Macroeconomic policy during the coronavirus epidemic

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Summary

- This paper summarizes the relevant economic literature to date, combining SIR models and macroeconomic models and discussing the consequences of the pandemic for fiscal and monetary policy.

- SIR models imply that our fight against the pandemic will only succeed if we are able to achieve a long-term reduction of the reproduction number.

- Macroeconomic epidemiological models highlight the mutual interaction between the spread of the infection and human economic behaviour. They show that there is a negative relationship between the depth of the economic recession and the rate at which the epidemic spreads. They also reveal that the epidemic creates negative externalities implying that spontaneously limiting activities is an inadequate response.

- The economic consequences of the pandemic are modelled as a mixture of supply and demand shocks; it is not entirely clear which type of shock will dominate. While the negative supply shock came first, the demand shock may end up dominating because certain sectors are hit harder than others.

- The macroeconomic literature also points out that the pandemic affects different groups of people to different extents: for example, quarantine measures affect young people and

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people with lower incomes more than others. The epidemic thus has significant consequences for the redistribution of income and consumption.

- In brief: governments' primary task is to implement public health measures that can flatten the epidemic's curve sufficiently to ensure that the health crisis connected with the spread of the coronavirus does not exceed the capacity of the given country's health system. These measures will necessarily contribute to worsening the economic crisis.

- During this stage of the crisis, in which fiscal policy plays an essential role, it is necessary 'to do whatever it takes' to maintain the majority of the economy in a viable state. Monetary policy will play only a secondary role during this phase.

- The longer and more serious the health crisis, the worse the economic crisis will be: it may also start to manifest itself in the form of a financial crisis, exchange rate crisis etc., which may then demand more drastic fiscal policy measures and greater coordination between fiscal and monetary policies.

- This pandemic and the economic crisis it has given rise to are global crises. They cannot therefore be overcome in isolation in one country or another, but demand coordinated efforts from the most developed countries and proper aid for the less developed countries, with the international and supranational institutions (IMF, WB, ECB, EU and others) playing a substantial role.

**Figure 3: The fraction of the population currently infected over time**

*Fraction of the population with an active infection over 18 months under different values of $R_0$, held constant over the entire 18 month time period*