## **Quantitative Macroeconomics**

Raül Santaeulàlia-Llopis UAB and Barcelona GSE Homework 1, due Monday Sep 28 at 8.30am

## Question 1. Labor Market and Covid

- 1. Compute (and plot) the time series of the monthly employment rate in the U.S. As source of data go to IPUMS and download the latest available CPS monthly data. Detrend and deseasonalize to show the effect of COVID19 in your estimates for year 2020.
  - Redo by education group as <HS, HS, College and > College.
  - Redo by industry (for example, create two groups of industries according to their ability to telework).
  - Redo by occupation. Hint: Find an interesting way to split occupations (2 or 3 groups) that you think is useful to learn the effects of COVID19.

Discuss your all your results.

- 2. Redo the previous item for average weekly hours. Discuss your results.
- Is the behavior of aggregate hours driven by employment or by average weekly hours. Decompose using percentage deviations from the predicted value of these items. Discuss your results.
- 4. Redo for wages (or earnings).
- 5. Redo for your own country. Discuss difficulties (if any) in getting the data. Discuss your results.