).

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Rural growth does not only occur in rural regions that are close to cities, but proximity is an important predictor for rural growth. Proximity allows stronger linkages between urban and rural places that allows for agglomeration benefits to be shared beyond the borders of a city. Rural residents have easier access to advanced public and private services that are only found in cities and commuting flows can help alleviate the congestion within cities. Indeed, more than 75% of rural residents live in close proximity to a (functional) urban area (OECD, 2016b).

Trends in ageing unequally

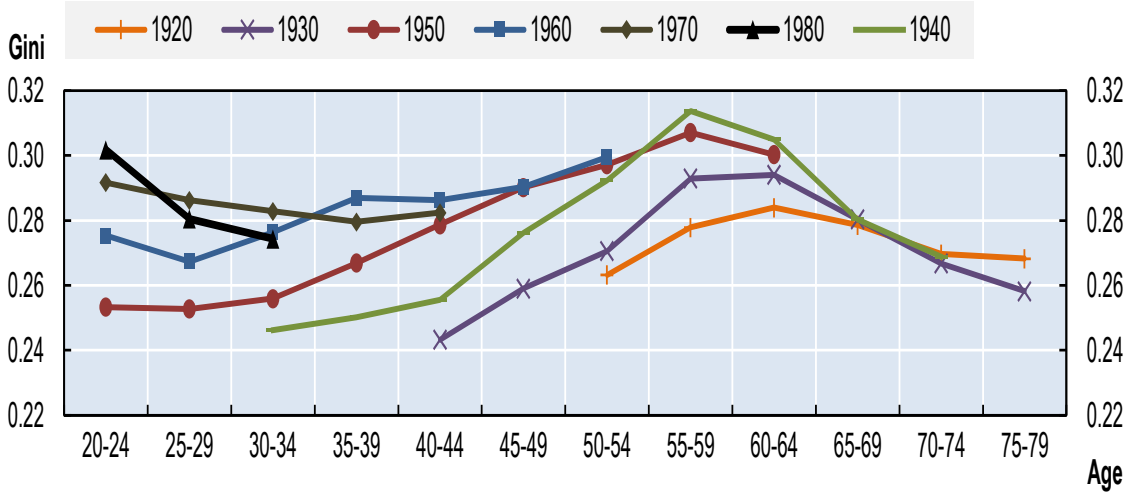
Inequalities are increasing across generations too. Income inequality typically rises with age within cohorts, generally peaking between 55 and 60 years old in OECD countries and declining thereafter (OECD, 2017a). However, inequality has evolved differently from one birth cohort to the next. The1940s-born experienced a particularly pronounced rise and fall in income with age, as shown by the hump corresponding to the 1940s cohort (Figure 1.16). For this generation, the Gini index rose from an OECD-wide average of 0.245 among 30-to-34 year-olds to 0.315 when, 25 years later, they reached 55 to 59 years. The increase was much more gradual for the 1960s cohort (for which data are available only up to 50-54) albeit from a higher level of inequality at younger ages. For the youngest cohorts, the Gini

index even declines up to around age 35, in contrast to the initial increase that had prevailed up to the 1950s-born cohort.

Overall income inequality at the same ages across cohorts has increased. The cumulative increase (between the 1920s and 1980s birth cohorts) has been very large – greater than 10% points– in Belgium, the Slovak Republic, Austria, Israel, the US, Poland, the United Kingdom, Finland, the Czech Republic and Australia. By contrast, inequality at the same age declined between the cohorts in Ireland, Switzerland, France and Greece.

Figure 1.16 Income Gini index by cohort and age group

OECD-wide averages, Gini index



Source: Figure 3.18 in OECD (2017a), Preventing Ageing Unequally, OECD Publishing, Paris.

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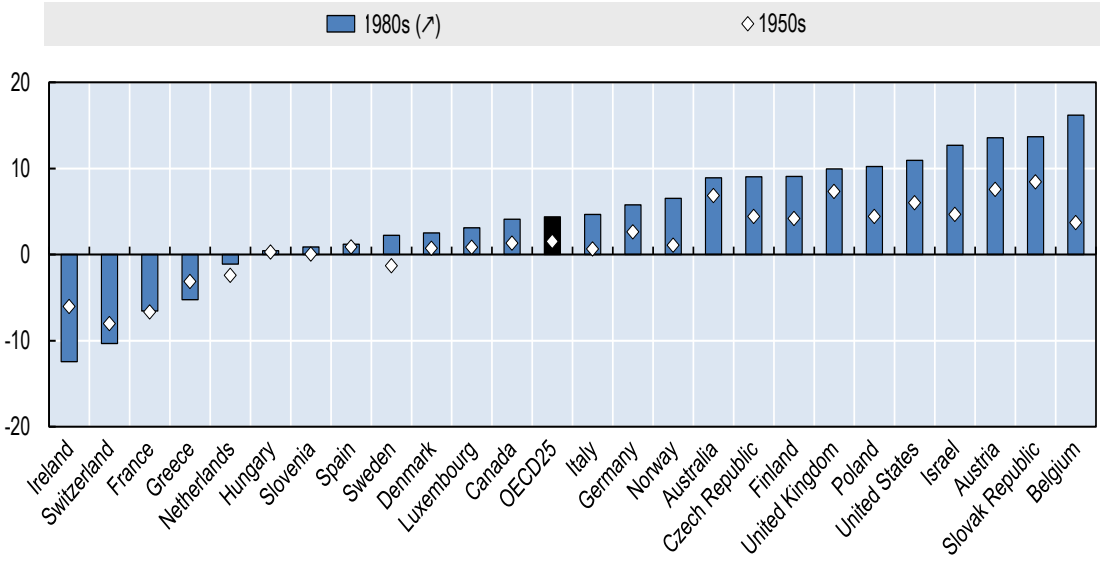
Income inequality at the same age has increased steadily in all cohorts born between the 1920s and 1980s. Income inequality for those born in the 1980s is much higher than among their parents at the same age, which in turn was higher than for their parents. More precisely, on average the Gini coefficient at the same age between generations born in the 1920s and in the 1950s increased by 1.5% points (Figure 1.17). Between the 1950s and 1980s birth cohorts, the Gini index at the same age increased by further 3 percentage points (or 10%) on average. In other words, at a given age, income inequality climbed by about 0.3% per birth year on average among people born from 1950 onwards. If the age patterns of the past prevail among the younger cohorts, they will suffer from great inequality in old age. Population ageing could heighten the difficulties that the disadvantaged elderly of the future may experience.

Figure 1.17 Income inequality at the same age has increased from one generation to the next

Changes in Gini indices across birth cohorts in percentage points, average across age groups, cohort reference = 1920s



Note: For each country, reported figures are derived from a specification that includes cohort and age fixed effects. Older cohorts tend to be observed at old ages only and younger cohorts at young ages. Due to quality issues, data from Mexico have not been used.
Source: Figure 3.19 in OECD (2017a), Preventing Ageing Unequally, OECD Publishing, Paris.

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Key dynamics and policies to enhance inclusive outcomes from growth

Addressing the decoupling between productivity and wages and ensuring a fairer sharing of productivity gains

The decoupling of real wage growth from productivity growth partly reflects global mega-trends, including capital-enhancing technological change and the rise in global value chains. Increasing productivity is not always enough to raise wages of a typical worker in real terms. Declines in relative investment prices –a measure of capital-enhancing technological change– and the rise of global value chains have reduced labour shares and may have raised wage inequality by increasing relative demand for high-skilled workers while squeezing the wages of low-skilled workers (OECD, 2017b; De Serres and Schwellnus, 2018). This explains the decoupling between labour productivity and real median wages.

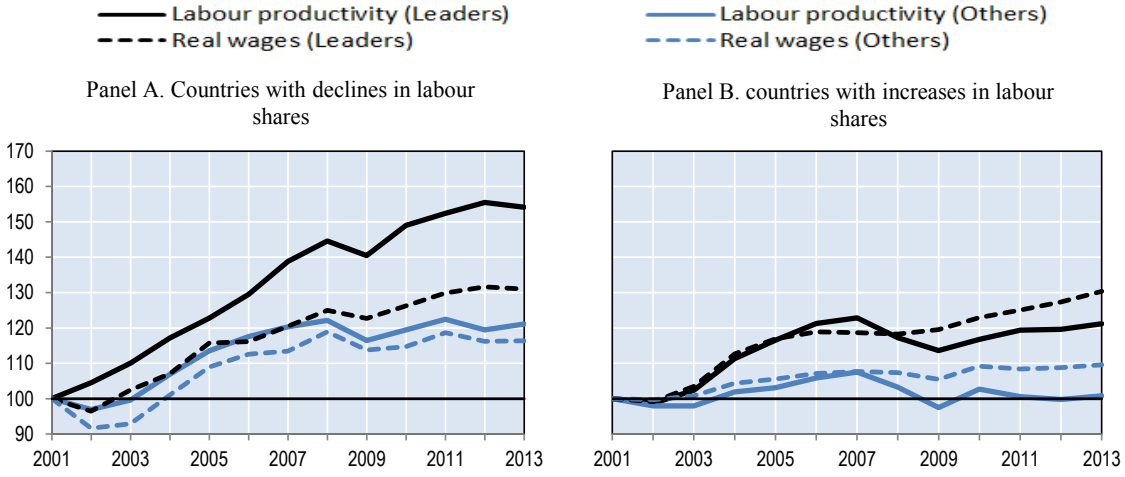
Large cross-country heterogeneity in decoupling suggests that national policies and institutions matter. Recent evidence indicates that three broad policy areas are key to a wider sharing of productivity gains (OECD, 2018b):

- **Skills policies.** High skills can support the wider sharing of productivity gains by limiting capital-labour substitution. Empirically, capital-labour substitution is more pronounced in countries and industries specialising in high-routine activities. However, even at given levels of specialisation in high-routine activities, capital-

labour substitution is lower when skills are high - with numeracy skills being particularly important (OECD, 2018b). This may be because high-skilled workers are reassigned to non-routine tasks more easily than low-skilled workers. Moreover, skills appear to shift specialisation patterns; with high skills typically reducing specialisation in high-routine activities.

- **Product market policies.** Pro-competitive product market reforms raise wages relative to productivity by reducing product market rents appropriated by capital. Average product market regulation has become more competition-friendly in OECD countries over the past two decades. *Prima facie* this appears inconsistent with the decoupling of wages from productivity. However, the evidence suggests that in a number of countries the technological change and globalisation have more than offset the wider sharing of productivity gains from pro-competitive product market reforms. For example, this includes reinforcing "winner-take-most" dynamics that contributed to decoupling of wages from productivity in the technologically most advanced firms (Figure 1.18).

Figure 1.18 Average wages and productivity in the best firms and the rest, 2001=100



Note: Labour productivity and wages are computed as the unweighted mean across firms of real value added per worker and labour compensation per worker. Leaders are defined as the top 5% of firms in terms of labour productivity within each country group in each industry and year. The countries with a decline in the labour share (excluding the primary, housing, financial and non-market industries) over the period 2001-2013 are: Belgium, Denmark, Germany, Ireland, Korea, Sweden, United Kingdom and US. The countries with an increase are: Austria, Czech Republic, Estonia, Finland, France, Italy, Netherlands and Spain. *Source:* OECD calculations based on OECD-ORBIS.

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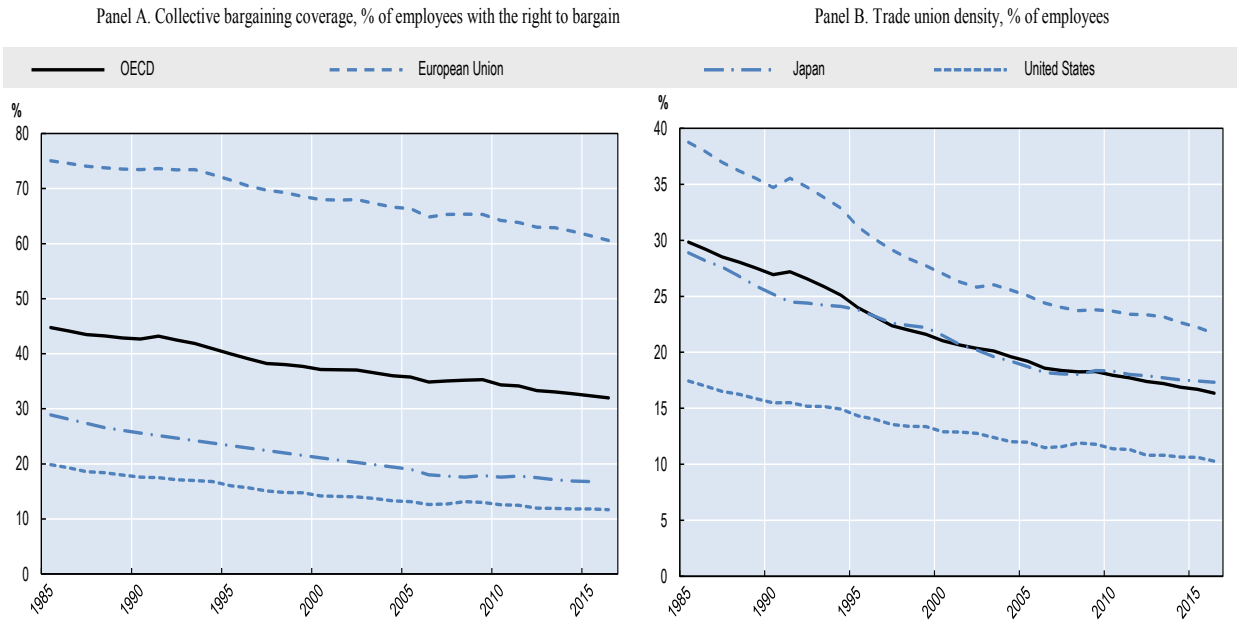
- **Labour market policies and institutions.** Labour market policies and institutions can support a fairer sharing of productivity gains through their impact on the relative cost of labour; for instance, by influencing the wage formation process or altering the cost of hiring and firing (OECD, 2018b; OECD, 2018c), and also by influencing the distribution of product market rents. In the imperfectly competitive labour market (e.g. in a labour market that is characterised by monopsony where the employer has leeway to set the level of wages), workers and capital owners bargain over the distribution of rents formally or informally. Labour market policies such as minimum wages or collective bargaining institutions can influence the distribution of rents between workers and capital-owners.

Figure 1.19 Trends in collective bargaining coverage and trade union density



Source: OECD/ICTWSS Database.

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Labour market policies and institutions that strengthen workers' bargaining position, especially at the lower end of the wage distribution, without unduly raising labour costs, are most conducive to the wider sharing of productivity gains. Well-designed active labour market policies support a wider sharing of productivity gains by helping people who lost their jobs find new and better ones (OECD, 2018b). Minimum wages can also help to ensure that low-wage workers benefit from growing economic prosperity, although need to be moderate in countries where relative cost competitiveness is an issue, and well-designed to avoid capital-labour substitution. In particular, the floor set by minimum wages could avoid that low-skilled workers are priced out of jobs by carefully considering interactions with taxes and transfers. For example, reductions in social security contributions around the minimum wage can enhance the effectiveness of the minimum wage as a tool to raise pay and reduce poverty, while limiting the rise in labour costs for firms. Minimum wages could be revised regularly, based on accurate, up-to-date and impartial information and advice that considers labour market conditions and the views of different stakeholders. Coverage of and compliance with minimum wage legislation could often be improved. Collective bargaining institutions can help to promote a broad sharing of productivity gains and raise wages of low-income workers. However, they would not need to push up wages only for a small group of workers covered by the agreements. For collective bargaining institutions to be effective for a majority of workers, coverage needs to be high. Over the past decades, however, collective bargaining coverage has been declining in most OECD countries (Figure 1.19; OECD, 2017b).

Collective bargaining coverages can be improved through well-organised social partners based on broad memberships. In order to extend social dialogue to all segments of the economy, including small firms and non-standard forms of employment, governments can put in place a legal framework that promotes social dialogue in large and small firms alike and allows labour relations to adapt to new emerging challenges. In the

absence of broad memberships, another way to maintain high coverage is the use of administrative extensions that extend the coverage of collective agreements beyond the members of signatory unions and employer organisations to all workers and firms in a sector. Parties that negotiate the agreements should represent the interests of all groups of firms and workers, that is, to avoid that extensions harm the economic prospects of start-ups, small firms or vulnerable workers. This can be achieved by subjecting the extension requests to reasonable representativeness criteria or providing well-defined procedures for exemptions and opt-outs in case of economic hardship.

Collective bargaining institutions need to strike the right balance between providing high coverage and sufficient coordination to align wages with productivity growth. Centralisation can improve the sharing of productivity gains by increasing the labour share, especially for low-wage workers, and by reducing wage inequality. Recent research by the OECD (2018d) shows that forms of centralised and/or coordinated bargaining systems can improve labour market performance compared to (fully) decentralised bargaining systems or where there is no collective bargaining. The former record higher employment rates are able to integrate vulnerable workers more into the labour market while at the same time improving the sharing of productivity gains by increasing the labour market share, especially for low-wage workers, and reducing wage inequality.

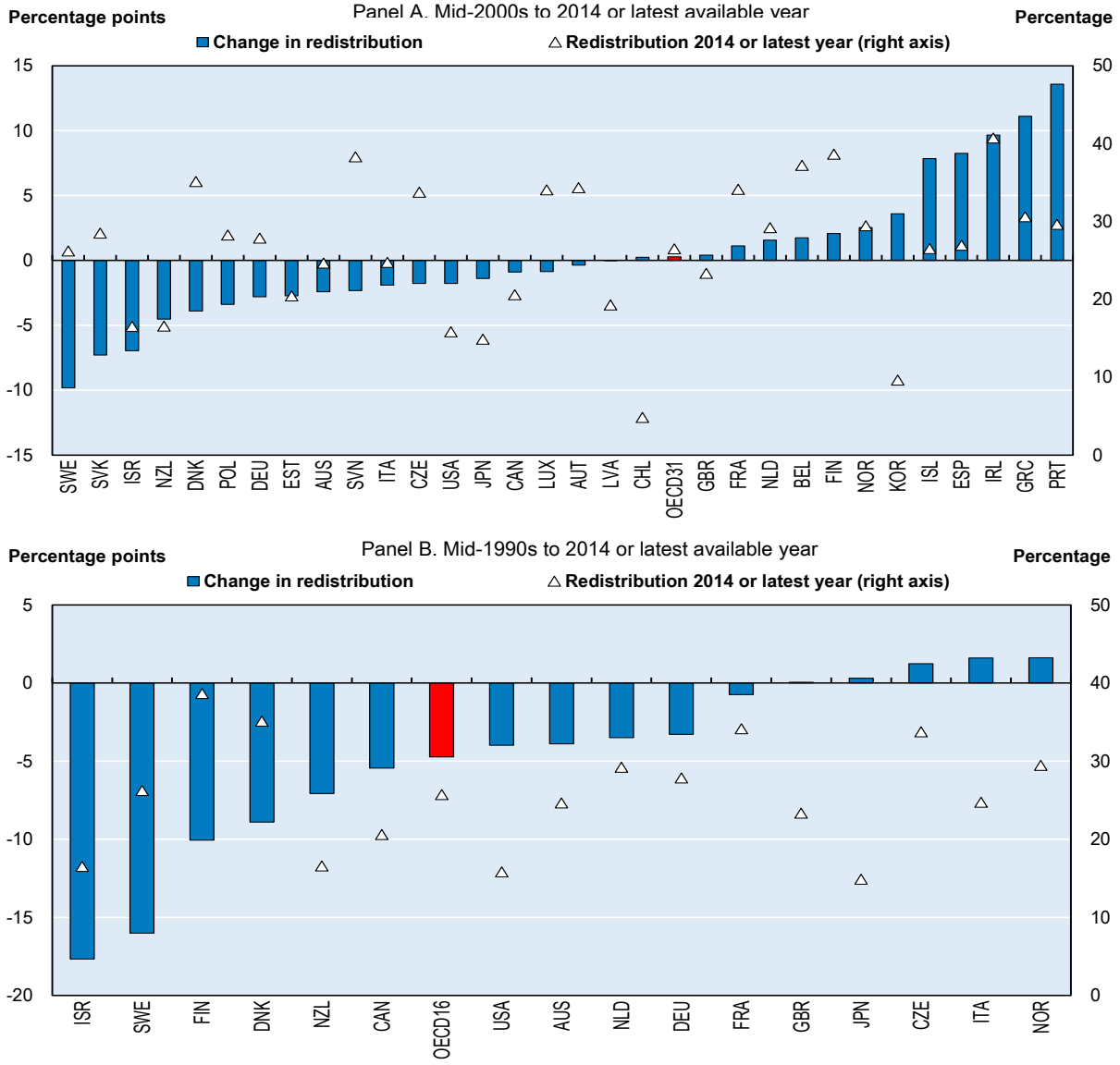
Fair and efficient redistribution

The tax and transfer system is a central means of redistributing in a fair and impartial manner the gains of growth to promote equity. Designing these systems to foster inclusive growth requires a holistic approach. The labour income tax system and transfers need to reduce poverty for those at the bottom of the income and wealth distribution. At the same time, it is important to ensure that capital income taxes are coherently taxed and tax evasion and avoidance is addressed to ensure effective taxation of those with high levels of income and wealth. However since the mid-1990s, the redistributive effect of taxes and transfers has declined (Causa and Hermansen, 2018; Figure 1.20A). This redistributive effect is more pronounced in the pre-crisis period during the mid-2000s.

Declines in the size of personal income taxes (PITs) tended to reduce redistribution. PITs have become slightly more progressive in particular because of the cuts in PITs on lower incomes. These counteracting changes in size and progressivity of personal income taxes tended to shape redistribution with fairly equal forces, in contrast to transfers for which changes in size tended to dominate over changes in targeting. In particular, income support provided by social transfers to workless households in the bottom 40% has declined in the majority of OECD countries for which data are available. Given the overwhelming weight of transfers relative to market income among that group, their disposable income declined markedly relative to median income. In the majority of countries for which data are available, cash transfers have become increasingly ineffective at preventing workless households from falling into relative poverty, especially in the presence of children. In contrast to workless households, income support provided by taxes and transfers to bottom 40% working households has increased in the majority of OECD countries. The increase in net transfer support was largely driven by declines in income taxes and social security contributions that tended to mitigate declines in market incomes Figure 1.20B), although significant variation across OECD countries can be found (see also Box 1.2).[6] The trend towards less redistribution was most pronounced over the pre-crisis period (1995-2007), and was temporarily reversed during the first period of the crisis (2007-2010); reflecting the cushioning impact of automatic stabilisers and fiscal discretionary measures.

Figure 1.20 Redistribution has declined in OECD countries since mid-1990s

Change in redistribution for the working-age population



Note: Coverage over time varies across countries. For Panel A: data refer to 2003-2012 for Japan; 2003-2014 for New Zealand; 2004-2015 for Finland and the United Kingdom; 2005-2014 for Denmark, France and Poland; 2005-2015 for Israel, the Netherlands and the United States; 2006-2015 for Chile and Korea; and 2004-2014 for the rest. For Panel B data refer to 1994-2015 for the United Kingdom; 1995-2012 for Japan; 1995-2015 for Finland, Israel, the Netherlands and the United States; 1996-2014 for Czech Republic and France; and 1995-2014 for the rest. Further details are provided in Causa and Hermansen (2017).
Source: Causa and Hermansen (2017).

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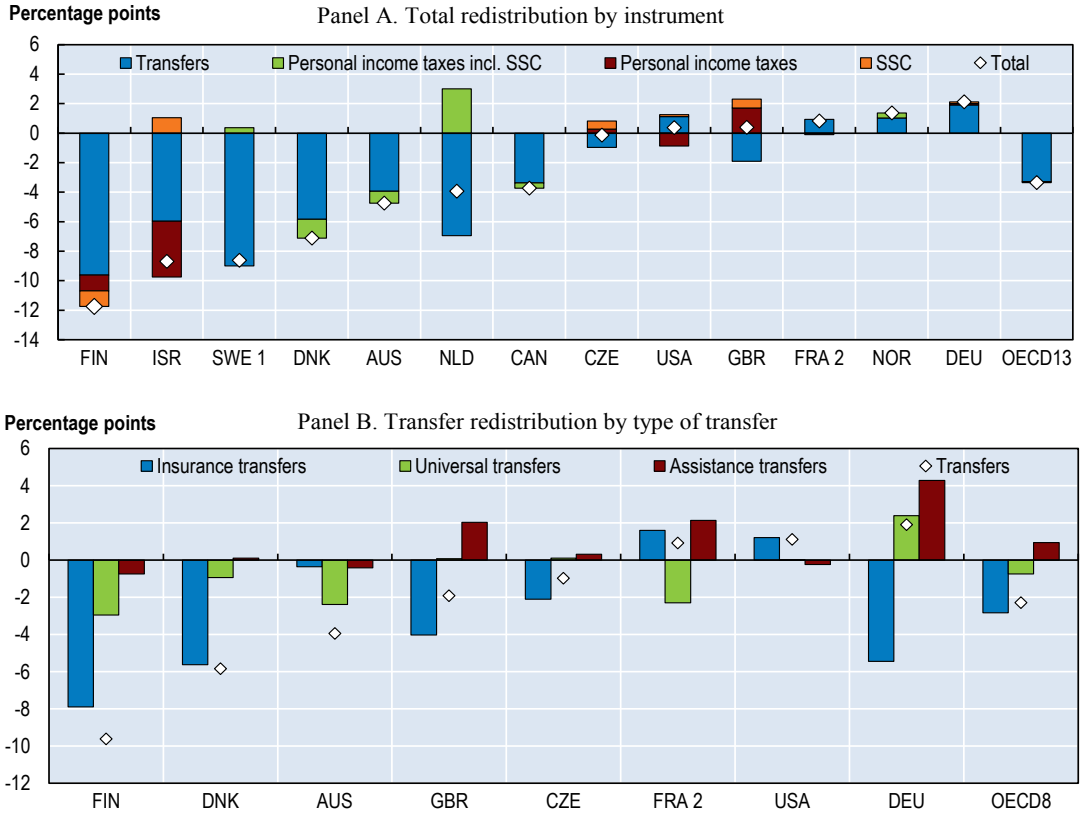
A decline in redistribution by cash transfers has driven the decline in overall redistribution across the majority of OECD countries over the last decade; since cash transfers account for the bulk of redistribution. Personal income taxes also contributed to this decline but played a less important and more heterogeneous role across countries

(Figure 1.21A). The decline in transfer redistribution was largely driven by insurance transfers (e.g. unemployment insurance, work-related sickness and disability benefits). This was partly mitigated by assistance transfers (e.g. minimum income transfers, means- or income-tested social safety net) in about half of the countries for which information is available (Figure 1.21B). Assistance transfers are less redistributive than insurance transfers in OECD countries.

A key policy challenge for designing tax and transfer systems is to achieve income redistribution and to strengthen the incentives for e.g. labour market participation and up-skilling. Given that the decline in redistribution may to some extent reflect the effects of efficiency-oriented tax and transfer reforms, this should not lead to the conclusion that countries have no choice but to trade more efficiency for less equity. Rather, reforms of taxes and transfers should be designed within an array of complementary policy instruments to address equity and efficiency objectives by taking into account country-specific context, constraints and social preferences.

Figure 1.21. The redistributive effect of transfers has declined in OECD countries

Change in redistribution for the working-age population, mid-1990s to 2013 or latest available year



Note: See Causa and Hermansen (2017), Box 4 for the approach to assess the redistributive impact of individual parts of the tax and transfer systems. Coverage over time varies across countries. Further details are provided in Causa and Hermansen (2017).
Source: Causa and Hermansen (2017).

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Box 1.2. The empirical analysis of the income redistribution drivers in OECD countries

Recent OECD research used the cross-country time-series regression analysis to examine the main drivers of income redistribution to working-age households. Causa et al. (2018, forthcoming) define redistribution as the relative reduction in market income inequality achieved through personal income taxes, employees' social security contributions and cash transfers. Using the household-level micro data, the empirical results so far indicate that the changes in the size of tax and transfer systems are likely to have contributed to the decline in income redistribution. This finding is related to widespread declines in social spending on cash support for the working-age population and to the diminishing role of personal income taxes in reducing inequality in the context of trade (Causa et al., 2018 forthcoming).

The underlying drivers and other changes in specific tax and transfer policy instruments include: i) the decline in the progressivity of personal income taxes, driven by a flattening of the tax schedule in the upper-part of the wage distribution as well as by a decline in top personal income tax rates and in the taxation of dividend income at the personal level, ii) the decline in the generosity and duration of unemployment-related transfers, including cuts to social assistance for the long-term unemployed, in combination with an increase in spending on active labour market policies, and iii) the reforms of pensions to encourage longer working life, for instance increases in the age of full pension eligibility and reductions in replacement rates. The impact of these factors has been partly mitigated by progressive family-friendly policies, such as widespread increases in spending on early education and childcare, as well as by tax cuts to low wage earners.

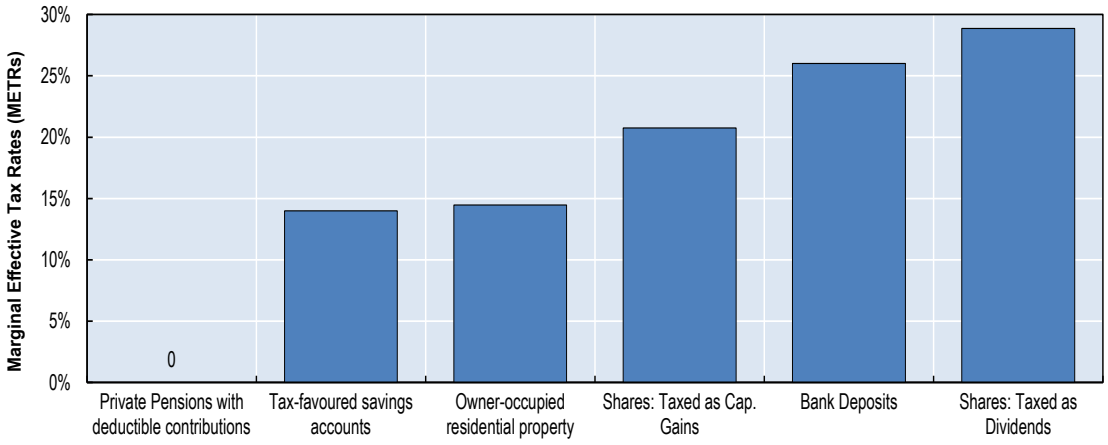
Source: Causa, O. A. Vindics and O. Akgun (2018), An empirical investigation on the drivers of income redistribution across OECD countries.

Strengthening the progressivity of the tax system should also occur through more effective taxation of capital income at the personal level. The share of income earned by capital is rising (Autor et al., 2017). At the same time, there are widespread calls for higher levels of capital taxation both domestically and internationally in response to increasing levels of income and wealth inequality, and drops in statutory corporate income tax rates. The move to Automatic Exchange of Information creates important new opportunities to tax capital effectively. However, savings rates generally lack coherence in most OECD and G20 countries (Figure 1.22). Tax differentials across assets are likely to result in significant distortions to the allocation of savings, as well as expanded opportunities for tax planning (OECD, 2018b). This means that the taxation of capital is often inefficient and regressive (Aghion et al., 2017).

Broadening the base of capital taxation is needed to improve the efficiency and fairness of their tax systems, although countries do not necessarily need to tax capital more (for example, to raise statutory rates). Some countries have tax expenditures for capital that have non-distributional policy rationales (such as the desire to increase levels of home ownership in the case of mortgage interest deductibility and the objective of increasing national savings for retirement in the case of the deductibility of pension contributions). However, these tax expenditures –particularly where they are uncapped– can have regressive consequences.

Figure 1.22. The tax burden on savings varies widely by asset type

Effective tax rates on savings across asset types on average across 40 OECD and associate countries



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, Austria, 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: OECD, Taxation of Household Savings.

StatLink http://dx.doi.org/10.1787/888933725924

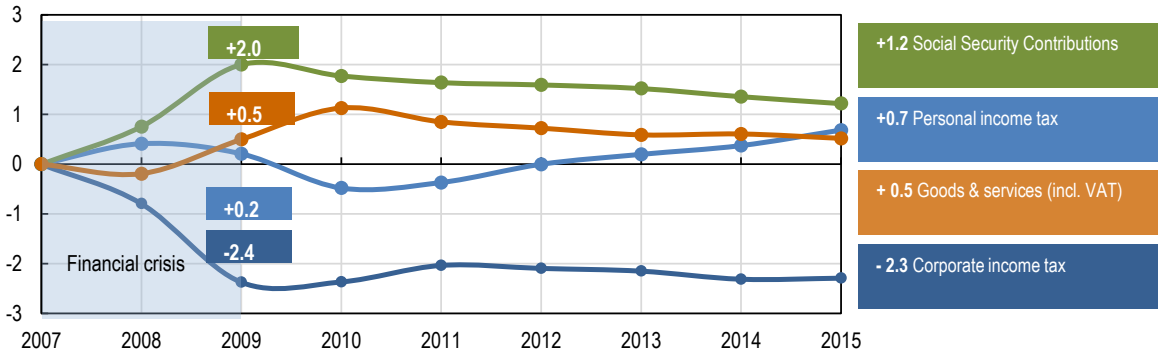
Caution needs to be exerted with wealth taxes. When combined with personal tax rates on capital income, they can result in extremely high effective tax rates being imposed on certain assets. Wealth taxes can be substitutes where a country for other policy reasons does not have a broad-based capital income tax, including a tax on capital gains, and a well-designed inheritance tax (OECD, 2018b). However, in the presence of these taxes, the case for net wealth taxes is not that strong.

Policymakers should consider the progressivity of the entire tax system to deliver inclusive growth rather than the progressivity of each tax in isolation. This includes rebalancing the tax mix towards those tax categories that can improve both the equity and efficiency of the tax system, and reforming taxes other than income tax to ensure progressivity (Akgun et al., 2018). The OECD has focused on the positive growth consequences of consumption taxes and property taxes.

Continued reform of VAT is necessary to deliver both progressivity and efficiency. The reform should focus on the removal of those tax expenditures that benefit higher income earners, particularly in the case of non-essential goods and services such as in the case of hotels, restaurants, and certain cultural products (Figure 1.23). Where base broadening does make some households worse off, it is important for the success of such reforms to ensure that losers are adequately compensated.[7]

Figure 1.23. Taxes on income have risen since the crisis, while corporate taxes have fallen

Changes in the tax mix in OECD and selected G20 countries,

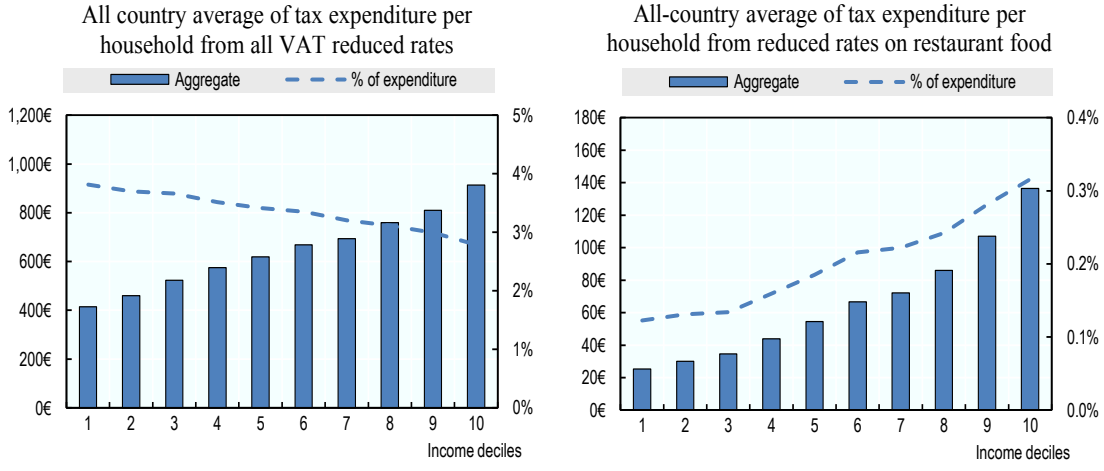


Source: OECD Revenue Statistics.

StatLink http://dx.doi.org/10.1787/888933724917

Taxes on immovable property have positive efficiency and equity consequences (Akgun et al., 2017), but reforms can increase their progressivity. Their progressivity stems from the fact that those with low levels of income and wealth are less likely to own property. In addition, the comparative difficulty in avoiding the tax and the immobility of the tax base creates beneficial characteristics also from an administration perspective. Subsidies for residential property in many OECD countries have adverse distributional effects and are not outweighed by property taxes (OECD, 2018b; OECD, 2018c). This is particularly true for mortgage interest deductibility that is uncapped in some OECD and G20 countries (OECD, 2018b).

Figure 1.24. Many VAT tax expenditures provide more support to high income households



Source: The Distributional Effects of Consumption Taxes in OECD Countries (OECD, 2014).

StatLink http://dx.doi.org/10.1787/888933724936

Tax transparency through peer reviews and exchange of information agreements are vital to maximise the effectiveness, integrity and progressivity of tax systems. Avoidance and evasion can undermine the integrity and progressivity of the tax system. Tax evasion is a particularly acute problem for many developing countries with weak governance and lower levels of tax capacity. While the development of exchange of information marks a step change in global tax transparency, there must be a continued focus on the peer-review process and the development of the network of exchange of information agreements for these new systems to maximise their effectiveness.

More work is needed to ensure that tax authorities have the capacity to use the information being exchanged to effectively address informality and tax evasion. Increased international cooperation is required. Policymakers need to be vigilant for any efforts to frustrate or circumvent new systems for exchanging information on tax matters, including the attempts to claim residency in low or no-tax jurisdictions. Informality can be addressed through a combination of tax policy and tax administration initiatives; including through targeted tax measures to induce taxpayers to enter the formal economy, such as EITCs or the phasing in of tax and SSCs.

Policies enhancing inclusive outcomes in developing countries

Strong and well-designed social protection is a powerful lever of inclusive growth in developing countries. Over the past decades, a growing number of developing countries have invested in social protection. Today about 2 billion people in the developing world have access to social safety net programs (World Bank, 2015). Virtually all countries, even some in fragile political contexts, have interventions in place that aim to address consumption deficits. Some middle income countries, especially in Latin America, have introduced cash transfers to encourage human capital development. Social protection can contribute to poverty reduction, resilience and economic development (World Bank, 2015; WIR, 2018).

Developing countries need to expand their social protection systems, either in terms of expenditure or coverage. Most developing countries spend only 5% of GDP or less on social protection, compared to 20% and above in OECD countries (ILO, 2017). Significant under-investment in social protection is associated with large coverage gaps. In low-income and lower-middle-income countries, in particular in Africa, a large share of the extreme poor population is not at all covered by social assistance. In more advanced countries, inadequate social insurance coverage means that the near poor and the middle class is at risk from falling back into poverty in the event of an economic shock or of an unforeseen loss of income due to sickness, for example. Besides coverage, the scope of social protection is also limited, with only a small number of life-cycle related benefits being provided – such as child benefits, unemployment benefits for the working age or pension for the elderly.

Long-term solutions to the effective and sustainable financing of social protection need to be found. A number of challenges stand in the way to effective functioning of social protection: from limited fiscal space and large informality to fragmented responsibilities and weak implementation mechanisms, poor governance and administrative capacity, the absence of appropriate management and information systems, insufficient knowledge and data, and the lack of policy coherence.

The effect of tax and transfers on inequality and poverty are mixed. In advanced OECD countries, taxes and transfers reduce the Gini coefficient on average by 15 Gini points

(OECD, 2011). In Latin America (OECD, 2009) and some countries in Asia (OECD, 2015a; OECD, 2015b), this effect is far less pronounced with a reduction of less than 2 Gini points. Other evidence for developing countries shows that tax and transfers tends to reduce slightly inequality but increases poverty (Lustig, 2017). In both advanced and developing countries, public spending is found to have a bigger impact on reducing inequality than taxation (IMF, 2014). Additional evidence for OECD countries (OECD, 2011; OECD, 2012) and Asia (Claus and al., 2014) indicates that social security contributions and consumption taxes tend to be regressive.

Reconciling tax and social protection policy objectives is crucial to promoting inclusive growth. This involves reassessing the equity-efficiency trade-off that exists at the heart of every tax system (Brys and al., 2016). In the case of developing countries whose tax systems are still evolving, it is important to get this right at the start. In many developing economies, social security contributions are very high. In Latin America, social security contributions account for the majority of the tax wedge due to the very-low level of personal income tax payments (OECD/CIAT/IDB, 2016). Social security and tax administration systems are often not integrated, which opens the door for tax evasion. Companies will maximise their payroll to the tax administration to minimise their corporate tax liability, while they will minimise their payroll for the social security system to minimise their contributions.

The way taxes and expenditures are allocated in a society is at the heart of the social contract, so is public confidence in fiscal institutions. The level of trust in the government is often determined by the extent to which fiscal policies such as taxes and transfers are perceived to be effective and equitable (OECD, 2008). When the fiscal system fails to reduce the gap between richer and poorer individuals it undermines fiscal legitimacy, damages the social contract and compromises the building of more inclusive societies.

While tax and transfers can be a powerful instrument for tackling inequality and poverty, ensuring sustainable funding for social policy and public investments requires strong mobilisation of domestic revenues. International evidence on the impact of fiscal policy on inequality and poverty demonstrates the need to look at tax and benefit systems as a whole (Brys and al., 2016). It further raises specific policy questions for developing countries that remain largely unanswered, for instance, on the appropriate balance between increased taxes to fund public social spending and poverty reduction and the need to maintain an internationally competitive tax system and attractive investment environment.

End notes

4 In several OECD countries, declines in total-economy labour income shares reflect increases in housing rents, which are related to increases in housing prices. Similarly in commodity-producing countries, declines in total-economy labour shares largely reflect increases in commodity prices. It should be noted that the GVA price index used to deflate labour income does not fully reflect the worker perspective (as it would for instance using a CPI). The GVA price index, for example (although convenient for decomposition analysis), presupposes that price changes in the cost of capital (services) and labour are the same.
5 Wealth concentration at the top of the distribution is likely to be significantly understated for countries whose data rely on household surveys that do not oversample the very rich (as it is done in the US) relative to those that rely on registers (such as Nordic countries and the Netherlands).
6 These results are based on country averages and in the majority of OECD countries for which data are available.
7 VAT is more beneficial for growth compared to other taxes in the tax mix in part because VAT is not levied on exports, and the tax base is relatively immobile (Akgun et al., 2017). High VAT rates are a characteristic of countries that have highly developed transfer systems. VAT is well-adjusted to a world characterised by increasing levels of globalisation and digitalisation. New international standards – the OECD/G20 VAT/GST VAT Guidelines have led the way in ensuring the ability of VAT to adapt to the challenges of digitalisation.

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