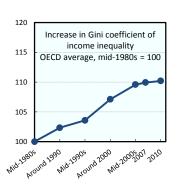


Crisis squeezes income and puts pressure on inequality and poverty

New Results from the OECD Income Distribution Database

The OECD's report on income inequality, *Divided We Stand* (2011), documented that the gap between rich and poor in OECD countries had widened continuously over the three decades to 2008, reaching an all-time high. New OECD data show that the global economic crisis has squeezed incomes from work and capital in most countries. Excluding the mitigating effects of the welfare state, via taxes and transfers on income, inequality has increased by more over the past three years to the end of 2010 than in the previous twelve. Tax-benefit systems, reinforced by fiscal stimulus policies, were able to absorb most of this impact and alleviate some of the pain. But, as the economic and especially the jobs crisis persists and fiscal consolidation takes hold, there is a growing risk that the most vulnerable in society will be hit harder as the cost of the crisis increases.



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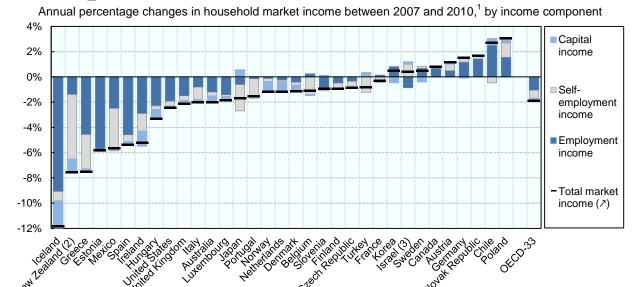
The crisis reduced work and capital incomes

As a result of the global economic crisis, in most OECD countries incomes from work and capital (*i.e.* market income) fell considerably between 2007 and 2010. Lower incomes from work and, to a lesser extent, capital contributed to a reduction in household market income of around 2% per year, in real terms (Figure 1).

Higher unemployment and lower real wages brought down household market income. The effect of unemployment was particularly large in Iceland, Greece, Estonia, Mexico, Spain and Ireland (5% or more per year). Self-employment income declined significantly in Mexico, Greece, Ireland and Japan. Lower incomes from capital also contributed to the erosion of household income, notably in Iceland and Ireland, even if this component plays a much smaller role.

By contrast, market income (particularly earnings) increased significantly in Poland and Chile as well as, to a lower extent, in the Slovak Republic, Germany and Austria.

1 Market income fell considerably during the crisis in most OECD countries



Notes: 1. 2007 refers to 2006 for Chile and Japan; 2008 for Australia, Finland, France, Germany, Israel, Mexico, New Zealand, Norway, Sweden and the United States. 2010 refers to 2009 for Hungary, Japan, New Zealand and Turkey; 2011 for Chile. 2010 data based on EU-SILC are provisional for Austria, Belgium, Czech Republic, Estonia, Finland, Greece, Iceland, Ireland, Italy, Luxembourg, Poland, Portugal, Spain, Slovak Republic and Slovenia. Household incomes are adjusted for household size (see Box). Market incomes are reported net of taxes in Hungary, Mexico and Turkey.

2. Changes in self-employment and capital income are not statistically significant.

^{3.} 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.

The distribution of market income became more unequal

The pain of the crisis was not shared evenly. The distribution of market income widened considerably during the first phase of the crisis in most OECD countries (Figure 2). Measured by the Gini coefficient (which is 0 when everybody has the same income and 1 when one person has all the income), between 2007 and 2010 the average market income inequality across OECD countries increased by 1.4 percentage points.

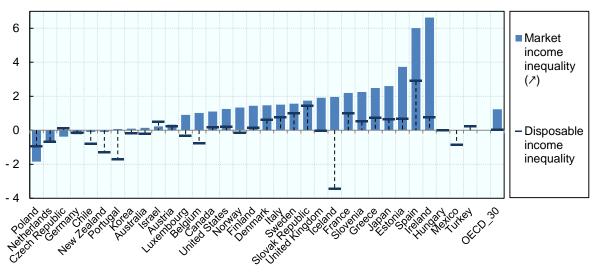
These developments in the distribution of market income added up to the long-term increase in income

inequality documented in previous OECD work. Looking at the 17 OECD countries for which data are available over a long time period, market income inequality increased by more over the last three years than what was observed in the previous 12 years.

Market income inequality rose by 1 percentage point or more in 18 OECD countries between 2007 and 2010. The increase was particularly large in some of the countries that experienced the largest falls in average market income such as Ireland, Spain, Estonia, Japan and Greece, but also in France and Slovenia. On the other hand, market income inequality fell in Poland and, to a smaller extent, in the Netherlands.

2 Market income inequality rose considerably

Percentage point changes in the Gini coefficient of household market and disposable incomes between 2007 and 2010



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Taxes and social transfers have cushioned much of the effects of falling market incomes

The income that households "take home" (disposable income), however, fell less than market income due to the effect of cash public transfers and personal income taxes. During recessions, expenditure on social transfers typically increases as more people claim unemployment or other safety-net benefits. Furthermore, at the beginning of the crisis (2008 and 2009) several OECD countries introduced fiscal stimulus packages to boost demand and cushion falls in household income which amplified this redistributive effects.

With the exception of Turkey, public transfers received by households increased in all OECD countries between 2007 and 2010 (see recent OECD Social Expenditure <u>Data update</u>). Figure 3 shows that the contribution of public transfers to the growth of disposable income was highest in those countries that were hardest hit by the crisis, with the exception of Mexico. In Ireland, New Zealand and Estonia public transfers increased in such a way that, had other sources of income remained constant, real household disposable income would have increased by about 2% per year.

Public transfers also increased strongly in the Slovak Republic, one of the countries where average household income continued to grow between 2007 and 2010. In Finland, Luxembourg and Norway the increase in public transfers either offset or exceeded the fall in market income.

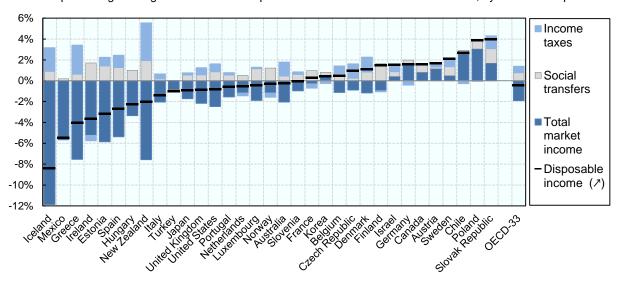
While government spending tends to rise during recessions, its revenues tend to fall as the capacity of

households to pay taxes diminishes. The income that households "take home" was also preserved due to lower amounts of direct taxes and social security contributions. This was particularly the case in New Zealand, Iceland, Greece and Spain. Conversely,

household taxes did not play an anti-cyclical role in the Slovak Republic, Sweden and Israel, where taxes fell as market income grew, and Ireland, Netherlands and Norway, where taxes grew as market income fell.

3 Taxes and social transfers mitigated falls in market income in most OECD countries

Annual percentage changes in household disposable income between 2007 and 2010, by income component



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602. Market incomes are reported net of taxes in Hungary, Mexico and Turkey. A positive sign of income taxes indicates a lower tax burden in total income.

Taxes and transfers were also quite effective in limiting the effects of the rise of market income inequality, at least in the first years of the crisis. Between 2007 and 2010, the Gini coefficient for disposable income remained broadly stable in most OECD countries, while changes were larger than 0.2 points in ten countries. In particular, disposable income inequality fell in Iceland, Portugal, New Zealand and Poland and increased in Spain, Slovak Republic, and Sweden (Figure 2). In Israel the Gini coefficient for disposable income increased more than for market income while in the Czech Republic and Poland the Gini coefficient for market income inequality fell more than for disposable income. In both cases, it indicates a decrease in the ability of taxes and social transfers to reduce inequality.

Income inequality increased especially in Spain, where Gini coefficient increased from 0.31 to 0.34. On the other hand, after having increased since the early 2000s, income inequality fell substantially in Iceland, moving down eleven places on an OECD countries' inequality ranking to the lowest level (Figure 4).

Consolidation policies appear to have been designed in an overall equalising manner. Disposable income inequality also declined in Portugal and New Zealand, although by a smaller amount.

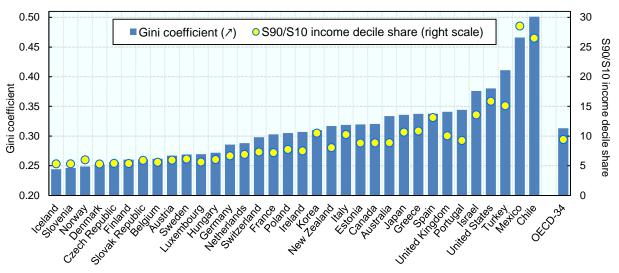
Large country differences in inequality levels persist

Differences in levels of income inequality across OECD countries remain large. The Gini coefficient ranges from 0.25 in Iceland to almost twice that value in Mexico and Chile. Nordic and central European countries have the lowest inequality of disposable income while inequality is high in Chile, Mexico, Turkey, the United States and Israel.

Alternative indicators of income inequality suggest similar rankings. The gap between the average incomes of the richest and the poorest 10% of the population (the so-called S90/S10 ratio) was close to 10:1 for the OECD area in 2010 – ranging from about 5:1 in Denmark to almost six times larger (29:1) in Mexico.

4 There are large differences in levels of income inequality across OECD countries

Gini coefficient of household disposable income and gap between richest and poorest 10%, 2010



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602

The pain was not shared evenly

Thus far, results presented are based on averages and summary indicators of overall inequality. However, they hide some important changes at the two extremes of the income distribution. Focusing on the top and bottom 10% of the population in 2007 and 2010 shows that lower income households either lost more from income falls or benefited less from the often sluggish recovery.

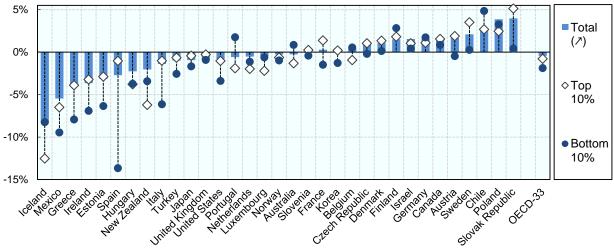
Across OECD countries, real household disposable income stagnated. Likewise, the average income of the top 10% in 2010 was similar to that in 2007. Meanwhile, the income of the bottom 10% in 2010 was lower than that in 2007 by 2% per year. Out of the 33 countries where data are available, the top 10% has done better than the poorest 10% in 21 countries.

Figure 5 shows that this pattern was particularly strong in some of the countries where household income fell the most. In Spain and Italy, while the income of the top 10% remained broadly stable, the average income of the poorest 10% in 2010 was much lower than in 2007. Incomes of poorer households also fell by more the 5% annually in Mexico, Iceland, Greece, Ireland and Estonia. Among these countries, only in Iceland the fall in average annual income at the top (-13%) exceeded that of the bottom (-8%).

Countries where average income did not change much experienced varying patterns. While in the United States, Italy, France, Austria and Sweden poorer families did worse than the average, in Australia and Portugal disposable income at the bottom of the distribution increased more than at the top.

5 Poorer households tended to lose more or gain less

Annual percentage changes in household disposable income between 2007 and 2010, by income group



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Poverty trends differed across countries

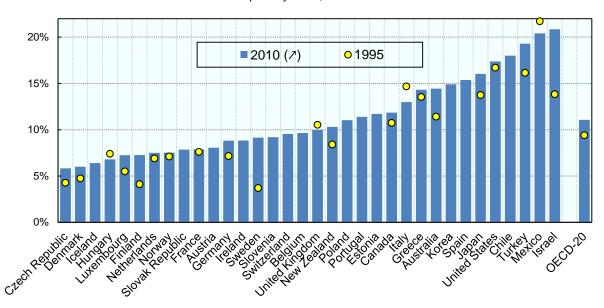
Relative income poverty – the share of people having less income than half the national median income – affects around 11% of the population on average across OECD countries, with large country differences. Poverty rates range between 6% of the population in Denmark and the Czech Republic to between 18% and 21% in Chile, Turkey, Mexico and Israel.

Over the two decades up to 2007, relative income poverty increased in most OECD countries, particularly

in countries that had low levels of income poverty in the mid-1990s (Figure 6). In Sweden, Finland, Luxembourg and the Czech Republic, the income poverty rate increased by 2 percentage points or more. In Sweden, the poverty rate in 2010 (9%) was more than twice what it was in 1995 (4%). Relative poverty also increased in some countries, such as Australia, Japan, Turkey and Israel, with middle and high levels of poverty. At the same time, poverty fell in some countries, such as Chile and Italy.

6 Relative poverty affects 11% of the population, on average

Relative income poverty rates, 1995 and 2010



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602. Income poverty is defined as the share of people living in households with less than 50% of median disposable income in their country.

The crisis had a somewhat limited impact on *relative* income poverty, at least in its initial phase (Figure 7). Between 2007 and 2010, poverty increased by more than 1 percentage point only in the Slovak Republic, Italy, Spain and Turkey. Over the same period, it fell in Chile, the United Kingdom, Portugal and Estonia, while changes were below 1 percentage point in the other OECD countries.

These modest changes in relative income poverty during the first three years of the crisis are especially significant in the light of the more pronounced changes in market income. In three out of four OECD countries, poverty of income before taxes and transfers rose by more than 1 percentage point, and the OECD average increased from 27% to 29%. This indicates that taxes and transfers were in fact quite effective in tackling the impact of changes in market income on poverty.

Measures of relative poverty refer to the current median income and are therefore difficult to interpret during recessions. In a situation where the incomes of *all* households fall but they fall by less at the bottom than at the middle, relative poverty will decline. Therefore, different more "absolute" poverty indices, linked to past living standards, are needed to complement the picture provided by relative income poverty.

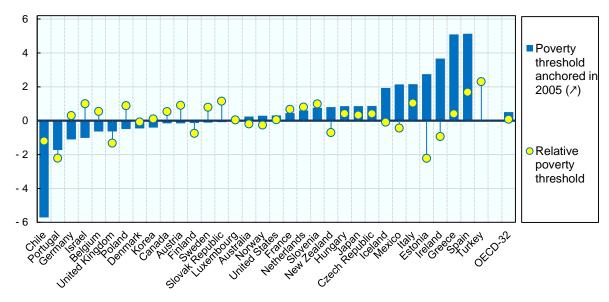
To address this issue, Figure 7 describes changes in poverty using an indicator which measures poverty against a benchmark "anchored" to half the median real incomes observed in 2005. Using this measure, recent increases in income poverty are much higher than suggested by "relative" income poverty. This is particularly the case in Iceland, Mexico, Italy, Estonia, Greece, Spain and Ireland. While relative poverty did not increase much or even fell in these countries,

"anchored" poverty increased by 2 percentage points or more between 2007 and 2010, reflecting disposable income losses of poorer households in those countries. Only in Israel, Poland, Belgium and Germany

"anchored" poverty fell at the same time as relative poverty stagnated or increased (this was a typical pattern in many OECD countries during the growth period before the Great Recession).

7 The evolution of poverty differs if the threshold is "anchored" at the time before the crisis

Percentage point changes in relative and "anchored" poverty rates between 2007 and 2010



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602. Changes in income poverty measured using relative and anchored poverty line based on 50% of current and 2005 median income in each country, respectively. Estimates for anchored poverty are not available for Switzerland and Turkey.

Poverty trends were not the same across different groups

Taxes and benefits effectively compensated for part of the overall increases in market income inequality and poverty. But their impact varied across different population groups. On average, relative income poverty increased among children, youth and adults, but it fell among the elderly.

Between 2007 and 2010, average relative income poverty in the OECD countries rose from 12.8 to 13.4% among children and from 12.2 to 13.8% among youth (Figure 8). Meanwhile, relative income poverty fell from 15.1 to 12.5% among the elderly. This pattern confirms the trends described in previous OECD studies, with youth and children replacing the elderly as the group at greater risk of income poverty across the OECD countries.

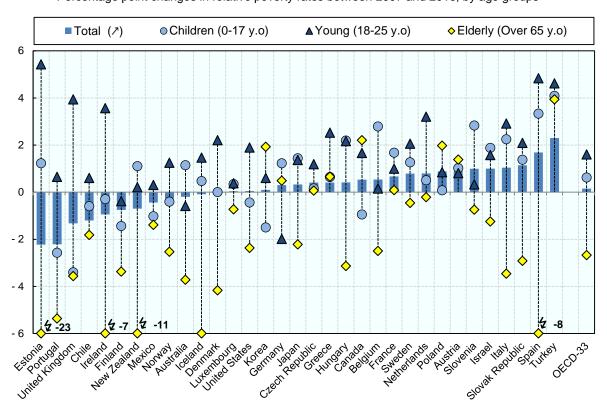
Households with children were hit hard during the crisis. Since 2007, child poverty increased in 16 OECD countries, with increases exceeding 2 points in Turkey, Spain, Belgium, Slovenia and Hungary. On the other hand, child poverty fell by more than 2 points in the United Kingdom and Portugal.

Since 2007, youth poverty increased considerably in 19 OECD countries. In Estonia, Spain and Turkey, an additional 5% of young adults fell into poverty between 2007 and 2010. In the United Kingdom and Ireland, the increase was 4%, and in the Netherlands 3%. Only in Germany, one of the countries where household income grew in this period and youth unemployment did not increase, youth poverty declined by 2 points.

In contrast to other age groups, the elderly have been relatively immune to rises in relative income poverty during the crisis. In the three years to 2010, poverty among the elderly fell in 20 out of 32 countries, and increased by 2 points or more only in Turkey, Canada and Poland. This partly reflects the fact that old-age pensions were less affected by the recession. In many countries (at least until 2010), pensions were largely exempted from the cuts implemented as part of fiscal consolidation. In addition, in some countries, a share of old-age pensioners may have income levels that are close to the poverty threshold. As a consequence, elderly relative income poverty tends to increase in periods of growth (as median incomes rise faster than pensions) and to fall in periods of recession.

This pattern is well illustrated by the experience of lowered relative poverty among the elderly from 30% Estonia, where the combination of a substantial fall in to 7%. A similar effect is observed in New Zealand, median incomes and stable old-age pensions have Spain, Ireland, Iceland, and Portugal.

Poverty rose among children and youth and fell among the elderly, confirming earlier trends Percentage point changes in relative poverty rates between 2007 and 2010, by age groups¹



See notes to Figure 1. Information on data for Israel: http://dx.doi.org/10.1787/888932315602. Income poverty measured using relative poverty rate based on 50% of current median equivalised household disposable income.

The OECD Income Distribution Database (IDD)

Over the last 20 years, to benchmark and monitor countries' performance in the field of income inequality and poverty, the OECD has developed a statistical database with a number of standardised indicators. The latter are based on the central concept of "equivalised household disposable income", i.e. the total market income received by the households (gross earnings self-employment and capital income) plus transfers less the current taxes they pay, adjusted for household size with an equivalence scale where all incomes are divided by the square root of the household size. While household income is only one of the factors shaping people's economic well-being, it is also the one for which comparable data for all OECD countries are most common. Income distribution has a long-standing tradition among household-level statistics, with regular data collections going back to the 1980s (and sometimes earlier) in many OECD countries.

The method of data collection used for the OECD IDD aims to maximise internationally comparability as well as intertemporal consistency of data. This is achieved by a common set of protocols and statistical conventions (e.g. on income concepts and components) to derive estimates. The information obtained by the OECD through a network of national data providers is more up-to-date relative to that available through many other statistical sources, but reflects the long time-lags that characterise data collection in this field in most OECD countries. Country estimates are provided to the OECD in the form of semi-aggregated tabulations, and are based on national sources that are deemed to be most representative for each country. One disadvantage of this approach is that it does not allow accessing the original micro-data, which constrains the subsequent analysis that can be performed.

The data collection is undertaken via a standardised questionnaire. Selected data from this questionnaire can be obtained through an OECD.Stat cube available at http://stats.oecd.org/Index.aspx?DataSetCode=IDD. Due to the increasing importance of income inequality and poverty issues in policy discussion, the database is now annually updated. The OECD aims to extend its database to Brazil, China, India, Indonesia, Russia and South Africa over the coming months.

In short

Many countries entered the global economic crisis already facing the highest levels of income inequality since OECD records began. With higher unemployment and lower returns from capital, the crisis not only weighted heavily on incomes from work and capital but also made their distribution more unequal. In the first three years of the crisis, the inequality in income from work and capital increased as much as in the previous twelve.

However, this pressure towards lower and more unequal income was alleviated by income taxes and social transfers as automatic stabilisers (rises in social transfers and falls in income taxes during recessions). This, reinforced in a number of countries by fiscal stimulus packages, helped lessening the rise in inequality and the falls in the amounts of income that households effectively "take home".

As a result, in most OECD countries, the levels of disposable income inequality and relative poverty in 2010 were just slightly higher than in 2007.

However, patterns differed significantly among different population groups. In general, but particularly in some of the countries where the crisis hit harder, poorer households either lost more income from the recession or benefited less from recovery. Likewise, poverty increased considerably among children and youth, while the income of the elderly were relatively immune. On average, elderly poverty fell by almost 20% across OECD countries. In fact, children and youth now face larger levels of poverty than the elderly, on average.

It is important to remember that these results only tell the *beginning* of the story. The data describes the evolution of income inequality and relative poverty up to 2010. The economic recovery has been anaemic in a number of OECD countries and some have recently moved back into recession. At the same time, many people exhausted their rights to unemployment benefits and governments have shifted the fiscal policy stance towards consolidation. If sluggish growth persists and fiscal consolidation measures are implemented, the ability of the tax-benefit system to alleviate the high (and potentially increasing) levels of inequality and poverty of income from work and capital might be challenged.

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Further reading:

Divided We Stand: Why Inequality Keeps Rising, via www.oecd.org/social/inequality.htm
En français: www.oecd.org/fr/social/inegalite.htm
Social spending after the crisis , via www.oecd.org/els/social/expenditure

Employment Outlook, via www.oecd.org/employment/outlook How's Life: Measuring Well-Being, via www.oecd.org/howslife

The OECD wishes to acknowledge the contribution of national data providers and Eurostat to this database. 2010 data based on EU-SILC 2011 for Austria, Belgium, Czech Republic, Estonia, Finland, Greece, Iceland, Ireland, Italy, Luxembourg, Poland, Portugal, Spain, Slovak Republic and Slovenia have been kindly provided by Eurostat and are provisional.

This note has been produced with the assistance of the European Union. The contents of this report are the sole responsibility of the OECD and can in no way be taken to reflect the views of the European Union.

The arrow \nearrow (or \searrow) in the legend of the charts relates to the variable for which countries are ranked from left to right in increasing (or decreasing) order.

Please source this note as: OECD (2013), "Crisis squeezes income and puts pressure on inequality and poverty".

This note as well as all figures and underlying data can be downloaded via www.oecd.org/social/inequality.htm
Data from the OECD Income Distribution Database are available at http://stats.oecd.org/Index.aspx?DataSetCode=IDD