Title:
The physical cost of the COVID-19 lockdown for non-professional athletes.

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Abstract:
We analyze the participation of non-professional athletes (NPAs) to sporting events (road cycling or running) that take place annually in Italy or the UK (further countries may be added later, depending on data availability). The COVID-19 lockdown inhibits or reduces training practices. This may condition negatively the athletes’ performance in these events. When the lockdown will be over, competitions will resume and, presumably, NPAs’ performances in each event will be inferior in comparison to previous years. We expect this to be true for events that will take place in the first few months after the end of the lockdown. The reduced performance (e.g.: the increase in the time required to complete a given road track) may be interpreted as a measure of the physical cost of the lockdown.

Data description:
--Phase 1: Using scraping techniques, we plan to assemble a series of datasets (one for each recurring event) and to identify those NPAs that have participated recurrently (at least twice) in each event. The data set will include the competition time and other available characteristics of each participant. These data will be made suitable for panel analysis. Where feasible, an estimate of both individual and average (for each age/gender group) annual improvement/decay of the performance will be obtained.
--Phase 2: After competitions resume, new performance data will be collected for all those events already included in the preliminary phase. The data assembled in Phase 1 will be updated to include those NPAs that have additionally participated in the post-lockdown competitions (in the second half of 2020 and first months of 2021). For those athletes, the difference between the predicted performance (on the basis of the pre-lockdown analysis) and actual performance will be interpreted as a measure of the physical cost of the lockdown, attributable to reduced training.

JEL codes:
C8; I10; Z2.

Key-words:
Sport data; Physical activity; Health economics; Data scraping; Panel data analysis.