Covid-19 Projects Registry

1. Title:
Mitigation of risks of Covid-19 contagion and robotisation: Evidence from Italy

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3. Abstract:
The rapid and dramatic diffusion of the Covid-19 epidemic in Italy was tackled by the Italian government with social distancing measures and with the suspension of all economic activities, but "essential" sectors. A lively policy debate on more refined criteria to choose what activities to allow and to suspend in the future led INAIL (National Institute for Insurance against Accidents at Work) to develop a measure of the risk of contagion in the workplace. In this paper we exploit this novel source of information about the risk of contagion in the workplace to study, for the first time, the cross-industry relationship between the estimated risk of contagion at work and the adoption of robots, so as to test the hypothesis that robotisation may facilitate social distancing and lower the risk of contagion. The analysis, which includes various controls of possible automation-related confounding factors and addresses possible issues of endogeneity, provides evidence that industries employing more robots per worker in production tend to exhibit a lower risk of contagion due to Covid-19. Results and policy implications for the selection of suspension criteria are discussed.

4. Data description:
We use data for Italy at the three-digit industry level on the risk of contagion (taken from the National Institute for Insurance against Accidents at Work, INAIL), robot adoption (taken from the International Federation of Robotics, IFR), ICT use (taken from the National Institute of Statistics, ISTAT)

5. JEL codes for the project:
I19, O33

6. Key-words:
robotisation, Covid-19, SARS-CoV-2, risk of contagion

URL to site with paper:
https://sites.google.com/site/maurocaselli/research?authuser=0