European Commission

SCIENCE FOR POLICY BRIEFS

The Mediterranean poor: a key component of EU-wide income inequality*

Headlines

- Since the economic and financial crisis of 2008-12, **income levels across the EU have declined**, particularly in Mediterranean Member States. During the same period, **income inequality remained mostly stable** in the whole of the EU but has increased substantially in Mediterranean Member States.
- The increase in inequality in the Mediterranean area, which has reached levels not seen for almost two decades, is chiefly related to **declining labour income for the less well-off**.
- Inequality has increased, but at different rates, among both women and men in the Mediterranean, to the point of eliminating the previously existing gap between them in levels of inequality.

Policy context

There is emerging consensus that the growing public perception of economic unfairness is undermining support for the European Union. Research consistently shows that **inequality beyond a certain point is harmful to both society and the economy**.

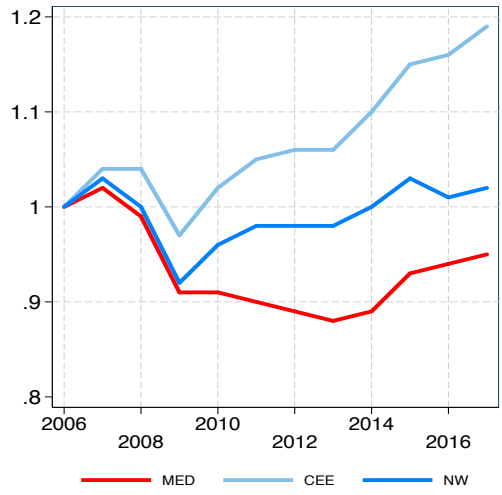
The European Commission fights inequality both through measures to promote job creation and income growth and by proposing appropriate social, employment and tax policies. Equality is an important dimension of the European Pillar of Social Rights.

We know quite a lot about inequality within the individual EU Member States, but relatively little about it when considering the Member States taken together, looking at the EU population as a whole. A number of recent studies show that **EU-wide income inequality is lower than that in the US but much higher than that within most EU Member States**.

Income levels in Europe since 2008

The economic performance of EU Member States diverged widely both during and after the 2008-12 economic and financial crisis (see Figure 1). Both North-Western and Mediterranean countries (see Quick Guide) experienced a drop in GDP, but **recovery in the Mediterranean was slower and less complete**. By contrast, Central and Eastern Europe experienced a smaller drop in GDP and a strong recovery.

Figure 1: Base index of per capita GDP (2006=1, in PPS)



* This brief is based on the JRC report *EU-wide inequality in the era of the Great Recession*, Péter Benczúr, Zsombor Cseres-Gergely and Péter Harasztosi, JRC Working Papers in Economics and Finance, 2017/14. This brief can be downloaded from https://ec.europa.eu/jrc/en/research/crosscutting-activities/fairness.

Quick guide

The **JRC database used to measure EU-wide inequality** is based on the EU-SILC survey. Microdata from Member States were appended, corrected, harmonised and weighted to yield a truly EU-wide database of individuals that can be aggregated in various ways. We have used the modified OECD scale to calculate per capita equivalised income levels, and the purchasing parity index of Eurostat to express them at a common purchasing parity standard (PPS). Our calculations are based on the subsample of the working 25-64-year-olds for 2006-2014.

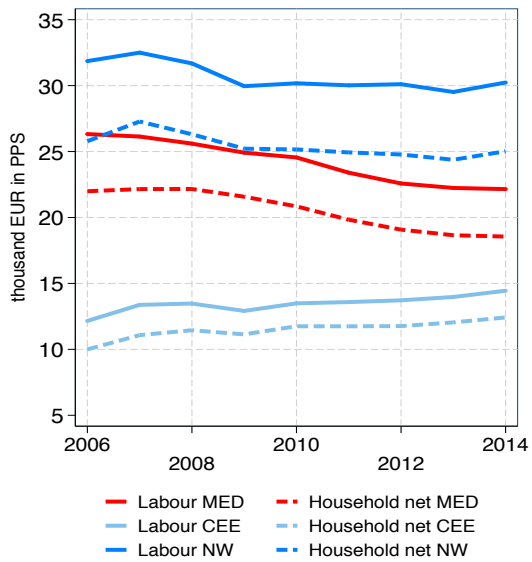
We defined **three geographic areas**: North-West (NW, comprising Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Sweden, the UK); Mediterranean (MED, comprising Cyprus, Greece, Italy, Malta, Portugal, Spain); Central and Eastern Europe (CEE, comprising Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia).

We made use of the detailed data by calculating **widely-used inequality measures** for the areas and the whole EU: the Gini and percentile ratios of income. The Gini assigns a number between zero and one to the whole distribution (with one indicating the maximum level of inequality, when everything is held by a single individual), while the percentile ratio (such as the p50-p10) shows the ratio of two income levels at chosen points of the income distribution. Note that measures at the area level are different from the average of the country-level measures.

We analysed **income concepts connected to 'insurance mechanisms'** that can help to lower income uncertainty, and thus also inequality. Income shared by couples and within the family, or redistributed by the state, can mitigate inequality.

Broadly in line with the dynamics of GDP, average income levels decreased in Europe after the onset of the crisis. While income losses of the employed in the North-West were contained, and there were even income gains in Central and Eastern Europe, income levels in the Mediterranean area declined throughout the entire 2006-14 period (see Figure 2).

Figure 2: Average annual labour and per capita household income levels (in PPS)



Patterns of income inequality in geographic areas

Though the crisis did not produce major changes in EU-wide income inequality, it did change the relative contribution of geographic areas to inequality at the EU level. The first 'Fairness report'[1] showed that **income inequality across the EU-15 was decreasing prior to 2000**, and thereafter only slightly increased. Figure 3 shows that EU-wide inequality in labour income was rather stable after 2006 and that inequality in household income even decreased.

By contrast, **inequality in the Mediterranean area increased very significantly from 2006 onwards**: by 2014 it had reached the prevailing EU-wide level. Both net household and gross labour income inequality increased, but the latter did so to a much greater extent. Such disparity in the rate of increase shows how income shocks to the individual can be dampened by various 'insurance mechanisms'.

[1] *What makes a fair society? Insights and evidence.* http://dx.doi.org/10.2760/861535

Figure 3: Gini of annual labour and per capita household income

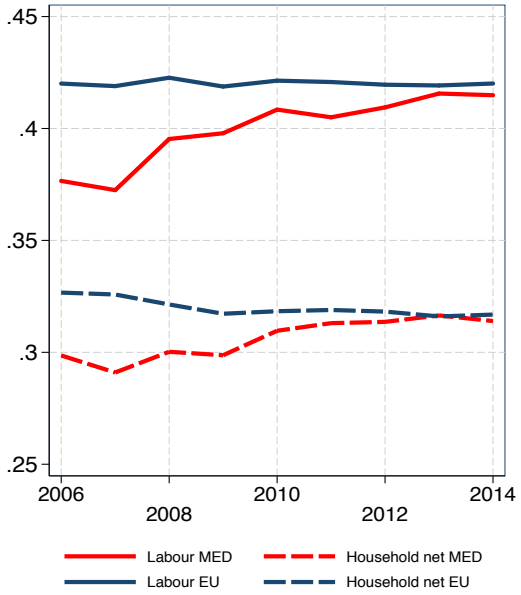
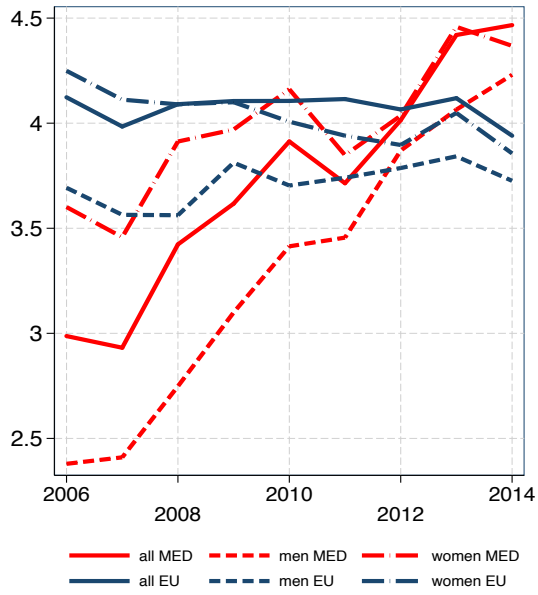


Figure 4: Annual labour income inequality at the bottom half of the distribution (p50–p10 ratio) by gender



The increase in labour income inequality in the Mediterranean area was mostly due to **widening differences at the bottom half of the income distribution**. In 2006, the ratio of income levels at the 50th and the 10th percentile (the 'p50–p10 ratio' – see the Quick Guide) was much lower in the Mediterranean area than in the EU as a whole (see Figure 4), meaning that the Mediterranean suffered less inequality than the EU as a whole; men enjoyed particularly low levels of inequality.

Over the following eight years, inequality changed only slightly across the EU, for both women and men. At the same time, it increased by almost 50 per cent in the Mediterranean area and even more for men. By 2014, inequality was substantially higher in the Mediterranean than in the EU, for both women and men. Together with the decline in income levels, this **increased inequality took a double toll on the Mediterranean poor**.

During this period, the initially large differences in the levels of inequality among women and among men almost completely vanished. In the EU as a whole, this was driven mostly by the decrease in inequality among women; in the Mediterranean area, however, the main factor was the **dramatic increase in inequality among men**. This is likely to have been due to job losses and subsequent re-entry to non-permanent, part-time contracts with lower wages. Inequality among women in the Mediterranean area also increased, due to the increased labour market activity of some.

Related and future JRC work

The JRC continues to conduct research on inequality in the EU above, at and below the country level. This includes research on the convergence of income distributions, the effect of major drivers of inequality, perceptions of inequality, and absolute poverty.

This brief is one of a **series of science for policy briefs** reporting on recent JRC research on various aspects of fairness. **A comprehensive report on fairness** will be published in 2019.

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