

# Focus on Inequality and Growth

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Directorate for  
Employment, Labour  
and Social Affairs

## Does income inequality hurt economic growth?

Widespread increases in income inequality have raised concerns about their potential impact on our societies and economies. New OECD research shows that when income inequality rises, economic growth falls. One reason is that poorer members of society are less able to invest in their education. Tackling inequality can make our societies fairer and our economies stronger.

### A long-term rise of income inequality

The gap between rich and poor is at its highest level in most OECD countries in 30 years. Today, the richest 10% of the population in the OECD area earn 9.5 times more than the poorest 10%. By contrast, in the 1980s the ratio stood at 7:1.

The average incomes at the top of the distribution have seen particular gains. However, there have also been significant changes at the other end of the scale. In many countries, incomes of the bottom 10% of earners grew much more slowly during the prosperous years and fell during downturns, putting relative (and in some countries, absolute) income poverty on the radar of policy concerns.

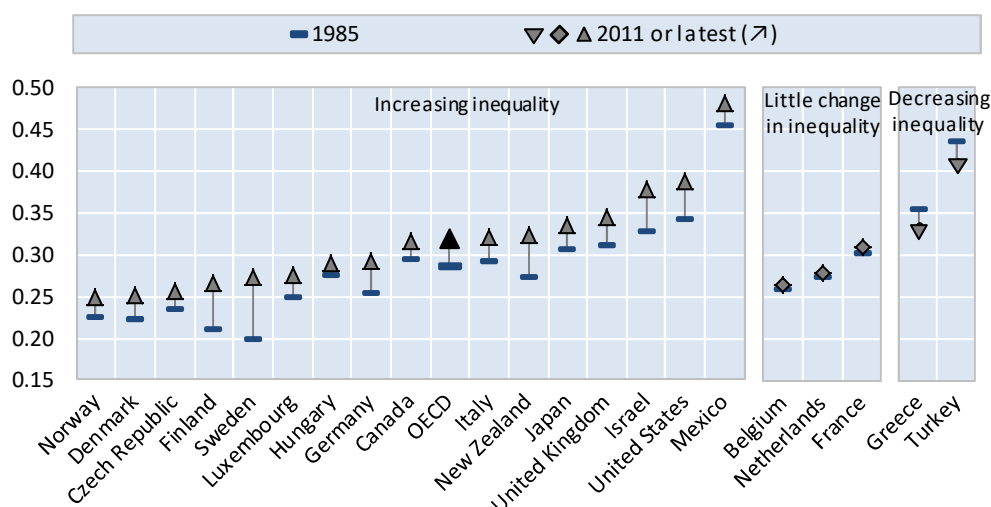
### Broad rises in inequality

The increase in income inequality is evident not just in a widening gap between the top and bottom income deciles, but also in the Gini coefficient, a broader measure of inequality (which ranges from zero, where everybody has identical incomes, to 1, where all income goes to only one person). In OECD countries in the mid-1980s, the Gini measure stood at 0.29; by 2011/12, it had increased by 3 points to 0.32.

The Gini coefficient increased in 16 out of the 21 OECD countries for which long time series are available, rising by more than 5 points in Finland, Israel, New Zealand, Sweden and the United States and falling slightly only in Greece and Turkey (Figure 1).

### 1. Income inequality increased in most OECD countries

Gini coefficients of income inequality, mid-1980s and 2011/12



Note: Incomes refer to household disposable income, adjusted for household size.  
Source: OECD Income Distribution Database (<http://oe.cd/idd>).

## How is inequality linked to growth?

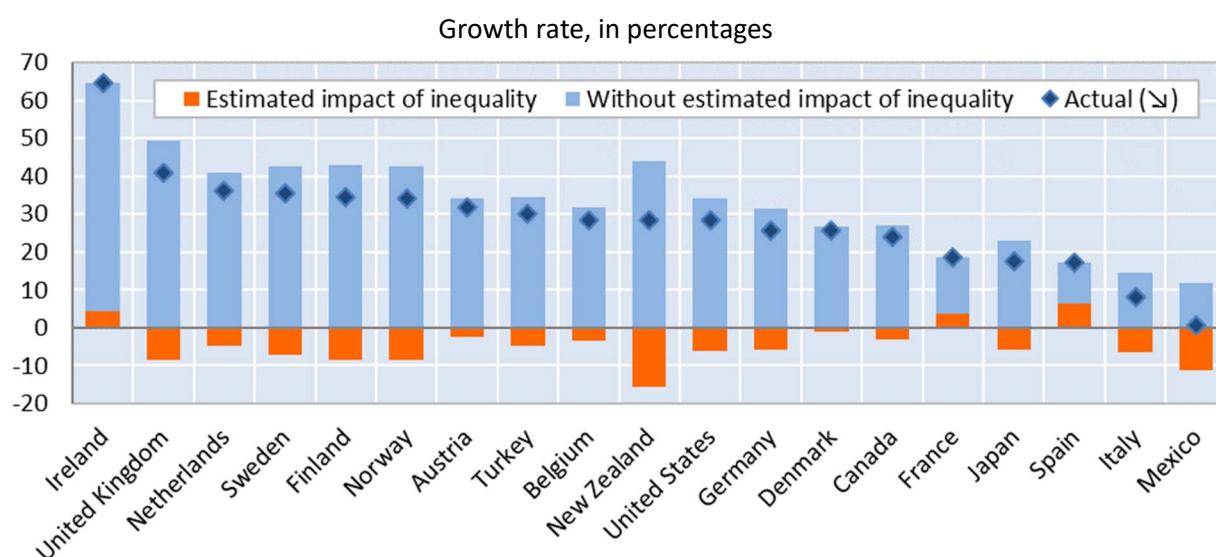
New OECD analysis suggests that income inequality has a negative and statistically significant impact on medium-term growth. Rising inequality by 3 Gini points, that is the average increase recorded in the OECD over the past two decades, would drag down economic growth by 0.35 percentage point per year for 25 years: a cumulated loss in GDP at the end of the period of 8.5 per cent.

What might this imply for the growth path of individual countries? Figure 2 indicates by how much the GDP growth rate would have increased or decreased over the period 1990-

2010 had inequality not changed between 1985 and 2005 (The most recent inequality trends since then are not taken into account as they affect future growth patterns). These estimates are meant to be illustrative and should not be interpreted as the causal effect of the actual change in inequality in each country. They indicate, however, that the possible impact of inequality can be sizeable.

Rising inequality is estimated to have knocked more than 4 percentage points off growth in half of the countries over two decades. On the other hand, greater equality prior to the crisis helped increase GDP per capita in a few countries, notably Spain.

### 2. Estimated consequences of changes in inequality (1985-2005) on subsequent cumulative growth (1990-2010)



Note: The chart reports the estimated consequences of changes in inequality on the growth rate of GDP per capita (relative to the population aged 25-64) over the period 1990-2010. "Actual" is the actual growth rate of GDP per capita; "Estimated impact of inequality" is obtained based on the observed changes in inequality across OECD countries (in 1985-2005) and the average impact of inequality on growth across countries estimated in the analysis; "Without impact of inequality" is the difference "Actual - Impact of inequality". It should be interpreted as the estimated growth rate that would have been observed had inequality not changed. Actual growth in Germany is computed starting in 1991; the changes in inequality are limited to the period 1985-2000 in the case of Austria, Belgium, Spain and Ireland. These estimates are meant to be illustrative and should not be interpreted as the causal effect of the actual change in inequality in each country.

### **The relative income of the lower middle class is a key factor**

The biggest factor for the impact of inequality on growth is the gap between lower income households and the rest of the population. The negative effect is not just for the poorest income decile but all of those in the bottom four deciles of the income distribution. These findings imply that policy must not (just) be about tackling poverty, it also needs to be about addressing lower incomes more generally.

### **Redistribution does not hinder growth**

The most direct policy tool to reduce inequality is redistribution through taxes and benefits. The analysis shows that redistribution *per se* does not lower economic growth. Of course, this does not mean that all redistribution measures are equally good for growth. Redistribution policies that are poorly targeted and do not focus on the most effective tools can lead to a waste of resources and generate inefficiencies.

## Why does inequality reduce growth?

The evidence is strongly in favour of one particular theory for how inequality affects growth: by hindering human capital accumulation income inequality undermines education opportunities for disadvantaged individuals, lowering social mobility and hampering skills development.

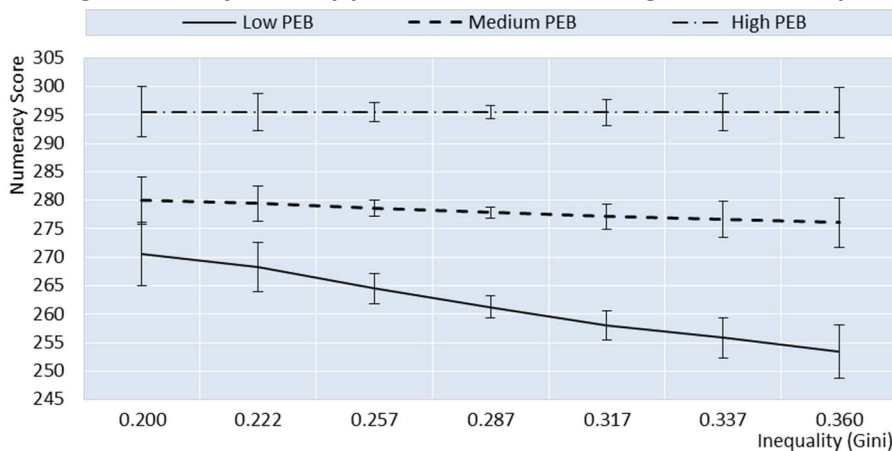
### Impact of social background

Analysis drawing from education data and the recent OECD Adult Skills Survey (PIAAC) shows that the human capital of people whose parents have low levels of education deteriorate, as income inequality rises. By contrast, there is little or no effect for the human capital of

people with middle or high levels of parental educational background. These patterns hold for both the quantity of education (e.g. schooling years) and its quality (e.g. skills proficiency). Figure 3 illustrates them for numeracy scores: a 6 points increase in income inequality (corresponding to the US-Canada differential in 2010) would lower numeracy by around 6 points among low-background individuals. This is nearly 40% of the gap relative to individuals with medium parental backgrounds.

In sum, the analysis suggests that inequality significantly shapes the opportunities of education and upward mobility of disadvantaged individuals.

### 3. Average numeracy score by parent educational background and inequality



Note: Average predicted numeracy score for individuals from low, medium and high parental educational background (PEB), by inequality level at the time they were around 14 years old. Low PEB: neither parent has attained upper secondary education; Medium PEB: at least one parent has attained secondary and postsecondary, non-tertiary education; High PEB: at least one parent has attained tertiary education. Lines represent baseline probabilities for each group, bars indicate 95% confidence intervals. The values of the Gini coefficient in the X-axis represent percentiles of the underlying distribution on inequality indexes, in particular the 25th (0.257), the median (0.287), and the 75th (0.317).

## How can policy respond?

The evidence that the trend increases in income inequality have dragged down growth in many OECD countries has significant policy consequences. In particular, it challenges the view that policy makers necessarily have to address the trade-off between promoting growth and addressing inequality. While previous work by the OECD has clearly shown that the benefits of growth do not automatically trickle down across society, the new evidence closes the circle by suggesting that inequality also matters for growth. Policies that help to limit or reverse inequality may not only make societies less unfair, but also wealthier.

It is not just poverty or the incomes of the lowest 10% of the population that inhibits

growth. Instead, policymakers need to be concerned about how the bottom 40% fare more generally. This includes the vulnerable lower-middle classes who are at risk of failing to benefit from and contribute to the recovery and future growth. Anti-poverty programmes will not be enough. Not only cash transfers but also increasing access to public services, such as high-quality education, training and healthcare, constitute long-term social investment to create greater equality of opportunities in the long run.

Policy also needs to confront the historical legacy of underinvestment by low income groups in formal education. Strategies to foster skills development must include improved job-related training and education for the low-skilled, over the whole working life.

### Key findings

- The gap between rich and poor is now at its **highest level in 30 years** in most OECD countries.
- This long-term trend increase in **income inequality has curbed economic growth significantly.**
- While the overall increase in income inequality is also driven by the very rich 1% pulling away, what matters most for growth are families **with lower incomes slipping behind.**
- This negative effect of inequality on growth is determined not just by the poorest income decile but actually by the **bottom 40% of income earners.**
- This is because inter alia **people from disadvantaged social backgrounds underinvest in their education.**
- **Tackling inequality through tax and transfer policies does not harm growth,** provided these policies are well designed and implemented.
- In particular, redistribution efforts should **focus on families with children and youth,** as this is where key decisions on human capital investment are made and should **promote skills development and learning** across people's lives.

### Further reading

Cingano, F. (2014), "Trends in Income Inequality and Its Impact on Economic Growth", *OECD SEM Working Paper No. 163*, [www.oecd.org/els/workingpapers](http://www.oecd.org/els/workingpapers).

OECD (2014), "Rising Inequality: Youth and Poor Fall Further Behind - Income Inequality Update - June 2014".

OECD (2014), "Focus on Top Incomes and Taxation in OECD Countries: Was the Crisis a Game Changer?".

OECD (2011), *Divided We Stand: Why Inequality Keeps Rising*.

### Source

Please source this document as: OECD (2014), "Focus on Inequality and Growth - December 2014". This document as well as figures and underlying data can be downloaded via [www.oecd.org/social/inequality-and-poverty.htm](http://www.oecd.org/social/inequality-and-poverty.htm)

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### Notes

The document has been revised in April 2016. Throughout this document, (↗) (or ↘) in the legend relates to the variable for which countries are ranked from left to right in increasing (or decreasing) order.

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