

Dr. Edoardo Gallo Associate Professor University of Cambridge Magdalene College Cambridge, CB3 0AG

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To CERF Board Members:

This is the report on progress for the "Contact tracing, quarantine, and financial activity" project which I am pursuing during my CERF Fellowship.

This research project aims to theoretically and experimentally study the trade-off between the extent of financial/economic activity and the containment of the COVID-19 epidemic with a combination of contact tracing and quarantine. In particular, the objective is to understand how individuals' decisions to perform activity fluctuates depending on the epidemiological situation and the choices of others in different institutional set-ups. The focus is on investigating whether a *mandatory* contact tracing and/or quarantine system leads to a welfare improvement compared to an *optional* one. The project sits at the intersection of economics, finance and epidemiology using a combination of theory and online experiments to address a topical question with a wide-ranging impact for society.

We have completed the theoretical part of the project. This consists of both analytical and simulation-based results that inform the design of the experiment. We have also completed the design of the experiment and coded it using oTree.

A set of pilots has shown that the online interface works and we are able to conduct interactive sessions lasting almost one hour. The results are also encouraging in terms of testing the theoretical predictions and finding novel behavioral responses.

I have presented the results of the work undertaken during my latest CERF tenures at invited seminars (University of Technology Sydney, Queensland University of Technology, University of Bologna, Paris School of Economics, University of Amsterdam, Université Paris 1 Panthéon-Sorbonne, University of Oxford, Cambridge-INET, Università Cattolica – Milan, University of East Anglia) and specialized workshops (BiNoMa Workshop on the Economics of Networks, SAET Conference).

Yours ever,

Edoardo Gallo