Questions? Contact John Robertson or Ellyn Terry

WAGE GROWTH TRACKER: REPLICATION AND FURTHER ANALYSIS

These instructions provide details for how to replicate the Atlanta Fed's Wage Growth Tracker and get started with further analysis.

SETUP INSTRUCTIONS

First, create the following three folders on your computer:

- WageGrowthTracker\programs
- WageGrowthTracker\Data\rawdata
- WageGrowthTracker\Data\processeddata

Second, download the Atlanta Fed's CPS dataset, saving it to the 'WageGrowthTracker\rawdata' folder

- Directly download the STATA (.dta) version of the file.
- If you would like to download only a subset of variables or dates, navigate to the Kansas City Fed's CADRE's CPS page, select "sign in," then "Google Login." Then, under schema, select "Harmonized Variable and Longitudinally Matched [Atlanta Federal Reserve] (1976–Present)" and use the interactive tool to select variables and dates. The CADRE CPS page also contains a data dictionary for the dataset.

Third, download and save the following three STATA programs to the 'WageGrowthTracker\programs' folder (you can download a .zip file of the programs here):

- **Create_WGT_groups_usingcadre.do**
- **Unweighted_WGT_usingcadre.do**
- **Weighted_WGT_usingcadre.do**

REPLICATE THE WAGE GROWTH TRACKER

Open the three programs in STATA. Run **Create_WGT_groups_usingcadre.do** to create a dataset with the various groups used for different cuts of the Tracker (saved in the 'rawdata' folder). Then run the other two programs (in either order) to create the Tracker time series data (saved in the 'processdata' folder). The **Unweighted_WGT_usingcadre.do** program produces three datasets–the unweighted individual level Wage Growth Tracker data for each group are saved to *wage-growth-data_unweighted.dta*, the time series of specific moments of the unweighted data (mean, median, 25th percentile, etc.) are saved to *wage-growth-data_unweighted collapsed.dta*, and smoothed versions of the time series data as 3-month and 12-month moving averages are saved to *wage-growth-data_unweighted_smoothed.dta*. The **Weighted_WGT_usingcadre.do** program produces comparable datasets to the unweighted program but first applies weights to the data to match certain characteristics of the employed population each month ("*wage-growth-data_weighted_smoothed.dta"*), and characteristics of the employed population in 1997 ("*wage-growth-data_weighted_97_smoothed*.dta").

Note that the CPS dataset on CADRE also underlies the Atlanta Fed's Labor Force Participation Dynamics web page. To learn about some other ways you can use this dataset see this macroblog post.

GET STARTED WITH FURTHER ANALYSIS

Example 1—**A weighted version of the Wage Growth Tracker data that adjusts only for demographics**:

The weighted versions of the Tracker on the website adjusts the distribution of the WGT sample to match that of the employed population. Specifically, we adjust for differences in the demographics distribution (age, education, sex) and the job mixture (industry and occupation) of the employed populations. Suppose instead you want to weight the data by only demographics. To do this, edit the "**Weighted_WGT_usingcadre.do**" file, and on line 59 replace "*secgroup occgroup*" with " ". This modified program will produce the two weighted series using only the demographic information you specified.

Example 2—**Generate Wage Growth Tracker data for a different demographic group**:

The program "**Create_WGT_Groups_usingcadre.do**" creates several categorical variables. For instance, the variable '*agegroup'* specifies three age categories: "16-24," "25-54," and "55+". Suppose instead, you want to look at wage growth for people aged 25-44. One way to do this is to edit the "**Create_WGT_Groups_usingcadre.do**" file and change the definition of the *agegroup* variable accordingly.