1. **Title:** The Short-Term Effect of COVID-19 on Employment and Wages

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3. **Abstract**
The COVID-19 epidemic has had tragic human consequences felt beyond China and other infected countries. In addition from being a human tragedy, COVID-19 is also an economic tragedy. The central questions in this paper are: (1) What are the short-term impacts of COVID-19 on employment and wages? (2) Are there larger effects for states with a greater number of COVID-19 cases and deaths? (3) Do the economic consequences vary across demographic groups, union status, and immigration status? (4) What are the short-term impacts of COVID-19 on self-employed workers? (5) Are there larger effects for relatively more “risky” occupations? (6) Are there smaller effects for individuals in occupations who can easily work from home? To answer (5) and (6), we built indexes using data on exposure to disease, physical proximity to other people and how easily occupations can work from home using pre-COVID-19 data on method of transportation to work.

4. **Data description**
Unfortunately, the CDC is not currently publishing disaggregated data at the day or week-level for each state. For this project, we thus manually collected data on COVID-19 cases and deaths from each state's Department of Public Health (or equivalent) or other governmental sources. For states without publicly available data, we rely on local news reports.

We match our COVID-19 data with the Current Population Survey (CPS) from Integrated Public Use Micro Samples (IPUMS). The CPS is conducted by the Bureau of Labor Statistics (BLS) and is a monthly survey of 60,000 eligible households. The CPS provides a large sample size of workers and individual characteristics such as age, education, race, and marital status and labor market characteristics such as labor force participation, employment, unemployment, hours of work, earnings, occupation and industry. The survey questions refer to activities during the week that includes the 12th of the month.

We will also study the impact of COVID-19 on self-employed workers. There are two groups of self-employed workers in the CPS: incorporated (those who work for themselves in corporate entities) and unincorporated (those who work for themselves in other entities). We will study the impact of COVID-19 on both.

A housing unit in the CPS is interviewed for four consecutive months and then interviewed again for four additional months after 8 months out of the sample. We will use data from 2009 to 2020 for some analysis but mainly focus on 2016 to 2020.

The CPS is administered using a probability selected sample of about 60,000 occupied households. The survey questions refer to activities during the week that includes the 12th of the month.

Our occupational measures of exposure to disease or infection and physical proximity will be from the Occupational Information Network (O*NET) survey data. We will complement these indexes by creating an index capturing how easily occupations can work from home using data from the American Community Survey 2014--2018.

We then merge these indexes with our data from the CPS after converting its occupation codes into SOC equivalents.
5. **JEL CODES**: I15, I18, J21

6. **Keywords**: COVID-19 - unemployment - wages - remote work - risky occupations