1. Title
Measuring social distancing: An empirical analysis using geo-location data from smartphones.

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3. Abstract
This research project uses anonymized geo-location data from 60 million mobile phone users in Brazil to quantify the impact of coronavirus lockdown measures on social distancing. The results confirm that the current share of the population staying home is lower than the target set by the public authorities to combat the spread of COVID-19. Using difference-in-difference and panel data regression to evaluate the determinants of social distancing, this paper confirms a statistically significant association between political support for Bolsonaro and social distancing. Since the Brazilian president is urging the population to ignore the COVID-19 “hysteria” and get back to a normal routine, the impact of social-distancing rules on the circulation of people is statistically significant lower in municipalities with a higher share of Bolsonaro voters.

4. Data description
Social Distancing Index from In Loco: The In Loco uses large-scale geo-location data based on network signals (GPS, Wi-Fi and Bluetooth) and on-device sensors from a population of 60 million smartphone users in Brazil.
Data present the level of adherence to social distancing in cities, states and neighbourhoods. Based on this information government authorities can direct efforts to the most critical neighbourhoods. The data is strictly anonymized and does not enable any inference of the user’s personal data, thus fulfilling the requirements set out in Brazilian law for data processing.

5. JEL codes for the project
H12, I12, I18, D72.

6. Key-words
COVID-19, social distancing, behavioural change, geo-location data, Brazil.