Chapter 2

The effect of pro-growth structural reforms on income inequality

This chapter reviews the evidence on the potential effect of pro-growth structural reforms on wage dispersion and household income inequality and examines whether specific policies driving GDP growth over the past decades may have also contributed to widening inequalities. In doing so, it distinguishes between the main channels via which policies affect growth and income distribution and identifies policy packages to make growth more inclusive.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Main findings

- Income inequality has increased in a majority of OECD countries since the mid-1990s. Households' disposable income has grown by less than gross domestic product (GDP), and income of the poorest households by less than that of the richest.

- Such trends are largely driven by technological changes, which involve a stronger demand for high-skilled workers. And they are likely to persist in the future.

- Some pro-growth policies that raise GDP through increased productivity may contribute to technology-driven inequality. For instance, reforms that boost innovation widen the wage distribution among employed workers.

- Other policies that promote labour force participation and job creation also widen the wage dispersion. However, because they contribute to raising employment – not least among lower-skilled workers – such reforms have a neutral effect on the dispersion of households' disposable income.

- A number of reforms unambiguously reduce wage dispersion and/or household income inequality. This is the case of better access to education, active labour market policies and growth-friendly tax and transfer systems.

- Overall, many *Going for Growth* recommendations have little or no impact on income inequality among households, even when they widen the wage dispersion, due to offsetting employment effects.

- Given the need in many countries to tackle rising inequalities, priority should be given to policy packages which both reduce income dispersion and boost growth. Especially important is raising the earnings potential of the low-skilled and promoting the labour force participation of women.

Introduction

Going for Growth focuses on maximising GDP per capita. More specifically, the flow of goods and services produced in the economy, as measured by GDP, is chosen as the central objective, even if proxying for only one dimension of wellbeing. At the same time, the OECD has been exploring distributional issues for a number of years (OECD, 2011a, 2013a, 2014a, b). In 2013, the Inclusive Growth Initiative was launched with a view to building a growth strategy that better take into account income distribution as well as other dimensions of wellbeing such as health outcomes. For *Going for Growth*, the focus on GDP is driven by the currently available data and analytical framework, but effects on broader aspects of wellbeing as well as interactions and trade-offs among them are increasingly covered.[1] One question is whether some of the OECD recommendations to foster growth may have unintended adverse consequences on some of these dimensions. As a partial answer to this question, the impact of pro-growth policies on income distribution is examined in this chapter, while Chapter 3 examines the effect on the environment.

When talking about inequality, it should be kept in mind that a certain degree of income dispersion is a fundamental characteristic of dynamic market economies, which are based on trust, property rights and the rule of law. The notion that one can enjoy the benefits from one's own efforts is a powerful incentive to invest in human capital, new ideas and products, as well as to undertake risky commercial ventures, all of which are key drivers of growth and income generation. However, beyond a certain point, widening income inequalities will undermine the foundations of market economies and adversely feed back into economic growth. Income inequality may also translate into inequality in opportunity which decreases social mobility and weakens incentives to invest in knowledge. The resulting under-investment in, and misallocation of skills, ultimately undermine efficiency and growth potential.

Income inequality has widened across OECD countries

On average across OECD countries and from the mid-1990s to the late 2000s, gains in household disposable incomes have not matched those in GDP per capita and the gap has been particularly large for poorer households and the lower middle class, suggesting that growth has come with rising inequality (Figure 2.1).[2] Indeed, recent studies reported steadily growing income inequalities in a majority of OECD countries during the past three decades (e.g. OECD, 2011c, 2013b, 2014a).[3] Figure 2.2 displays the change in the distribution of household income between mid-1990s and 2011, as measured by the Gini coefficient. The dispersion in market income, i.e. income *before* taxes and transfers–has increased in many advanced OECD countries, while it fell substantially in Turkey and Mexico. Inequality in household disposable income, i.e. *after* taxes and transfers, followed a similar pattern, although it widened by more than market income in countries such as the Nordics, which remain nonetheless among the most egalitarians.

Figure 2.1. **Gains in household disposable incomes have been stronger in the upper half of the distribution**

Average annual growth of GDP per capita and household disposable income (1995-2011): Weighted average over 26 OECD countries
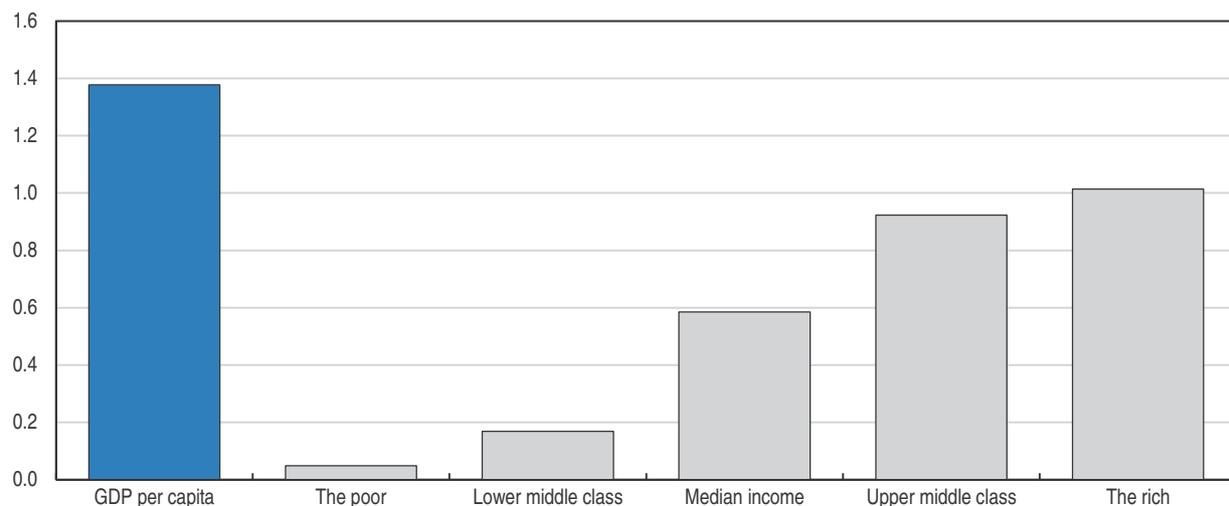

Note: Household disposable incomes at different points of the distribution are measured on the basis of income standards (see Methodological annex to Chapter 5). The average income of the 26 OECD countries is calculated from income data expressed on a per consumption basis in USD 2011 constant prices and 2011 constant PPPs with Purchasing Power Parities for private consumption. The OECD average is calculated using population weights.
Source: OECD, *Income Distribution Database*, http://dx.doi.org/10.1787/data-00654-en.

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Figure 2.2. **Household income inequality has risen in a majority of OECD countries**

Change in Gini coefficients from the mid-1990s to 2011
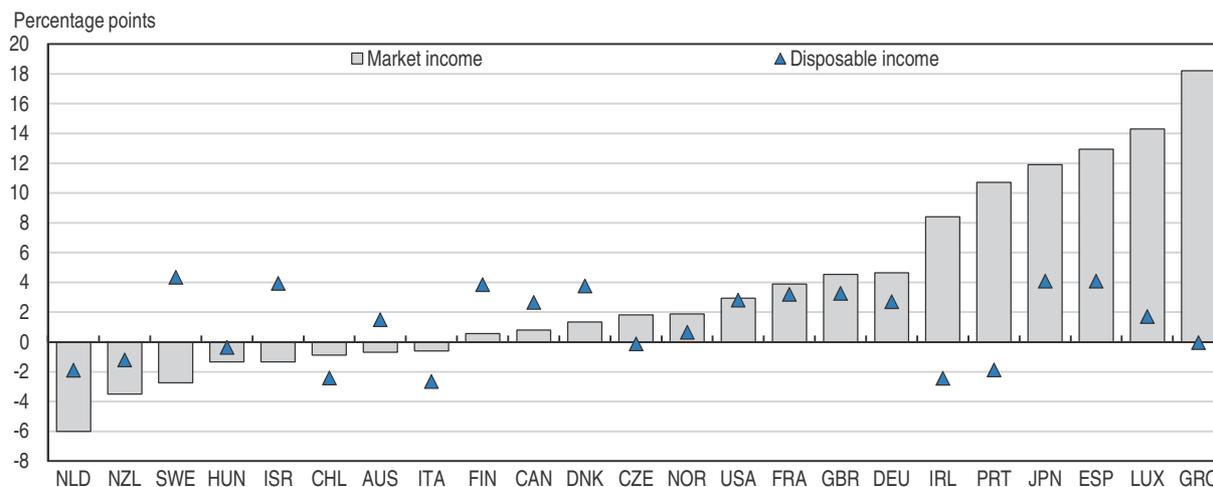
Note: The figure displays the changes in Gini coefficients corresponding to inequality in household market and disposable incomes. The period of observation is between 1995 and 2011 except for Australia, Finland, Hungary, the Netherlands and the United States (1995-2012), Chile, the Czech Republic, France and Luxembourg (1996-2011), Greece, Ireland and the United Kingdom (1994-2011) and Japan (1995-2009). The changes in Gini coefficient of market income for Greece, Hungary, Ireland, Luxembourg, Portugal and Spain are based on imputation.
Source: OECD, *Income Distribution Database, http://dx.doi.org/10.1787/data-00654-en.*

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An important policy question is whether some of the forces driving GDP growth – including policy changes – may have also fuelled inequalities. Finding empirical evidence of specific policy trade-offs between growth and a more equal income distribution is not straightforward. Some reasons are methodological: the assessment of inequality depends on *how* inequality is defined (see Box 2.1). In discussing the impact of pro-growth policies on income inequality, this section will mainly refer to three measures of income: individual wages among employed workers, individual labour earnings among the whole working-age population and household disposable income among the entire population.[4]

Similarly, the assessment of inequality also depends on how inequality is *measured*, that is, on how the set of individual incomes is aggregated into an inequality indicator (Box 2.1). In particular, changes in inequality measured by one summary indicator such as the widely-used Gini coefficient can mask diverging developments across different portions of the income distribution. For instance, recent evidence (Causa, de Serres and Ruiz, 2014) suggests that for many OECD countries, income inequality has widened between low and middle-income households, as the gains in disposable incomes have been particularly subdued for poorer households. In Spain, disparities grew among the households in the lower half of income distribution while the Gini coefficient indicates no change in overall inequality. In other countries, such as Australia, the United Kingdom and the United States, inequalities grew within the upper half of income distribution and in particular at the very high-end, as 50 to 60% of total income gains have accrued to the top 1% of households (Piketty and Saez, 2014; OECD, 2014a).

Distinguishing between the different measures and definitions may help to shed light on the channels through which structural reforms influence the income distribution. For instance, the trend rise in household disposable income inequality has its source primarily in an increase in wage dispersion, while rising capital incomes (which tend to be highly concentrated), less redistributive tax and benefit systems and changes in demography and

Box 2.1. **Measuring income inequality**

Different concepts of income inequality can be distinguished, from the least to the most comprehensive, depending on the definition of income and on the population covered (see below):
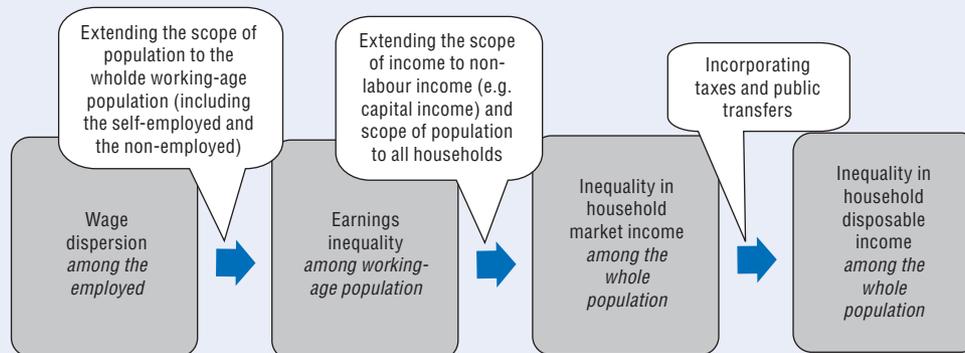
The least comprehensive concept is the dispersion of wages among individuals currently in employment. Earnings inequality extends the coverage of population by including the income of all individuals in working-age population, which comprises not only the employed but also the self-employed, job-seekers and those not participating in the labour market. Inequality in household market income is a wider concept both in terms of population and income, for it extends the coverage to non-working age population (such as retirees) and also include non-labour market income such as capital income and private transfers. Finally, inequality in disposable household income considers household income after public transfers (such as pension benefits) and taxes.

Structural policies are likely to influence income through different components and to have an impact that varies across segments of the population, insofar as they target different age or gender groups. Furthermore, some structural reforms, such as measures to liberalise foreign trade and investment, are likely to affect the entire population, because they would operate not only via the earnings channel for those in age of working, but also via the price channel for all age groups (for instance, by lowering the price of available goods and services) and the increase in product variety.

Several summary measures can be used to assess the overall shape of an income distribution:

● *Gini index* (or coefficient): measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of zero represents perfect equality and an index of one, extreme inequality (where one individual or household would get all income in the economy).

● *The P90/P10 inter-decile ratio*: is the ratio of the upper-bound value of the ninth decile to that of the first.

● *The P50/P10 inter-decile ratio*: is the ratio of median income to the upper-bound value of the first decile.

The Gini index is the most popular measure due to its wide availability and comparability across country and overtime. While the rankings of a country may be altered depending on the specific inequality measure used, very high cross-country correlations between each of these alternative inequality measures and the Gini index are observed for OECD countries (OECD, 2008). However, the Gini index lacks granularity for characterising information about inequality across different subsets of the income distribution. This can be overcome by relying on income standards, as shown in Causa, de Serres and Ruiz (2014).*

* See the methodological note of Chapter 5 (Country notes) on the concept and use of income standard.

household formation patterns have also contributed, albeit more modestly (OECD, 2008, 2011c).[5] The increase in wage dispersion, in turn, can be explained to some extent by the acceleration of skill-biased technological change (SBTC) which is only partly mitigated by rising educational attainments (Autor, 2014; OECD, 2011c).

Assuming that technological progress will continue at a similar pace in the future, there is little reason, under the current policy stance, to expect a halt in the trend towards higher wage dispersion (let alone a reversal). If anything it may intensify, as the effectiveness of education in increasing the relative supply of skilled workers diminishes, given that the share of population with higher-educational attainment is unlikely to continue rising as rapidly in the future. In fact, the *OECD 50-Year Global Scenario* suggests that wage inequality could grow by between 17% and 40% within the OECD countries by 2060 if the same trend of SBTC observed over the past 25 years persists (OECD, 2014b).[6] Under such a scenario, low inequality countries like Norway, Sweden and Switzerland, will see inequality levels similar to the OECD average today, whereas the OECD average will get closer to today's US level. Virtually all increases in inequality would take place between high- and medium-income earners, in line with recent evidence suggesting that technology increasingly replaces medium-skilled jobs (Braconier and Ruiz-Valenzuela, 2014; Goos et al., 2010).

Pro-growth reforms often contribute to higher wage dispersion

Against this background, there is risk that structural reforms that boost productivity growth by enhancing competition, investment in knowledge-based capital (KBC) and innovation contribute to higher wage dispersion among workers through faster SBTC. For instance, recent empirical evidence (OECD, 2011c, 2012; Braconier and Ruiz-Valenzuela, 2014) suggests that reducing regulatory barriers to product market competition can increase wage dispersion. This finding is in line with views that fiercer competition encourages firms to invest in KBC, which increases the demand for specific skills but render others obsolete.[7] Stronger competition can also reduce the bargaining power of labour unions in formerly protected sectors, resulting in wider wage dispersion (see Table 2.1).[8] Finally, the same studies have reported that higher R&D spending is associated with larger wage dispersion.

Some labour market and income support reforms aimed at fostering employment by raising incentives to work and to hire can also result in a wider wage distribution among those employed. For example, lowering the minimum wage or reducing the unemployment benefit replacement rate as well as easing the stringency of employment protection may lead to higher wage dispersion by reducing the reservation wage and by increasing the creation of low-paid jobs (OECD, 2011c). The adverse distributional effects from such reforms are however more likely to be concentrated in the lower half of the wage distribution (OECD, 2011c; Koske et al., 2012; Braconier and Ruiz-Valenzuela, 2014).

Other pro-growth reforms can reduce wage dispersion. As mentioned above, there is fairly widespread evidence that more education is associated with smaller wage dispersion (OECD, 2011c; Koske et al., 2012; Braconier and Ruiz-Valenzuela, 2014). As a result, reforms that enhance provision, access and quality of basic education as well as higher education are expected to reduce wage inequality by increasing the supply of skilled workers. In a similar vein, increasing the provision or the effectiveness of active labour market policies (ALMPs) can also mitigate rising wage inequality, insofar as such policies encourage jobseekers' up-skilling through training programmes – an argument which can be extended to policies oriented towards lifelong learning. However, because education

Table 2.1. **The impact of pro-growth policies and structural forces on wage dispersion and employment**

A pro-growth change in:	Effect of change on:		
	Wage dispersion	Employment	Overall earnings inequality
Labour market policies			
Easing Employment Protection Legislation (EPL) (overall protection)	+	=/+	=/+
Easing EPL (reducing duality)	-	+	-
Lowering minimum wage	+	=/+	=
Lowering unemployment benefit replacement rate	+	+	=
Strengthening active labour market policies (ALMPs)	=	+	-
Lowering labour tax wedges	+	+	-/=
Removing barriers to female labour force participation	-	+	-
Innovation and technology			
Technical progress (higher MFP)	+	=	+
Higher R&D intensity	+	=	+
Globalisation			
Deeper trade integration	=	=	=
Higher FDI openness	=	=	=
Education/human capital			
Higher share of skilled workers	-	+	-
Product market competition			
Lowering regulatory barriers to entry	+	+	=

Note: "+" represents increase in the variable whereas. "-" represents decreases. "=" corresponds to the cases where the net impacts are unclear.
Sources: Braconier and Ruiz-Valenzuela (2014); Koske et al. (2012); OECD (2011c).

reforms take more time to bear fruit than measures in other areas, on balance *Going for Growth* recommendations are more likely to put additional pressures on wage dispersion, at least in the short term (see Table 2.1, column 1).

## Pro-growth reforms can reduce income inequality via employment gains

Higher wage dispersion among workers does not necessarily translate into wider income inequality among the broader working-age population (i.e. including both employed and non-employed). This is because the effects of growth-oriented reforms on earnings dispersion operate through two offsetting channels: they increase the dispersion of wages among those who are in employment, but they also improve the employment opportunities of those looking for a job, which reduces the inequality in earnings among the whole working-age population. The consequence of pro-growth structural reforms on inequality therefore depends on the relative size of the two effects, which is not clear *a priori*. Indeed, a look at the change in inequality against a composite indicator of progress in structural reforms suggests the absence of a clear relationship, at least on the basis of a simple bilateral correlation (Figure 2.3).[9]

Table 2.1 provides a brief summary of the main findings from various empirical studies on the link between structural settings and earnings inequality; hence it focuses on wage dispersion and employment effects, and their combined effect on overall earnings inequality. Indeed, the net impact of reforms on earnings inequality depends to a large extent on the strength and interplay between the employment and wage channels. Table 2.2 summarises in a qualitative manner the effect of the main *Going for Growth*

Figure 2.3. **No systematic relationship between the pace of structural reforms and income inequality**

Selected OECD countries, 2000-11
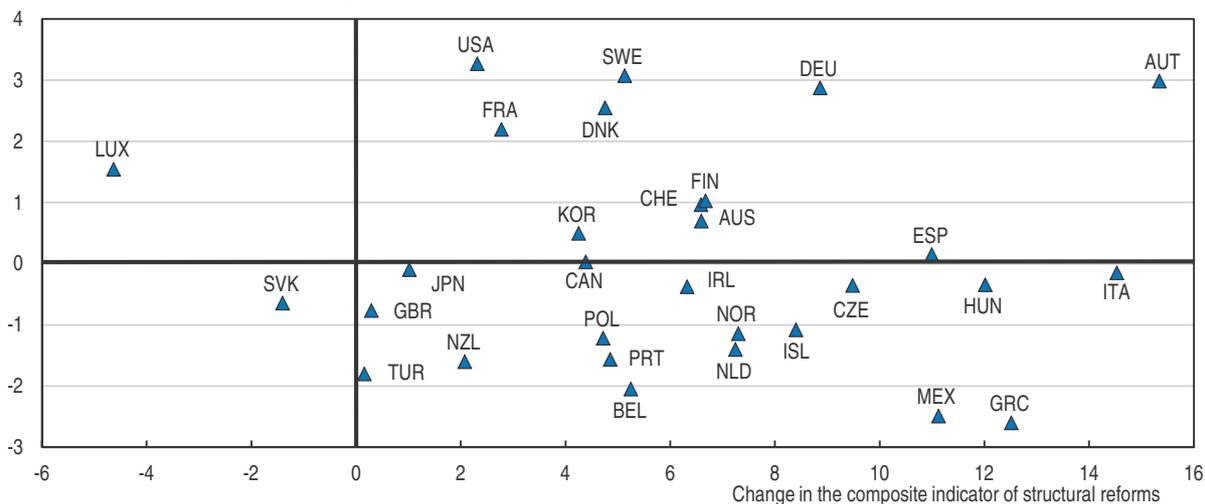
Note: The index of structural reform is measured by the change in the composite indicator constructed in Chapter 1 (see Box 1.2). The Gini coefficient is measured on the basis of household disposable income. The period of observation is between 2000 and 2011 except for Australia, Hungary, Mexico and the Netherlands (2000-12), Austria and Greece (1999-2011), Switzerland and Luxembourg (2001-11), the Czech Republic (2002-11), Iceland, the Slovak Republic and Turkey (2004-11), Japan (2000-09) and Korea (2006-11).
Source: OECD, *Income Distribution Database*, http://dx.doi.org/10.1787/data-00654-en.

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Table 2.2. **The impact of *Going for Growth* recommendations on income inequality**

The 2015 *Going for Growth* priorities (countries concerned)	Effects on employment	Effects on wage dispersion (or earnings inequality)	Effect on inequality in household disposable income
Reforms that are likely to reduce income inequality			
Labour utilisation enhancing reforms			
Extending the coverage of unemployment insurance and social protection (AUS, CHL, CHN, GRC, IDN, ITA, JPN, KOR, PRT, RUS, TUR).	Well-designed unemployment insurance encourages formal labour force participation.	No direct impact on wage dispersion.	Unambiguous reduction in inequality through employment effect and wider insurance against income risks.
Improving effectiveness of ALMPs (job-search assistance/ individual follow-up/training and re-skilling) (ESP, EST, FRA, GRC, GBR, IRL, ISR, ITA, LVA, NLD, PRT, RUS, SVK, USA, ZAF).	Effective ALMPs reduces unemployment spells and labour market mismatch, thereby raising employment.	ALMPs improve both the employment opportunities and the earnings potential of low-skilled, with an unclear net effect on wage dispersion.	Reduction in inequality mainly through effects on employment.
Reducing the duality between regular and non-regular workers (in job protection, training opportunity, etc.)/ reducing informal labour participation (CHL, DEU, ESP, FRA, ITA, IND, IDN, ISR, JPN, KOR, SWE, TUR).	Easing stringent job protection on regular contracts encourages hiring.	Equity in job protections and training opportunities reduces earnings inequality between regular/non-regular workers.	Unambiguous reduction in inequality through employment effect and earnings inequality.
Reforming the tax-benefits system to encourage labour force participation of the low-skilled (AUT, BEL, COL, CZE, DEU, EST, FIN, GBR, HUN, IRL, ISR, LUX, LVA, NLD, POL, SVN, TUR).	Lower tax wedges promote labour force participation and employment of low-skilled individuals.	Wage dispersion may widen if employment increases mostly at the bottom of wage distribution.	Reduction in inequality if employment effect dominates the wage dispersion effect.
Reducing barriers to female labour force participation (increasing provision of childcare, reducing fiscal disincentives) (AUS, CHE, CHL, COL, CZE, DEU, GBR, IRL, JPN, KOR, NLD, NZL, POL, SVK, TUR, USA).	Effective measures allow higher labour force participation of women.	Smaller gender gap in working hours and training opportunities reduces earnings inequality.	Unambiguous reduction in inequality through effects on employment and wage dispersion.

Table 2.2. **The impact of *Going for Growth* recommendations on income inequality** (*cont.*)

The 2015 *Going for Growth* priorities (countries concerned)	Effects on employment	Effects on wage dispersion (or earnings inequality)	Effect on inequality in household disposable income
Labour productivity enhancing reforms			
Increasing the provision and quality of early, primary and secondary education (AUS, BRA, CHE, CHL, CHN, COL, CZE, DEU, DNK, FRA, GBR, GRC, HUN, IRL, ISL, IND, IDN, ISR, ITA, JPN, KOR, MEX, NZL, NOR, POL,PRT, SVK, SWE, TUR, USA, ZAF).	Basic education prevents social exclusion and increases employability.	Increased supply of skilled workers mitigates the wage dispersion driven by skill-biased technological change (SBTC).	Unambiguous reduction in inequality through employment effect and reduced wage dispersion.
Increasing the outcome of tertiary education/broadening access to VET and life-long training (AUT, BRA, CAN,CHE, CHL, CHN, COL, CZE, DEU, DNK, ESP, EST, EU, FIN, FRA, GBR, GRC, HUN, IND, ITA, JPN, KOR, NZL, POL, PRT, SVK, SVN, SWE, TUR, USA, ZAF).	Higher educational attainment is usually associated with higher employment rate.	Increased supply of skilled workers mitigates the wage dispersion driven by SBTC.	Unambiguous reduction in inequality through employment effect and reduced wage dispersion.
Enhancing the efficiency of the tax system (cutting back tax expenditures/broadening tax base/fighting tax evasion, etc.) (AUS, AUT, CAN, CHE, COL, DNK, DEU, FIN, FRA, GRC, ITA, JPN, LVA, NLD, NOR, SWE, TUR, USA).	No direct impact on employment.	No direct impact on wage dispersion.	Reduction in inequality to the extent that the tax expenditures benefitted most the higher income households.
Reforming agricultural and energy subsidy (CHE, EU, IDN, ISL,ISR, JPN, KOR, NOR,TUR, USA).	No direct impact on employment.	No direct impact on wage dispersion.	Reduction in inequality to the extent that the subsidies benefitted most the higher income households.

Reforms with undetermined impact or likely to raise income inequality

Labour utilisation enhancing reforms			
Reducing the replacement rate and duration of unemployment benefits/strengthening conditionality on job-search (BEL, FIN, FRA, IRL, LUX, NLD, PRT, SVN).	Tighter conditionality on unemployment and social benefits encourage job search.	Potential increase in wage dispersion by lowering the reservation wage of the unemployed.	Overall impact on inequality ambiguous. Inequality increases if the benefits were targeted to groups with low employment prospects.
Reforming minimum wage and wage bargaining (BEL,COL, ESP, IDN, PRT,SVN, TUR, ZAF).	Lower minimum wage and more flexible wage setting encourage hiring.	Lowering minimum wage can increases wage dispersion especially at the bottom of the wage distribution.	Overall impact on inequality ambiguous.
Reducing disincentive for continued work at old age and tightening the eligibility to disability benefits (AUT, BEL, DNK, EST, FIN, HUN, LUX, NLD, NOR,POL, SVN, SWE, TUR, USA).	Tighter access to early retirement and disability benefits encourage labour force participation (higher employment conditional on employability of the targeted groups).	No direct impact on earning inequality.	Inequality reduced as long as earned labour income is higher than pension or benefits.
Labour productivity enhancing reforms			
Reforming product market regulation (PMR) to enhance competition, trade and FDI (AUT, BEL, BRA, CAN, CHL, CHN, CZE, DEU, DNK, ESP, EST, EU, FIN, FRA, GRC, HUN, IND, IDN, IRL, ISL, ISR, ITA, JPN, KOR, LUX, LVA, MEX, NZL, NOR, POL, PRT, RUS, SVK, SVN, TUR, ZAF).	Reducing barriers to entry as well as to trade and FDI spurs business activities and expand employment opportunities.	Fiercer competition increases wage dispersion by promoting SBTC and reducing the bargaining power of labour union.	The overall impact ambiguous and depends on the relative strength of the employment and SBTC effects.
Boosting innovation activities (R&D and other investments in KBC) (AUS, CAN, CHL, COL, CZE, EST, EU, IRL, LVA, MEX, NZL, PRT, RUS, SVK, SVN).	Innovation can expand employment via new business while making some jobs obsolete. No clear effect on overall employment.	Higher R&D intensity is often associated with larger wage dispersion.	Increase in inequality if leads to faster SBTC.
Shifting tax burden from direct to indirect taxes (consumption, property and environment taxes) (AUS, AUT, BEL, CAN, CHE, COL, CZE, DEU, DNK, EST, FIN, FRA, HUN, ITA, JPN, KOR, LAT, POL, SWE,USA).	Lower labour and corporate income tax rate boosts labour force participation and job creation, expanding employment.	No direct impact on wage dispersion.	Increase in inequality by reduced redistributive capacity of tax system and higher reliance on more regressive sources of taxation.
Reforming housing policy (cut back housing subsidies, rent regulation, and tax expenditure on home ownership) (DNK, LUX, NLD, NOR, POL, SVK, SWE, USA).	No direct impact on employment.	No direct impact on wage dispersion.	Increase in inequality if housing subsidies were originally targeted to poor households.

recommendations on overall inequality in household disposable income via their effect on employment and earnings inequality. The focus of these tables is on the long-run effects, consistent with the emphasis of most empirical studies, but also with the longer-term perspective of structural reforms.

Some reforms to stimulate labour force participation and job creation induce a trade-off between higher employment and wider wage dispersion among those employed (Table 2.1). This is the case with reductions in the minimum wage, unemployment benefits and the labour tax wedge (especially when targeted at low-wage workers). Others, however, unambiguously reduce overall earning inequality. For instance, measures to reduce the gap in employment protection between regular and temporary contracts have favourable long-term effect on employment while being conducive to a reduction in wage dispersion. Higher spending on ALMPs tends to be favourable to lower-skilled employment, while having little impact on wage dispersion.

As regards reforms to stimulate labour productivity, Table 2.1 indicates that with the exception of measures that boost multi-factor productivity via faster technological progress (e.g. through investment in innovation), most reforms are found to have either little effects or to reduce overall earnings inequality. First, once controlling for technological progress, spurring integration in world markets through either external trade linkages or foreign direct investment has no clear effect on earnings inequality. Second, lowering regulatory barriers to competition in product markets is found to widen wage dispersion, but this effect can be more or less offset by employment gains.

One recent study examined the joint effects of structural reforms on GDP per capita and inequality in household disposable incomes and came up with broadly similar conclusions as regards the identification of policy trade-offs between growth and income equality (Causa, de Serres and Ruiz, 2014). According to the analysis, lower regulatory barriers to domestic and foreign competition and investment, stronger ALMPs are all found to deliver stronger income gains for households at the low end of income distribution, hence to reduce income inequality. Conversely, reductions in unemployment benefits for the long-term unemployed are found to reduce the income of poor household while lifting GDP per capita and average household income.

Increases in the dispersion of market income can also be mitigated by taxes and transfers, resulting in lower inequality of household disposable incomes. Indeed, the taxation of labour and capital incomes, social security contributions as well as transfers including pension and unemployment benefits have played an important role in mitigating household income inequality between the mid-1980s and the mid-1990s (OECD, 2011c; OECD, 2012).[10] However, their redistributive capacity has declined since the mid-1990s, partly due to stricter conditionality in transfers and to an increase in tax expenditures that benefit higher-income groups most. Furthermore, the growing importance of technological progress as a source of market income inequality, combined with the increasing cross-border mobility of skilled workers, firms and intellectual property, is likely to challenge the redistributive capacity of tax and transfer systems and the perception of fairness. This underscores the importance of identifying robust and efficient redistribution instruments while co-ordinating policies at the global level (OECD, 2014b).

How can pro-growth reforms be made more inclusive?

It is noteworthy that many *Going for Growth* recommendations are favourable to both economic growth and a narrowing of income distribution once the employment effect is taken into account (see Table 2.2). Furthermore, drawing from the observation in Table 2.2, Figure 2.4 indicates that among countries starting with a relatively high level of inequality, the number of recommendations likely to reduce inequality is nearly twice as large as the number with an undetermined impact or likely to raise inequality. The allocation of recommendations between those that help reducing inequality and those that do not help is more balanced among OECD countries with relatively low income inequality. This section discusses how reforms can be designed in order to make growth more inclusive.

Figure 2.4. **Many *Going for Growth* recommendations will help reduce household income inequality**

Number of recommendations for groups of countries with Gini coefficients below or above the median
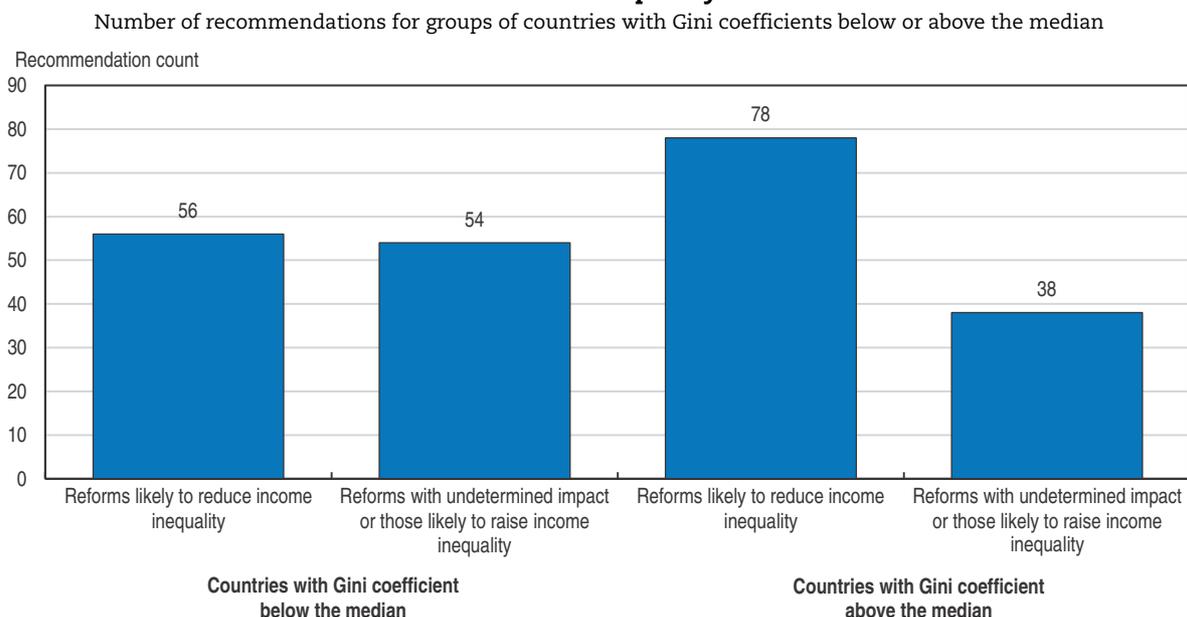
Note: This figure summarises the number of *Going for Growth* recommendations that are likely to reduce income inequality and that of recommendations with undetermined impact or which potentially raise inequality. It corresponds to the recommendations listed in Table 2.2. 34 OECD countries are separated into the 17 countries with Gini coefficients of household disposable income (the 2011 data or of latest available year) lower than median and the other 17 countries with higher Gini coefficients.

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Increasing the provision and quality of education and training is an example of reforms that contributes both to economic growth and equity. Particular emphasis should be put on equal access to early, primary and secondary education as well as in evenly-high quality of basic education, in order to prevent the exclusion from labour market of socially or economically disadvantaged groups. Also, broader access to higher education, vocational education and training as well as life-long re-training opportunities mitigates the impact of skills-biased technical change on wage inequality. Ensuring equal opportunity of up-skilling will be an important policy for inclusiveness in knowledge-based economies.

Removing obstacles to the labour participation of women is another reform that enhances growth and reduces income inequality. One priority in this area is to reduce the financial disincentives to return to work after childbirth, including specific features of the tax-benefits system, such as high taxes on second earners and ill-targeted childcare

support. Making tax allowances and transfers conditional on second earner's income level rather than on family income level, or expanding childcare support conditional on employment (such as childcare subsidies or paid maternity leave) are likely to reduce such disincentives. Furthermore, expanding the access to affordable childcare services is also likely to encourage women full-time labour participation and reduce inequality.

Reducing regulatory barriers to entry and competition in sectors with large potential markets is associated with large employment effect, which is likely to reduce income inequality even in face of wider wage dispersion. A recent OECD study (Criscuolo et al., 2014) found that across 18 OECD and non-OECD countries, small firms that are five years old or less on average contribute to about 42% of job creation whereas they represent only 17% of employment. Such a disproportionally large role by young firms in job creation suggests that reducing barriers to entrepreneurship can contribute significantly to income equality via employment effect.

Income redistribution can be strengthened in a growth-friendly way by cutting tax expenditures, broadening tax bases and fighting tax evasion. Such reforms can raise the efficiency of the tax system and reduce income inequality especially for those tax expenditures that are mostly benefitting higher-income households, even though some of the regressive tax expenditures may be related to socially valuable activities (such as R&D tax credits). In contrast, raising marginal tax rates can entail non-negligible economic costs.[11]

Some reforms call for a careful implementation so as to take into account their potential adverse equity effects. For instance, in reforming unemployment benefits, special attention needs to be given to the long-term unemployed, which comprise more than one-third of the unemployed in the OECD area (at the first quarter of 2014). Because of their bleaker employment prospects, tightening benefits for this group can exacerbate poverty unless matched by other forms of social protection or targeted requalification measures. This also implies that unemployment benefits and active labour market policies should be primarily geared toward shortening the unemployment spell.

In a similar vein, reforms that tighten access to pension and disability benefits require a careful design of employability assessment. Such reforms may widen income inequality if the prospect of finding jobs that compensate for the loss of social transfer is low. Provisions of activation services and retraining opportunities extended but targeted to those groups (which are currently under-represented in such programmes) become an important policy for enhancing both growth and equity as working lives are progressively extended.

Employment protection legislation is another policy area with potentially large effects on income inequality. Reforms of employment protection should focus on reducing the gap in the degree of protection between temporary and regular contracts. Such reforms reduce income inequality through effects on employment and wage dispersion: where excessively strict, an easing of regulatory constraints on the dismissal of workers on regular contracts would encourage more hiring on such contracts, preventing thereby employment to be biased toward temporary workers. Insofar as dismissals entail the loss of wage income, the easing of employment protection legislation should be coupled with a reform of unemployment benefits to provide adequate coverage to all workers. In this regard, shifting protection from jobs to workers brings higher efficiency and equity.

Reforms of taxes and transfers have direct consequences on income inequality since they concern the very instruments of redistribution. For instance, reforming the tax structure in a way to lower the weight of direct taxes while relying more on indirect taxes

is favourable for growth (Arnold, 2008), but may increase inequality through various channels such as the likely adverse effects of relatively higher consumption taxes on less affluent households (who tend to consume more out of income). However, such impact can be minimised if the tax shift is achieved by lowering the labour tax wedge on low-income households through in-work tax credits and other income-conditional tax allowances. This preserves the redistributive capacity of the tax-benefits system while further enhancing equity by encouraging the labour participation of low income households. Increasing the role of indirect taxes can be made less regressive by strengthening the taxation on immovable properties and inheritance. Even when the reform involves a rise in consumption tax rates, the regressive nature can be mitigated by enlarging the tax allowance targeted at low-income households.

Notes

1. The 2006 issue of *Going for Growth* (OECD, 2006) discussed the limitation of GDP to gauge material living standards and well-being (Chapter 6). Some measures that extend GDP numbers to non-market production have been explored in the 2011 issue (OECD, 2011b, Chapter 1 Annex). The 2012 issue (OECD, 2012, Chapter 5) reported the empirical findings on the effects of a selection of structural reforms on earning inequality, whereas the 2013 issue (OECD, 2013a, Chapter 2) offered a comprehensive overview on the side-effects of *Going for Growth* recommendations to income inequality.

2. Figure 2.1 involves a comparison between National Accounts (macro) and Household Survey (micro) data. As such, the comparability could be affected by measurement discrepancies (see Causa et al., 2014).

3. There is growing consensus that the most appropriate income concept for analysing income distribution is household disposable income adjusted for publicly-provided in-kind services, such as education and health care spending (Stiglitz et al., 2009). This measure is the most comprehensive income concept, and includes several policy and non-policy factors shaping its distribution. However, since measures of household disposable income adjusted for in-kind services have only been produced for recent years, longer trends can only be examined on the basis of series without such adjustment.

4. The focus of the chapter is strictly on income and the issue of wealth distribution is not addressed. For a review of long-term trends and evolutions in the distribution of wealth in major countries, see Piketty (2014).

5. Demographic factors such as the changes in age structure (increase in older household) and household structure (increase in people living alone) explain significant portion of the change in income distribution for some countries such as Australia, Canada, France, Germany, the Netherlands and the United Kingdom (OECD, 2008).

6. Such growth in wage inequality is slightly faster than the average annual increases observed during the early 1990s to the pre-crisis period in the OECD countries. Wage inequality is measured in this case as the ratio of the upper bound of the 9th decile of the wage distribution for full-time employees to the upper bound of the 1st decile.

7. Stronger product market competition induces firms to improve productivity (Pavnick, 2002, Aghion et al., 2005). Such productivity improvement is often realised through investment in knowledge-based capital. For instance, Bloom et al. (2012) reported that import competition with China induced European firms to invest in IT, R&D and better management practices. Intensive use of KBC, namely IT and complementary organisational change, is considered to have reduced the demand for codifiable, routine job (Bresnahan et al., 2002; Autor et al., 2006).

8. At the same time, lower prices resulting from competitive pressures may support the wage of low-income groups in real terms, if they occur in the goods that have a relatively high share in the consumption basket of the low-income groups (OECD, 2013a).

9. The composite indicator of structural reform reflects changes in a broad set of policy settings over the period 2000-12. See Box 1.2 in Chapter 1 for details on the construction of the composite indicator.

10. See in particular Chapter 7 and Chapter 5 of the respective references.

11. Beside the difficulty related to the global mobility of skilled workers and firms, a recent OECD study (Andrews and Criscuolo, 2013) found that higher marginal tax rate is associated with lower intensity in entrepreneurship.

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