In parts of Europe, income inequality barely changed at the onset of the pandemic

*Furlough and social security benefits meant disposable household incomes were protected to a substantial degree at the start of the pandemic. Income inequality was largely unchanged, write **Olga Cantó (Universidad de Alcalá), Francesco Figari (University of Insubria), Carlo Fiorio (University of Milan)** and **Iva Tasseva (LSE)**.*

The strict lockdown measures introduced at the beginning of the pandemic led to a sharp contraction in economic activity. Between the first and second quarter of 2020, GDP per capita fell by a substantial 20% in the UK, 18% in Spain, 13% in Italy and 12% in Belgium.

But our study shows that at the onset of the pandemic the fiscal policy response in these countries lessened these shocks, leading to smaller losses in average household disposable income. Though household living standards deteriorated due to the pandemic, income inequality remained broadly unchanged.

Governments designed emergency fiscal policy measures at speed. Across Europe, they have been providing income support for furloughed workers and the self-employed, and relying on social security benefits for the unemployed and low-income families. It has been critical to understand the impact these had on household incomes and to assess their effectiveness. To do that, we need data on household incomes. But data collection and processing take time, so high-quality data on household incomes is only released with a serious time lag. For example, actual poverty and inequality figures for European countries for 2020 (based on household survey data from the EU-SILC) are expected to be released in the autumn of 2022.

We therefore combined pre-pandemic data on household incomes with timely data on employment and earnings changes during the pandemic and the tax-benefit microsimulation model EUROMOD. This allows us to predict how the COVID crisis has been affecting household circumstances, taking into account all the policies in place when the pandemic began.

Our study shows that COVID hit household incomes hard at the start of the pandemic. If we treat all furloughed workers as if they lost all their earnings before receiving furlough, we estimate that on average households lost a substantial share of their gross pre-tax market income: 16% in Spain, 18% in Belgium, 24% in the UK and 26% in Italy.

But the support for furloughed workers and the self-employed, and social security benefits, protected household incomes to a substantial degree. As a result, household disposable income fell on average by 4% in Spain and Belgium, 6% in Italy and 8% in the UK.

Another way to see the protective role of policies is to look at the ratio between household disposable income at the onset of COVID and before it (the so-called 'net replacement rate'). Household disposable income is the sum of the household's income from the market (e.g. earnings, investment income, private pensions, rental income) and social security benefits, minus income taxes and contributions. We break down the ratio by income source to see the contribution of each policy as well as the gross market income of the household.

On average, gross incomes from the market have been by far the biggest source of income insurance for households in Belgium and the UK, and to a lesser degree in Spain and Italy. These are the earnings of household members not affected by the negative COVID labour market shocks or other types of market income, such as private pensions or investment income. Market incomes have played an important role for self-insurance, especially among higher-income families.
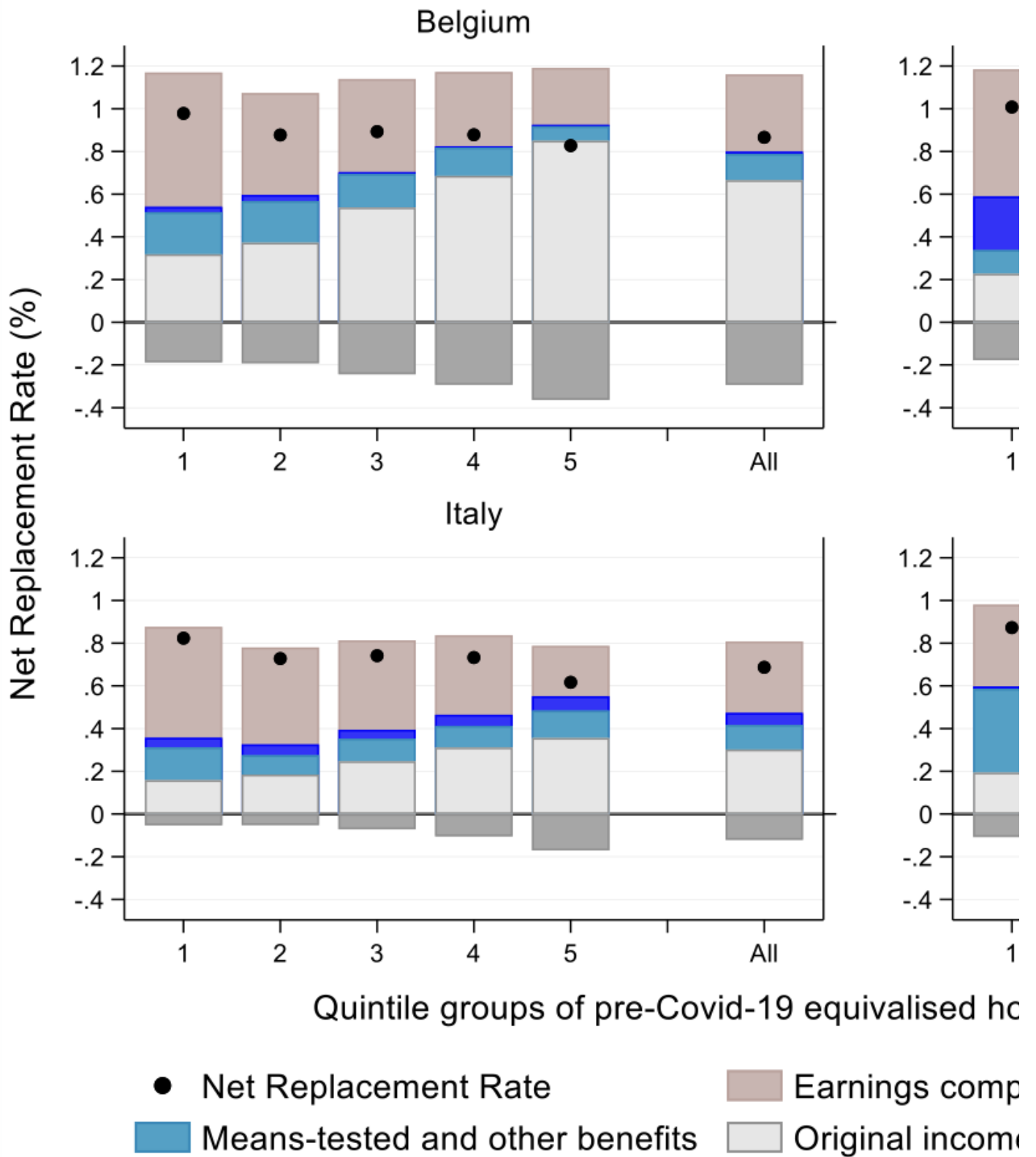
Photo: 'Un día más': by José Luis Morcillo Amo and Espacios para el Arte via a CC-BY-NC-SA 2.0 licence

The next most important source of income protection has been support for furloughed workers and the self-employed, providing insurance for households across all parts of the income distribution.

In all these countries, means-tested benefits targeted at lower-income families and unemployment benefits in Spain and Italy in particular have also supported household incomes during the pandemic.

Figure 1: Net Replacement Rates (in %) among families affected by the COVID labour market shocks, by household income quintile groups

Belgium

Net Replacement Rate (%)

Italy

Quintile groups of pre-Covid-19 equivalised ho

● Net Replacement Rate   ▨ Earnings comp

▨ Means-tested and other benefits   ▨ Original incom

Notes: The Net Replacement Rate (NRR) is the ratio between household disposable income after and before the COVID labour market shocks, estimated on the sample of families affected by the shocks. The NRR is depicted by the black circle and broken down by income source (the bars add up to the black circle). All population income quintiles based on the pre-COVID distribution of equivalised household disposable income. Quintile 1 = the poorest 20% and quintile 5 = the richest 20% of the population. Earnings compensation = support for furloughed workers and the self-employed. Original income = gross pre-tax market income. Source: Cantó et al. (2021).

But despite household living standards worsening, we find no substantial changes to overall inequality in household disposable incomes. Inequality fell only slightly in Belgium, Spain and the UK and increased a little in Italy.

In another study focusing on the UK, we examine the changes to inequality at the onset of the pandemic. We find that the crisis led to large losses in the incomes of higher-income families but also to a large rise in the number of adults with very low disposable income. As a result, inequality in disposable income fell only slightly. Disparities in earnings increased a little. However, tax-benefit policies – in particular social security benefits – more than offset the increased inequality in earned income, highlighting their importance for redistribution.

Figure 2: The pandemic's impact on income inequality in April-May 2020 in the UK
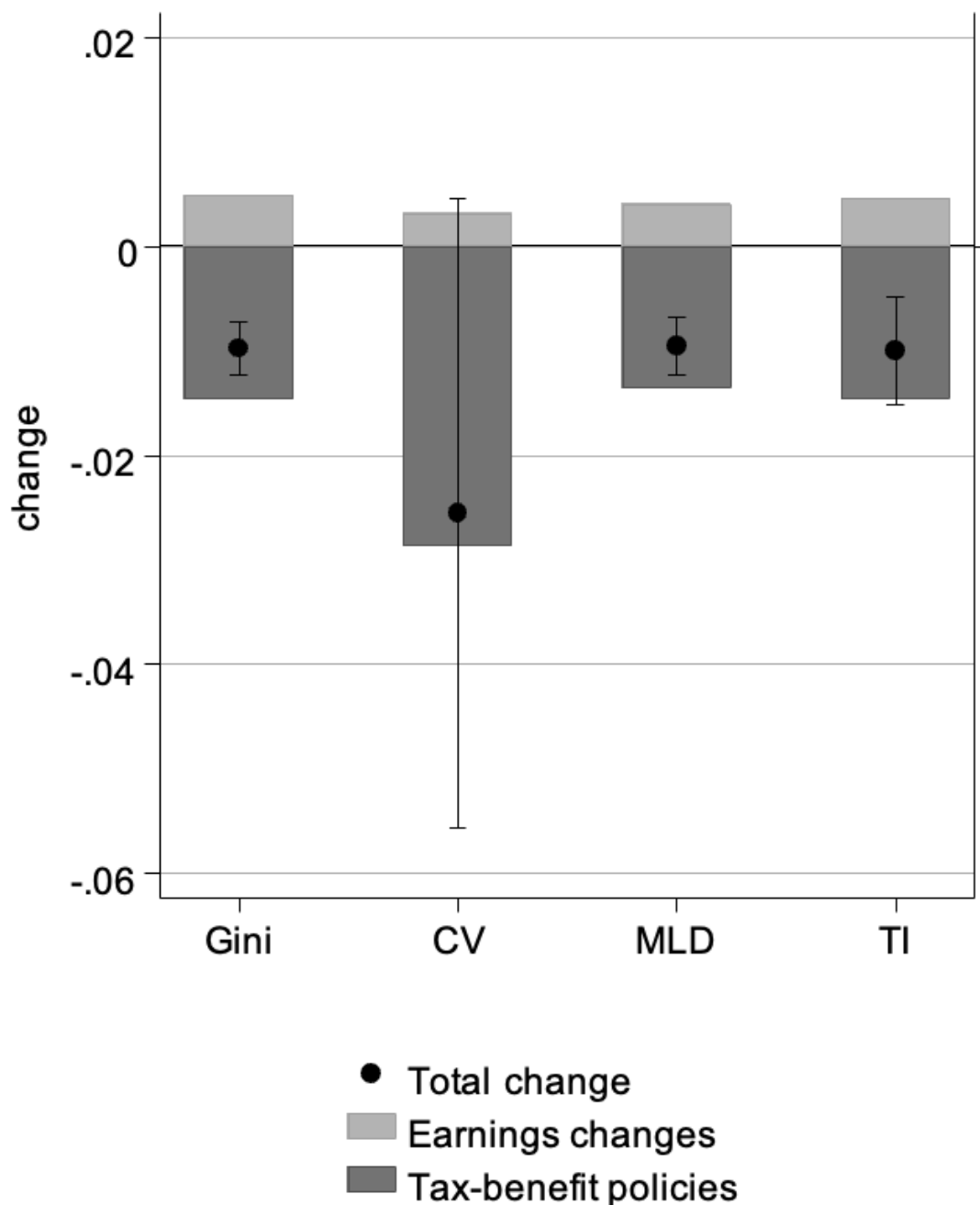
Notes: Inequality is measured by different indices: Gini = Gini coefficient; CV=coefficient of variation; MLD=mean log deviation; TI=Theil index. Changes in income inequality based on equivalised household disposable income. The total change in inequality is depicted by the black circle and broken down by the changes due to earnings versus tax-benefit policies (the bars add up to the black circle). Source: Brewer and Tasseva (2021).

During the pandemic, European fiscal policies have been protecting household incomes to a substantial degree. But this crisis has also highlighted some important issues with their design. In Italy and Spain, for example, the most important income support schemes depend on the past year's income, and do not react to sudden losses of earnings such as those experienced at the start of the pandemic, delaying important income protection for households. In the UK, different groups of workers have been falling through the gaps in the safety net. Furthermore, as emergency measures are being gradually phased out and with a slow economic recovery, many households will be left unprotected. Policy makers should draw on these lessons to strengthen the safety net and prepare for future crises.

This post represents the views of the authors and not those of the COVID-19 blog, nor LSE.