## We need an 'emergency survey' based on random samples. Urgently.

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These times are not just unprecedented in terms of the drastic policy measures that are taken, but also in terms of the drop in large-scale data collections through surveys. While in the UK many surveys have been able to continue online and via phone, some key socio-economic surveys, including the Family Resources Survey, have been put on hold. In many other European countries even more surveys have been suspended, including the EU Statistics on Income and Living Conditions, the main comparative survey on income and material well-being in Europe. This deprives us of the possibility to assess and monitor the, probably quite dramatic, impacts the virus and associated economic and social policy measures are having on people's mental, physical, social and material well-being. Some new online surveys have been launched in many countries (for instance this one in Belgium), as well as apps that collect data on a large scale. However, many of these data collections suffer from the problem that they are based on sampling techniques that do not allow for easy, reliable generalisations to the broader population.

More surprisingly, though, is that relatively little is known about key characteristics of the epidemic itself. While unseen, but justifiable, policies are put in place which suspend fundamental freedoms, purposefully contract economic activity and employment, restrict people to their homes and cushion the social consequences of these measures, very basic information on the incidence and spread of the virus is lacking. Although modelling on the basis of available data is very useful, current estimates of, for instance, the mortality rate are unreliable given that only a very specific group of people is being tested for COVID-19.

However, it should be possible to collect data in an 'emergency survey' that would provide us with much better information to assess and predict the development of the epidemic, as well as the socioeconomic and health impacts of the measures that are being taken. To do so, a random representative sample of the population should be drawn, and this sample should be followed over a prolonged period of time, preferably with regular testing for COVID-19. This would allow to find out a reliable answer to, for instance, the following questions:

- (1) What is the (current) incidence of COVID-19 in the population?
- (2) How is it spreading across the population?
- (3) To what extent does the incidence of asymptomatic cases predict the number of people with severe symptoms?
- (4) What is the mortality rate?
- (5) Can people contract the virus multiple times?
- (6) What is the role of children in spreading the disease?

Obviously, the size of the sample being tested should not undermine the capacity of hospitals to test people with symptoms that require hospitalization, and the sample could increase in size along with improved testing capacity. Especially when sufficiently reliable antibody <u>tests become available</u>, applying testing to a relatively large random sample of persons should be feasible. Furthermore, such

a survey could be linked with a questionnaire, which could help to better understand the effectiveness of the current measures taken, by asking about people's hygienic attitudes and behaviour, the degree to which they follow government recommendations, the role of various factors that may contribute to contracting the virus. A large-scale emergency study could also provide pivotal information for effective policy-making with regard to when and where it would be possible to restart economic activity and reduce the restrictions on people's freedom to move around and meet others.

Importantly, the current crisis is not just a health crisis, it is also a socio-economic crisis, with potentially deep, long-lasting social and economic consequences. Therefore, it would be important to have a more expansive questionnaire which would allow to also look into the impacts of the virus and the measures being taken on other aspects of physical, mental, social and material well-being, which would be key for:

- (1) Understanding the interactions with other physical and mental health conditions;
- (2) Monitoring the level of distress in the population and identifying those most in need;
- (3) Understanding the socio-economic distribution of (1) the incidence and spread of COVID-19; (2) losses in various dimensions of well-being; For instance, results from the Netherlands suggest that mainly older people contracted the virus, whereas broader testing in Iceland showed a very <u>different distribution by age</u>, random testing could confirm the real distribution, facilitating more targeted policy responses.
- (4) Evaluating the impact of the measures that are taken to cushion the economic impacts on people's purchasing power;
- (5) Evaluating where current social policy measures fall short of meeting their objectives;
- (6) Carrying out a more in-depth cost-benefit analysis of the policy measures taken;
- (7) Better understanding which social and economic policies are required to jumpstart the economy again, once the health situation is back under control.

It can be expected that the pandemic and the policy measures taken are affecting different groups very differently, including low-income households vs. high-income households, the young vs. old, those living alone vs. those living in families, those with children vs. those without, those with happy family relations vs. those in difficult family circumstances, those in urban areas vs. those in rural areas, those working in 'key sectors' vs. those working in other sectors, those with good access to quality health care vs. those without such access, etc.. Better understanding these differential effects and inequalities would be extremely helpful for designing effective, efficient and fair public policy responses. Needless to say, more insight into these matters would provide very relevant information not just for tackling COVID-19 and the crisis it has caused, but also other pandemics and emergencies that may occur in the future.

Although testing capacity for COVID-19 is limited, such a combined health and socio-economic survey, based on a random sample of the population, would not consume a very large amount of the available capacity. Initially, in line with testing capacity, the main focus could be on understanding uncovered needs in the population, with testing only a relatively small (random) subsample for COVID-19 (and as soon as possible for antibodies). Once testing capacity increases and more efficient tests become available, these could be expanded to the full sample. Diverting some testing capacity to a random sample, including people with no symptoms at the moment, would outweigh the disadvantage of fighting blindfolded an epidemic with the most drastic social and economic measures seen in the past 70-80 years. While Iceland has started with testing a large fraction of its population, Germany has launched a panel study which will track people over a prolonged period of

time < > and both <u>Germany</u> and <u>Norway</u> have started discussions to put in place random sampling to track corona virus infections, other countries should follow soon.

Obviously, the current crisis also offers an opportunity for studying factors that may help to better tackle this other big, but somewhat less acute, emergency: climate change. For instance, it would be useful to study the effect of the current change in lifestyles on people's current carbon footprint and how this compares to their previous and future footprints. However, as pointed out by Meehan Crist in the New York Times, this would be scratching only t<he surface of the problem. More importantly, such a survey could also delve into bigger questions about how social norms change, how people's preferences for specific consumption patterns change, as well as their attitudes towards factors that have bigger impacts on carbon reductions, including their organisation of the work-life balance (shorter working hours, lower overall consumption, more quality time with loved ones?), changes in attitudes and behaviour regarding commuting and business travel, and, more generally, people's opinion on the role of government in society and its responsibility for tackling the causes of climate change and mitigating its impacts in a fair manner. In many Western countries, governments have now undertaken actions with a decisiveness that many would have deemed impossible only a few weeks ago. It would be good to know whether this creates more (long-term) support for more decisive action also with regard to the climate emergency.

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