The Need for Data

It goes without saying that there is much we don't know about COVID-19 – we find ourselves in uncharted territory. However, there is a lot we do know or, at a minimum, should be able to figure out by now, based on what has happened so far. There is nothing more frustrating than the lack or deliberate withholding of crucial data that should be informing important policy decisions, including the decision of whether to prolong the lockdown that many U.S. states and countries across the world have implemented.

Here are some of the questions I would like to have answered:

1) What is the age distribution of hospitalization and death cases so far? What is the distribution by pre-existing conditions? This information should be available by now based on records of heavily affected countries. A recent piece in Bloomberg suggests that the median age of those who have died in Italy was 80.5; only 0.8% of the fatalities did not suffer from previous conditions; and almost half of the victims suffered from at least three prior illnesses. These figures were based on analysis of only 18% of total fatality records. We need updated numbers, based on a larger number of records, and for more countries. And we need these numbers to receive as much attention as the morbid statistics about the total number of deaths.
2) Along the same lines, what explains the big differences in the fatality rates between Germany and Italy or Spain? Are such cross-country differences due to the age profile of patients? Or, are they due to differences in the way deaths are attributed to covid-19?
3) What is the asymptomatic rate, by U.S. state, and in major cities? I could not express the need for randomized testing any better than Jim Stock recently did in his piece: "Random Testing is Urgently Needed"
4) What are the bottlenecks preventing a scaling up of testing? Specifically:
    a. If it is know-how, what prevents us from importing ideas successfully used in other countries? Is it nationalism? Are there scientific reasons for not using the same tests they used in Korea or Germany?
    b. If it is cotton swabs, test tubes, etc., how long would it take to ramp up production of these items? What are the constraints? Labor? Inputs?
5) No matter what the response of the country is in the next few weeks, one thing is clear: we will need more medical supplies and more ventilators. This again brings up questions about bottlenecks. Why can't the U.S. ramp up production of masks or ventilators on short notice? Specifically:
    a. Is it lack of technical know-how (in the case of ventilators)?
    b. Is it labor? If so, is there scope for providing short-term employment to those displaced in the service sector?
    c. Is it specific inputs?

    A back-of the envelope calculation of: (a) approximately, how many extra ventilators would be needed under reasonable assumptions about hospitalizations (by locality), and

(b) how fast these ventilators could be produced under current capacity constraints, would be most helpful.

We need the data to answer these questions before deciding on our next moves. Equally importantly, we need to make sure that the relevant information finds its way to the press, and is reported in an objective, impartial, and constructive way. As Pierre-Olivier Gourinchas wrote, this is not the time to be cautious. But it is not a time for mass hysteria fueled by misinformation or misrepresentation either.