

## 24<sup>e</sup> Congrès des économistes

### **Unequal Consequences of COVID-19 by Age, Income, and Country**

Julian Jamison (University of Exeter), Michèle Belot (Cornell University), Eline van den Broek-Altenburg (University of Vermont), Syngjoo Choi (Seoul National University), Nicholas W. Papageorge (John Hopkins University), & Egon Tripodi (University of Essex)

*Using representative survey samples in six countries (including Italy and the UK), we document the early impact of the pandemic in April 2020. In particular, we find that younger respondents are more likely to have lost their job at least temporarily (although also slightly more likely to be teleworking); report lower income and spending; have higher rates of negative psychological outcomes; and are less likely to support government protective measures. Meanwhile the lowest-income groups are also more likely to have experienced job loss (and are less likely to telework) but are more mixed on the other outcomes. Targeted government support may be helpful both to mitigate the negative impacts and also to rebuild social trust and cohesion.*

The COVID-19 pandemic has affected almost all countries in the world and has led to unprecedented measures being implemented to contain the virus. The adjustments required have had a dramatic impact on how we live, on our ability to work, and on our leisure activities. Countries have differed in their response to the epidemic. Some adopted stringent measures, such as shelter-in-place orders, while others implemented early and widespread testing and tracing procedures.

Within each country, society is structured in a way that not everyone would be equally affected by the measures. Younger individuals, for example, typically have more active social lives and more face-to-face interactions at work. Higher-income groups are more likely to be high-skilled and therefore to have jobs that can be performed from home.

Here we document the effects of the epidemic and measures implemented in six different countries on different age and income groups. Data was collected in the third week of April 2020 on samples of around 6,000 individuals from China, Italy, Japan, South Korea, the UK, and the US. The samples are nationally representative on three dimensions: age, gender, and income. [The US data covers the four most populous states – California, Florida, New York, and Texas – and the sample is also nationally representative by race.] “Europe” below refers to Italy and the UK from this data. At the time of data collection, the countries we examined were at different phases of the epidemic and had implemented different measures.

Our key questions are: How have the lives of individuals of different age and income groups been affected, in particular with respect to labour market outcomes? And can these impacts explain differences in protective behaviour and in public support for the measures implemented?

Across all countries, we observe a clear age gradient in economic impact: Younger groups are more likely to have experienced a drop in household income due to the pandemic, as well as a drop in consumption. In Europe roughly one-third of respondents report having lost their job (at least temporarily) by April 2020, which is lower than in China but higher than the other East Asian countries. This effect (except in China) is disproportionately high amongst the youngest.

Although our data cannot directly speak to longer-term outcomes, one suggestive piece of evidence comes from looking at who does or does not engage in teleworking. Here we find smaller differences: in Europe the elderly (especially above 65) are unsurprisingly less likely to telework, however the gap is modest (about 8 percentage points, not statistically significant). Combining this with above, we see that younger adults are more ‘expendable’ in the short-run, but if anything are better placed to respond flexibly over time.

Turning next to income gradients, the impacts on income and consumption patterns across countries are less robust. Within Europe, job losses are smallest for the top two income quintiles (namely 15-20 percentage points lower, highly significant). In Italy the lowest quintile stands out as uniquely most likely to have lost their job at least temporarily, whereas in the UK (similar to the US) the entire bottom half of the distribution fares relatively poorly.

Meanwhile teleworking shows a clear gradient by income, with those at the top of the distribution noticeably more likely (from 10 up to 25 percentage points) to telework, presumably because of the nature of their occupations. This gradient exists in almost all countries in the sample, although it is for instance steeper in Italy than in the UK. Nevertheless neither of these results yields significant trends on lost wages or household spending by income level, implying that some form of mitigation (whether individually or socially) has also occurred.

What are the implications for more downstream outcomes such as wellbeing (admittedly measured concurrently)? In all six countries, younger age groups report experiencing substantially more negative psychological effects (such as anxiety and loneliness). Not only are they more financially affected as above, but they also had more social interactions pre-pandemic, which were reduced by the various government responses, so the total impact is quite striking.

On the other hand, higher income groups also reported more social interactions originally, which to some extent negatively counteracts and thereby balances out their increased financial resilience. Indeed overall we find almost no connection between income levels and wellbeing, except perhaps for slightly more negative outcomes amongst low-income respondents in the UK.

Finally, both younger individuals and (to a lesser extent) low-income individuals are less likely to report engaging in self-protective behaviours such as mask wearing, and are less supportive of strict preventive measures implemented by governments. Intriguingly, this link persists even after controlling for e.g. work status and income loss, so it isn’t solely operating via those channels. Similarly, those who have access to telework are more likely to take up [other] self-protective behaviours, even after controlling for their remaining characteristics.

In summary, we have provided a descriptive and representative early snapshot of the differential impacts of COVID-19 (and government responses thereto) across groups in multiple countries. The clearest finding is that younger age cohorts were more negatively affected in terms of jobs, finances, and wellbeing. This may not seem surprising, although note that it was not entirely the same for low income respondents. However – especially given the fact that early-life experiences can shift long-run expectations and aspirations – it highlights the need for sustained support and for proactive creative usage of new work environments.