Uncovering the effects of COVID-19 on wellbeing and economic decision-making

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Abstract:
To counter the public health emergency caused by the spread of COVID-19, “stay-at-home” executive order have been issued in most states across the U.S.. Because of the social distancing measures, the fear of income and employment losses and the fear of friends, family or oneself becoming infected, COVID-19 poses massive burdens on individuals’ mental well-being and stress levels. According to existing literature and our own preliminary work, such increased stress levels affect individuals’ decision-making in risky environments, their choices over time dated payments, their willingness to donate to charities, and their honesty when provided the opportunity to cheat for personal monetary gain. If COVID-19-induced stress has a similar impact on preferences and choices, it could impact a range of outcomes such as health, borrowing and savings, and human capital formation. It could, then, exacerbate changes in mental well-being and trigger a poverty cycle or trap with long-term consequences for well-being, economic-decision making, and poverty. In this research project, we will use a survey and a field experiment to quantify the impact of COVID-19, by investigating the following three questions: 1) What are the effects of COVID-19 on stress, mental and physical well-being, and preferences that are key determinants of health, income, and growth? 2) Do participants believe in the effectiveness of the strategies to slow the spread of COVID-19 and, what is the confidence in the institutional bodies responsible for these strategies? and 3) What are the welfare effects of a pandemic such as COVID-19? How much money and how many years of life would participants give up in order to avoid exposure to a future pandemic similar to COVID-19?

We will use a survey and a field experiment, built on an ongoing study aimed at assessing the impact of stress induced by traffic and congestion on economic preferences and decision-making. The survey has several unique features that will allow us to quantify the non-monetary costs of a pandemic, such as COVID-19. First, the survey measures how exposure to COVID-19 affects self-reported levels of stress, life satisfaction, and mental well-being. Additionally, with the field experiment we elicit individual specific measures of time and risk preference, honesty, and prosocial/altruistic behavior, to examine whether and how stress induced by COVID-19 affects economic preferences and decision-making. Results from the study will inform the on-going debate on stability of preferences and how preferences respond to temporary shocks, such as the COVID-19 pandemic. Finally, we contribute to the poverty trap literature by disentangling the role of stress and income effects on changes in preferences and economic decisions. To do so, we will compare the effects of COVID-19, which may affect both stress and income through changes in emploment and/or hours worked, to the effects of traffic and congestion, which impact stress, but not income.

Data description:
To recruit participants, we will draw a random sample of 7,500 individuals from voter registration data covering the Birmingham metropolitan area in Alabama, US. The selected sample receives personalized invitation letters to participate in an online survey. The online survey is structured into three parts. The first part is identical to two prior survey waves, conducted in August and December 2019. This allows us to compare choices before and after the outbreak of COVID-19. This first part elicits participants’ stress levels, life satisfaction and mental wellbeing as well as sociodemographic characteristics and changes in daily routines. Further, as in prior waves, we will use standard incentivized experiments to gather measures of participants’ risk and time preferences, altruism and moral choices. The second part extends the prior survey by adding questions eliciting participants’ beliefs about the effectiveness of different strategies to slow the spread of COVID-19, trust in institutional bodies and main source of information and news. To investigate the welfare effects of COVID-19, the third part extends the prior survey to include two decision tasks. In one decision task, we elicit participants’
willingness to pay to avoid a future pandemic using the contingent valuation method. In the other task, we ask participants on the years of lifetime they are willing to forgo to avoid continued exposure to COVID-19 using the time trade-off method.

**JEL codes:**
C93, D01, D91, I31

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COVID-19, stability of preferences, risk preferences, time preferences, present bias, altruism, cheating, stress, life-satisfaction, trust in government, welfare assessment, willingness to pay, field experiment