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3. Abstract:
Our research proposal is two-fold, consisting of a reduced-form analysis and a structural analysis. The ultimate goal is to develop and estimate a model that has all the necessary ingredients to capture the two-way interaction between the pandemic and the economy, including an epidemiological model, social interactions, home production, and liquidity constraints on households and firms. We can then use the model to make forecasts of both the health and economic consequences of various health policies, monetary policies, fiscal policies, and liquidity provision to households and firms. To do so, we need to estimate numerous parameters, like “R0”, the rate at which infected people spread the virus to others, and how R0, and in general social interactions, respond to recent changes in policy (e.g., shelter-in-place policies). We plan to carry out reduced-form analyses comparing different locations, exploiting policy differences across time and space. States, counties, and municipalities enacted non-pharmaceutical interventions (NPIs) at various times as the pandemic unfolded. We plan to exploit the differential roll out of those policies across time and space to understand the impact on social distancing, individuals participating in the market (going to establishments) and the effect on hours and employment for establishments.

4. Data description:
US Data from SafeGraph (on anonymized cell phone movements) and Homebase (on payroll data from firms).

5. JEL Codes: E32, I18, J60

6. Keywords: Pandemic, Non-pharmaceutical interventions (NPI), macroeconomy