# ECONOMICS IN A PUBLIC HEALTH CRISIS



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He is an expert on financial markets and monetary policy, as well as aspects of monetary and financial history. "Q487 Mr Baker: I need to come to my last question, and I can see Jagjit wants to come in. Bearing in mind this is a public health crisis, what is the legitimate role of the economist in a public health crisis?"

**Professor Chadha:** ... where economists can help is that we are pretty good at understanding how to interpret numbers. More than anything else, before deciding on the kinds of policies... we need much better local measures of the reinfection rate at the granular level. We also need surveys that tell us accurately who has antibodies and who has had the virus in the past. Without these two critical parameters, it is incredibly hard to decide how lockdown should be eased at the regional level, even if that is what we wanted to do. We know that, even if the reinfection rate is 0.7 on average, there could still be many regions and areas, or even streets, in which the number is 1.1 or 1.2. It is not entirely possible to create a safe climate if there are any areas in which R is greater than 1. We need measurements. We need surveys to understand who has the disease at high frequency and surveys and estimates of the antibodies that are available. I think we have only just now discovered a test that may be reliable. Those things together would then be able to guide the policies we might want to do to ease the lockdown."

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The question is often and rightly asked about what economics can teach science and, in our current circumstances, what role might it have to play in helping the country confront the covid-19 pandemic. Indeed, the question was put to me by a member of the Treasury Committee in May. Unfortunately, I really do not quite have enough time to go through all the ways economics can help. But let me try to go through some of them here and then run through in a bit more detail an issue of the importance of designing good institutions to meet social objectives and what they mean for the role of the state

### STABILITY, DATA AND ESTIMATION

Economists typically spend a large part of their time thinking about the stability of the relationships they posit or estimate. That is when a system gets shocked, under what conditions does it return to its previous steady state of or not. Understanding the dynamics of equations is the bread and butter of economic analysis from questions such as inflation to the formation of herds. The critical value in such analysis is normally 1, which by now should sound a rather familiar quantity.

Measuring the economy requires a structure to the sampling of all types of economic activity and crosschecks to ensure an absence of double counting or missing elements. The increasing digitisation of the economy has introduced a particular concern that much activity may be underreported and/or over-priced, meaning that we might be understating real national income. The lockdown has introduced its own concerns about the accuracy with which we can measure activity.

From the theory and the measurement, we quickly move

to a branch that is concerned with estimation. How we can place any confidence on the parameters we estimate about inter-relationships when they result from observations that are jointly determined? For example, unemployment is not the fundamental cause of Covid-19 deaths but they are rising together. What about sample sizes for safe inference but then what if samples start to overlap with different regimes or behaviour?

The uncertainty of numerical estimates and also in our understanding of whether estimated economic relationships are robust, mean that we have to treat any estimated parameters with great care and cannot treat them as a final answer on which to base policy. Obviously, this limits the safe space for policy responses. But without the right policy responses the economic systems will be unstable, but also with the wrong types of responses they will also display instability.

## INSTITUTIONS AND RULES

How do economists confront the issue that data relationships are so inherently unknowable, but that policy must act to stabilise the economy? By recourse to rules, institutions and managing expectations. One possible condition of policy success depends on getting people to behave in line with the policy objectives. It is then the case that objectives must be credible. For example, the objectives for the provision of public goods such as health, transport and education should relate to advice on experts and the extent which they match the choice that society could make if it could speak. This requires complex interactions between knowledge, public opinion and political direction.

So how did policymakers then deal with the economic hit to Britain's economy? First identify the shock: the coronavirus has affected nearly all economies and exposed them to the risk that globalisation, which dominates modern economic production, will not only be disrupted but may also have to change in radical ways. This means the shock is not only about the incidence of the virus and the mortality rate but also imparts disruptive news about future patterns of production. In this case, the macroeconomic policy playbook gives some clear guidance on what to do: shore up demand and allow the economy to adjust slowly to its new level of productive capacity. If you provide people with a clear signal as to that level of support then the damage and the costs of change will tend to be substantially mitigated.

In terms of demand management, so far so good.

Much has been done to foster confidence. The crisis triggered a co-ordinated response by monetary, financial and fiscal policies. On Budget day we had a £50 billion emergency cut in bank rate, a new SME term funding scheme and a relaxation of the counter-cyclical buffer. On the following Tuesday, the Chancellor moved even further away from his arbitrary fiscal rules and announced support to business worth some 15 per cent of GDP and nearly 70 per cent of outstanding business loans. And the following day the Bank of England engineered a further emergency cut in Bank Rate to 0.1 per cent and reignited the quantitative easing programme, with a further £200bn or nearly 10 per cent of GDP. Subsequently both arms of policy have been further flexed

Even that may not be enough and requests for state support from firms - what economists call the supply side - may start to come thick and fast. And these may be hard to resist from the travel, tourist and hospitality sectors, as well as supporting key workers distributing and carrying in the gig economy. The key here is the co-ordination of the various policy arms to the same objective of shoring up demand and helping the supply side adjust. But note all these interventions mean that the state has ratcheted up in size with more public debt, to around the size of one year's national output, with even more of it held by the Bank of England along with directed lending to firms and an insurance network that will resemble industrial policy on a scale not seen since the 1970s.

### DID WE ASK FOR A BIGGER STATE?

The uncertainty tab has been picked by the state. And socially we may see much more of the

same. How we manage an infectious health crisis when there are substantial herding effects to confront may also lead to more direct state control. One initial strategy was to allow the spontaneous spread of the virus to build up so-called 'herd immunity'. The herd would eventually act as a barrier to the spread of the virus. The argument ran that even though this might lead to more deaths in the short run, it would limit deaths in the longer run. The alternate strategy of imposing a quarantine, it was argued, would lead to lower deaths now but not allow herd immunity to develop which would lead to more deaths in the future. In economic terms, we had to choose a point on the trade-off.

But confronting the actions of the herd is about actually creating a groupthink that pushes the group in the right direction. Individuals will tend to place a significant weight on what they think others will do in response to a policy, rather than simply following the policy signal. The success of any policy thus depends on which endpoint the herd latches onto. That will require clearer signalling, explanation and direction by the state.

In order to decide on the best policy strategy to limit the health impact of the virus, we need to understand how the outcomes are affected by the way that individuals and families interact with each other's responses rather than just the policy intervention itself, where what also matters is the likely consistency, or credibility, of the policy treatment.

So if I think individuals are not interested in taking the personal risk of developing herd immunity and/or that the government is unlikely to carry out its plan consistently when the deaths mount, I will cancel plans to

attend gatherings and selfimpose my own travel restrictions. In February and March as people decided to act in accordance with their view of what everyone else will do rather than what the government suggested, the more liberal policy floundered. Instead the government had to follow the popular lead and order bars, restaurants, theatres and museums to close their doors because the herd had decided to stay at home. But now when we open those same bars and restaurants, if people do not believe they are safe or are concerned that may yet lose their jobs, the economy may still not recover that much. The interaction of policy with data and beliefs is key to the outcomes.

And so here again in order to confront the choices of the herd, more direct state involvement may occur with the possible requisition of businesses or premises that may otherwise be redundant in the face of the virus, whose assets could prove valuable in handling the consequences of a large increase in the numbers of infected people. Hotels could be converted into hospitals or care centres and restaurants could be hubs for food delivery.

We may have witnessed the point at which government actions will tend to enlarge the reach of the state into everyday lives. Co-ordinated economic policy actions also suggest more direct state involvement in the market economy. The state is being ratcheted up. This not only implies more tax to support the larger state, but it is a way of confronting and corralling the herd in the internet age. The new era of an enlarged state taking back control may only just be beginning. □