Growing Income Inequality in OECD Countries: What Drives it and How Can Policy Tackle it ?

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GROWING INCOME INEQUALITY IN OECD COUNTRIES: WHAT DRIVES IT AND HOW CAN POLICY TACKLE IT?

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GROWING INCOME INEQUALITY IN OECD COUNTRIES: WHAT DRIVES IT AND HOW CAN POLICY TACKLE IT?

The overall picture: inequality on the rise in most OECD countries

Trends in income inequality

Over the two decades to the onset of the global economic crisis, real disposable household incomes increased in all OECD countries, by 1.7% a year, on average (Table 1). In a large majority of OECD countries, household incomes of the top 10% grew faster than those of the poorest 10%, leading to widening income inequality. Differences in the pace of income growth across household groups were particularly pronounced in some of the English-speaking countries, some of the Nordic countries and Israel. In Israel and Japan, real incomes of people at the bottom of the income ladder actually have fallen since the mid-1980s.

Table 1. Household incomes increased faster at the top

Trends in real household income by income group, mid-1980s to late 2000s

	Average annual change, in percentages		
	Total population	Bottom decile	Top decile
Australia	3.6	3.0	4.5
Austria	1.4	0.4	1.6
Belgium	1.0	1.7	1.5
Canada	1.1	0.9	1.6
Chile	1.5	2.5	1.0
Czech Republic	2.7	1.8	3.0
Denmark	1.0	0.7	1.5
Finland	1.8	1.3	2.7
France	1.2	1.6	1.3
Germany	0.9	0.1	1.6
Greece	2.1	3.4	1.8
Hungary	0.6	0.4	0.6
Ireland	4.7	4.5	3.7
Israel	1.7	-1.1	2.4
Italy	0.8	0.2	1.1
Japan	0.3	-0.5	0.3
Luxembourg	2.3	1.8	2.8
Mexico	1.4	0.8	1.7
Netherlands	1.4	0.5	1.6
New Zealand	1.5	1.1	2.5
Norway	2.3	1.4	2.7
Portugal	2.2	2.4	2.3
Spain	3.7	6.0	3.0
Sweden	1.8	0.4	2.4
Turkey	0.5	0.8	0.1
United Kingdom	1.9	0.9	2.1
United States	1.3	0.5	1.9
OECD-29	**1.7**	**1.4**	**2.0**

Note: Income refers to disposable household income, corrected for household size and deflated by the consumer price index (CPI). Latest year refers to 2008, except for Czech Republic, Denmark, Finland, Hungary, Luxembourg, Turkey (2007); Chile, Japan (2006); and Austria, Belgium, Ireland and Spain (2000). Earliest year refers to 1985, except for Austria, Belgium, Sweden (1983); France, Italy, Mexico (1984); Finland, Luxembourg, Norway (1986); Ireland (1987); Greece (1988); Hungary (1991); Czech Republic (1992); Australia, Portugal (1995).

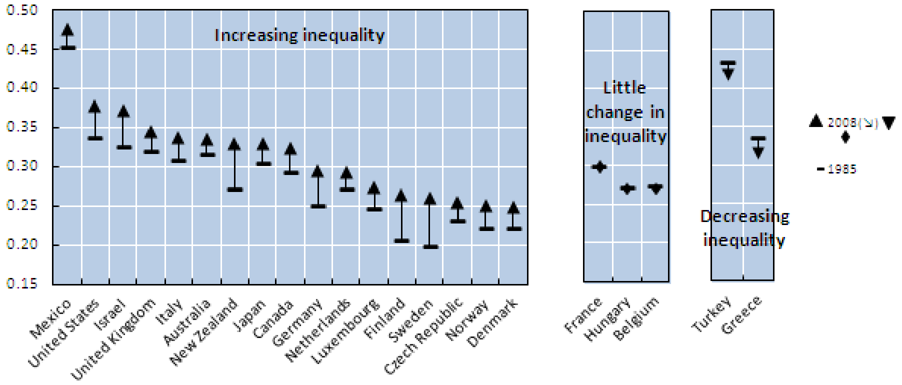
Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD Income Distribution and Poverty Database.

At present, across OECD countries, the average income of the richest 10% of the population is about nine times that of the poorest 10%. While this ratio is much lower in the Nordic countries and in many continental European countries, it rises to around 14 to 1 in Israel, Turkey and the United States, to a high of 27 to 1 in Chile and Mexico. The Gini coefficient, a standard measure of income inequality that ranges from zero (when everybody has identical incomes) to 1 (when all income goes to only one person), stood at 0.28 in the mid-1980s on average in OECD countries; by the late 2000s, it had increased by some 10%, to 0.31. On this measure, income inequality increased in 17 out of the 22 OECD countries for which data are available (Figure 1, left-hand panel). In Finland, Germany, Israel, New Zealand, Sweden and the United States, the Gini coefficient increased by more than 4 percentage points: and only five countries recorded drops, albeit small ones (Figure 1, right-hand panel).

Figure 1. Income inequality increased in most OECD countries

Gini coefficients of income inequality, mid-1980s and late 2000s



Note: Data for mid-1980s refer to early 1990s for Czech Republic and Hungary.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD Income Distribution and Poverty Database.

Income inequality followed different patterns across OECD countries and there are signs that levels may be converging at a common and higher average. Inequality first began to rise in the late 1970s and early 1980s in some Anglophone countries, notably in the United Kingdom and the United States, followed by a more widespread increase from the late 1980s on. The most recent trends show a widening gap between poor and rich in some of the already high-inequality countries, such as Israel and the United States. But countries such as Denmark, Germany and Sweden, which have traditionally had low inequality, are no longer spared from the rising inequality trend: in fact, inequality grew more in these three countries than anywhere else during the past decade. However, some countries recorded declining income inequality recently, often from high levels (Chile, Mexico and Turkey).

Where is the increasing income inequality coming from: wages, employment or capital incomes?

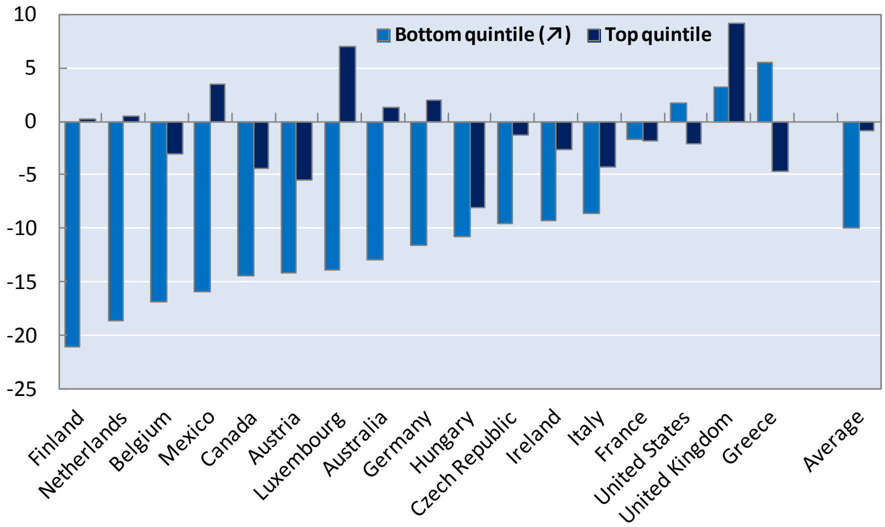
Increases in household income inequality have been largely driven by changes in the distribution of wages and salaries which account for 75% of household incomes of working-age adults. With very few exceptions (France, Japan and Spain), wages of the 10% best-paid workers have risen relative to those of the 10% least-paid workers. This was due both to growing earnings' shares at the top and declining shares at the bottom, but top earners saw their incomes rising particularly sharply (Atkinson, 2009). The highest 10% of earners have been leaving the middle earners behind more rapidly than the lowest earners have been drifting away from the middle.

Earnings inequality also depends on the type of jobs people hold and their work arrangements. Since the mid-1980s, women's employment has grown much more rapidly than that of men. But many women work part-time and earn less which explains part of widening earnings gaps among the workforce. On average across the OECD, the share of part-time employment in total employment increased from 11% in the mid-1990s to about 16% by the late 2000s, with the strongest increases observed in some European countries (OECD, 2010).

But rich and poor people were not affected by these changes in working-time arrangements in the same way. Average annual hours worked per person in dependent employment fell slightly in most OECD countries over the past ten years. But more working hours were lost among low-wage than among high-wage earners, again contributing to increasing earnings inequality (Figure 2).

Figure 2. Hours worked declined more among lower-wage workers

Trends in annual hours worked by bottom and top quintiles of earners, mid-1980s to mid-2000s



Note: Paid workers of working-age. Mid-2000s refer to 2000 for Belgium and France. Mid-1980s refer to early 1990s for Austria, Czech Republic, France, Greece, Hungary and Ireland.

Source: OECD (2011), *forthcoming*.

Self-employment is another factor that could play a role. It is much more unequally distributed across countries than wages and salaries and the self-employed tend to be disproportionally concentrated in the lower income groups in most OECD countries. But since the share of self-employment income accounts for only a relatively small share of gross labour income, between 3% and 13% depending on the country, self-employment can account for only a minor part of the overall inequality increase.

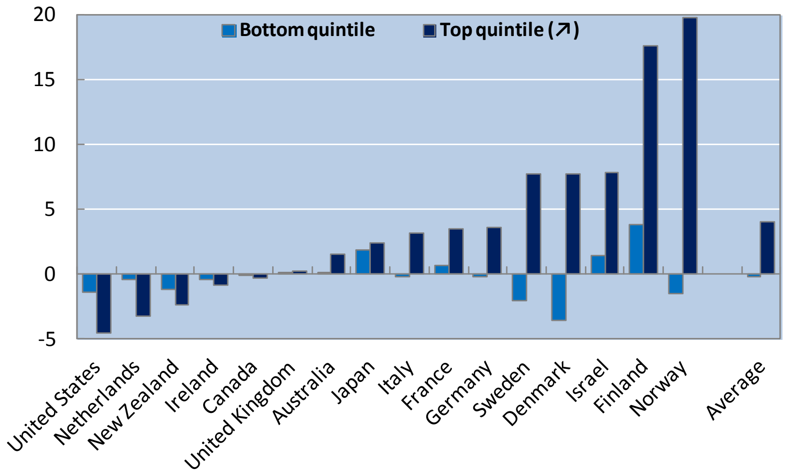
A much debated driver of income inequality in OECD countries is the distribution of incomes from capital, property, investment and savings and private transfers which has become more unequal over the past two decades. In particular, *capital income* witnessed a greater increase in inequality on average than earnings in two-thirds of OECD countries.

But how important is the share of capital income in household income? Even though its share increased in most countries, it remains modest on average around 7% of total income. Not surprisingly, where this share increased, it was predominantly due to movements in the *upper* part of the distribution.

Capital income shares have been growing particularly fast in the Nordic countries and in Israel (Figure 3). Compared with labour earnings, the contribution of capital income to household income inequality is comparatively low but has risen in the past 20 years.

Figure 3. Capital income is becoming a more important source of household income, but mainly for rich households

Percentage-point changes of the shares of capital income in total household income, mid-1980s to mid-2000s



Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD (2011), *forthcoming*.

What drives growing earnings and income disparities?

The rise of earnings and income inequality occurred in most countries during periods of sustained economic growth, which raises the question why not everybody benefited from growth in the same way. While it is difficult to assess fully the role of many potential driving forces, the following factors have often been identified as having the most important impacts on widening inequality in OECD countries:

- Globalisation, skill-biased technological progress and institutional and regulatory reforms have all had an impact on the distribution of earnings;
- Changes in family formation and household structures have had an impact on household earnings and income inequality;
- Tax and benefit systems have changed in the ways they redistribute household incomes.

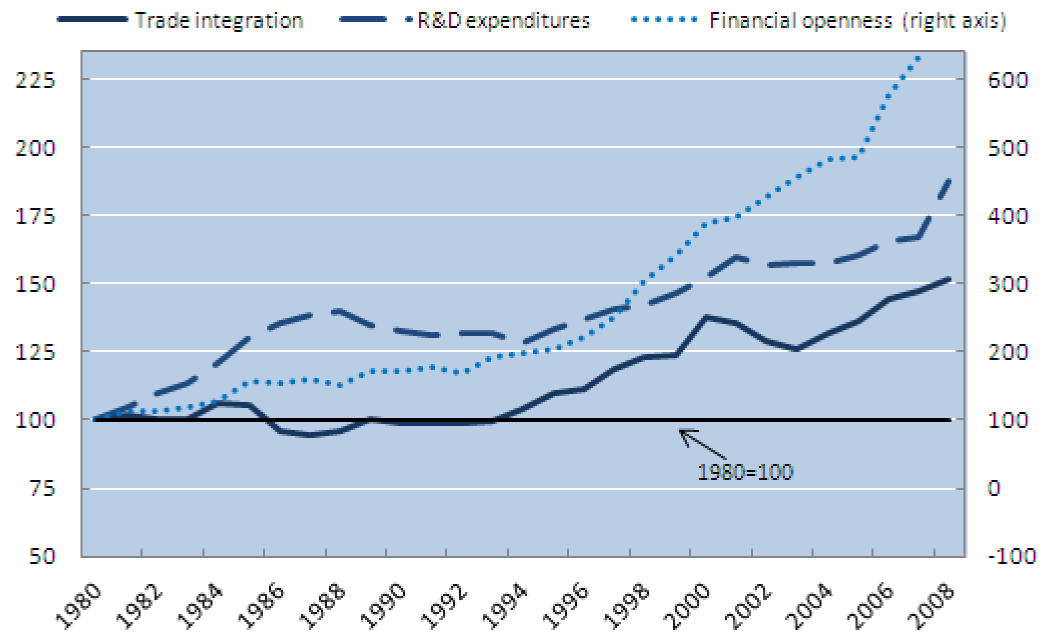
A forthcoming OECD study assesses the relative roles of these different factors. The study first examines how trends in globalisation, technological change and regulatory and institutional reforms have affected *inequalities in wages and earnings*. Then, it analyses the extent to which trends in labour earnings inequality have translated into changes in *income inequality*. Finally, the study examines possible reasons for changes in the *redistributive effectiveness of tax/transfer systems* over time.

How important are globalisation, technological change and regulatory reform for inequality?

Over the past decades, OECD countries have undergone significant structural changes resulting from their closer integration into a global economy and rapid technological progress. These changes have brought higher rewards for high-skilled workers and thus affected the way earnings from work are distributed. The skills gap in earnings reflects several factors. First, a rapid rise in trade and financial markets integration has generated a relative shift in labour demand in favour of high-skilled workers at the expense of low-skilled labour. Second, technical progress has shifted production technologies in both industries and services in favour of skilled labour. All three structural changes have been well underway since the early 1980s and accelerating since the late 1990s (Figure 4).

Figure 4. Economic integration and the role of technology were growing rapidly, especially since the mid-1990s

Developments in trade integration, financial openness and technological change, OECD average, 1980-2008
(1980 = 100)



Note: Trade integration is defined as the sum of imports and exports as a percentage of GDP. Financial openness is defined as the sum of cross-border liabilities and assets as a percentage of GDP. R&D expenditures refer to business-sector expenditures on research and development as a percentage of GDP.

Source: OECD (2011), *forthcoming*.

Traditional trade theory associates increased trade integration with higher relative wages of skilled workers in richer countries, thus contributing to increased wage inequality in those countries, while possibly decreasing wage inequality in low-income countries. A number of international cross-country studies have found supporting evidence for the first prediction, namely an association between trade integration and increased earnings and income inequalities in advanced countries, but a number of these studies have also suggested increasing inequalities in developing and emerging economies (*e.g.* Milanovic and Squire, 2005). Other studies suggest that rising imports from developing countries are associated with declining income inequality in advanced countries (Jaumotte *et al.*, 2008).

But globalisation is not only about trade in goods and services. It also concerns foreign investment. Outward stocks of *foreign direct investment* increased in all OECD countries, on average from less than 5% of GDP in 1980 to nearly 50% at the end of the 2000s. OECD countries have seen substantial growth in the number of multinational corporations as well as their overseas operations, reflecting more offshore outsourcing of their activities. A common assumption is that off-shoring disproportionately hurts lower skilled occupations.

Globalisation also went hand-in-hand with the rapid adoption of new technologies which may penalise those workers who do not have the necessary skills. *Technological progress* is therefore often seen as inherently "skill-biased". Some studies put this process at the forefront of their explanation for increasing inequality. For instance, OECD (2007) reports evidence that, on balance, "technical change is a more powerful driver of increased wage dispersion than increased trade". But disentangling the separate effects of these forces is not easy. Technological progress may, for instance, be the effect of more trade and, at the same time, better communication facilities and technology may lead to greater trade integration.

Finally, during the past two decades most OECD countries carried out *regulatory reforms* to strengthen competition in the markets for goods and services and associated reforms that aimed at making labour markets more adaptable. For instance, anti-competitive product-market regulations were reduced significantly in all countries. Employment protection legislation for workers with temporary contracts also became more lenient in many countries. Minimum wages, relative to average wages, have also declined in a number of countries since the 1980s. Wage-setting mechanisms have also changed; the share of union members among workers has fallen across most countries, although the coverage of collective bargaining has generally remained rather stable over time. In a number of countries, unemployment benefit replacement rates fell, and in an attempt to promote employment among low-skilled workers, taxes on labour for low-income workers were also reduced.

These changes in policies and institutions affected the ways in which globalisation and technological changes translated into distributional changes. On the one hand, empirical evidence points to a significant positive impact of these reforms on *employment levels* (*e.g.* OECD, 2006). In particular, greater product market competition tends to increase aggregate employment by reducing market rents and expanding activity which in turn leads to stronger labour demand (Blanchard and Giavazzi, 2003; Spector, 2004; Messina, 2003; Fiori *et al*., 2009; Bassanini and Duval, 2006). There is also some evidence that lower unemployment replacement rates and lower tax wedges are associated with higher employment.

On the other hand, many of these reforms, have also contributed to widening *wage disparities*, as more low-paid people were brought into employment and the high-skilled reaped more benefits from a more dynamic economy. In particular, a number of studies associate more relaxed employment-protection legislation as well as a decline in union density and bargaining coverage with higher wage dispersion among those who work (*e.g.* Koeninger *et al*., 2007; Visser and Cecchi, 2009; Wallerstein, 1999).

However, the combined influence of these factors on overall earnings inequality and household income inequality is less straightforward. Promoting employment opportunities for under-represented groups could increase market income for certain households and increase overall resources available for redistribution.

Does it matter for inequality whether rich men marry rich women?

Household structures have changed profoundly over the past decades in OECD countries. There are *more single-headed households* with and without children today than ever before; their share among working-age households has increased in all OECD countries, on average from 15% in the late 1980s to 20% in the mid-2000s. Smaller households are less able to benefit from the savings associated with pooling resources and sharing expenditures. A trend toward smaller households therefore is likely to increase earnings and income inequality.

Among couple households, the wives of top earners were those whose employment rates increased the most. There was also a tendency in all countries towards a phenomenon often described as "*assortative* mating", that is to say people with higher earnings having their spouses in the same earnings bracket – *e.g.* doctors marrying doctors rather than nurses. Today, 40% of couples in which both partners work belong to the same or neighbouring earnings deciles, compared with 33% some 20 years ago.

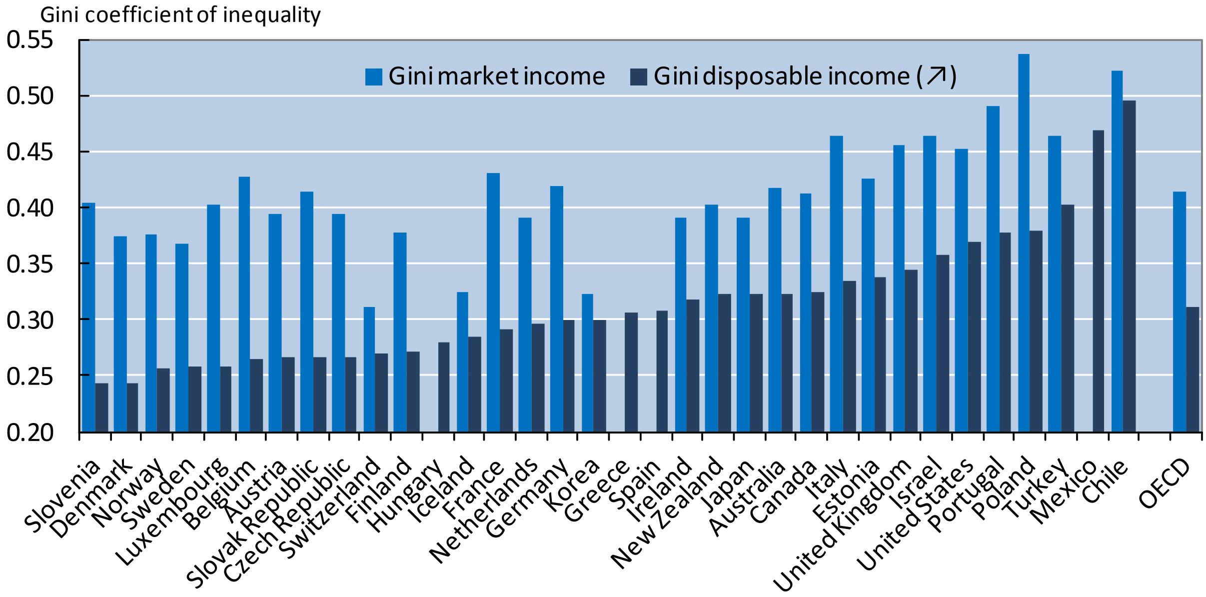
These trends have contributed to higher household earnings inequality. Some observers even consider these changes in family formation to be a main reason for rising inequality. Daly and Valletta (2006), for instance, suggest that the increase in single-headed families is responsible for a large proportion of the growth in inequality in the United States and several studies suggest that the increasing correlation of spouses' earnings across couple households contributes significantly to widening inequality (Cancian and Reed, 1999; Hyslop, 2001; Schwartz, 2010). For an overall assessment, it is important to consider the effect of these demographic changes along with the impact of "pure" labour-market-related changes.

Have income taxes and benefit systems become less successful in redistributing income?

Public cash *transfers*, as well as income *taxes* and *social security contributions*, play a major role in all OECD countries in reducing market-income inequality. Together, they are estimated to reduce inequality among the working-age population by about a quarter on average across OECD countries (Figure 5). This redistributive effect is larger in the Nordic countries, Belgium and Germany, while it is well below average in Chile, Iceland, Korea, Switzerland and the United States.

Figure 5. Market incomes are distributed much more unequally than net incomes

Inequality of market income and disposable (net) income in the OECD area, working-age persons, late 2000s



Note: OECD average excludes Greece, Hungary, Mexico and Spain (no data on market incomes are available for these countries). Countries are ranked in increasing order of disposable income inequality. Data refer to the working-age population.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD (2011), *forthcoming*.

In most countries, the *extent* of redistribution has increased over the period as a whole. As a result, tax-benefit policies have offset some of the large increases in market-income inequality but they appear to have become less effective at doing so over the past 10-15 years. Up until the mid-1990s, tax-benefit systems in many OECD countries offset more than half of the rise in market-income inequality. However, since then, while market-income inequality continued to rise, the stabilising effect of taxes and benefits on household income inequality has mostly declined. In some countries, taxes and benefits became *less* redistributive during the past decade.

These redistribution trends were mostly driven by changes in benefit receipt patterns and benefit generosity. In particular, both changes in numbers of unemployed and reforms to benefit eligibility criteria appear to have been major factors, whereas benefit targeting seems to have played less of a role. Despite the large gains of high-income earners in some countries, income taxes played a relatively minor role in moderating trends towards higher inequality.

Redistribution is not only about cash (for instance, governments spend about 13% of GDP on *public social* services, which is as much as all cash benefits taken together). While this is not their prime objective, these social services *are* redistributive. On average across OECD countries, they reduce income inequality by a fifth.

Which lessons for policies?

Reforming tax and benefit policies is the most direct and powerful instrument to increase redistributive effects. Large and persistent losses of low-income groups following recessions underline the importance of well-targeted income-support policies. *Government transfers* – both in cash and in-kind – have an important role to play to guarantee that low-income households do not fall further back in the income distribution.

At the other end of the income spectrum, the relative stability of higher incomes – and their longer-term trends – is important to bear in mind in planning reforms of redistribution policies more broadly. It may be necessary to review whether existing *tax provisions* are still optimal in light of equity considerations and current revenue requirements. This is especially the case where the share of overall tax burdens borne by high-income groups has declined over recent years (*e.g*., because of non-compliance, cuts in marginal income taxes or because tax expenditures mainly benefit high-income groups).

However, redistribution strategies based on government transfers and taxes alone would be neither effective nor financially sustainable. A key challenge for policy is to facilitate and encourage *access to* employment for under-represented groups. This requires not only new jobs, but jobs that enable people to avoid and escape poverty. Recent trends towards higher rates of in-work poverty indicate that job quality has become a concern for a growing number of workers. Policy reforms that tackle inequalities in the labour market, such as those between standard and non-standard forms of employment, are needed to reduce income inequality.

Policies that invest in human capital of the workforce are needed. This requires better training and education for the low-skilled. The latter would serve to boost their productivity potential and future earnings. Over the past two decades, the trend to increased education attainment has been one of the most important elements in counteracting the underlying increase in wage inequality in the longer run. Policies that promote the up-skilling of the workforce are therefore key factors to reverse the trend to further growing inequality.

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