

# Fiscal Stimulus in a Monetary Union: Evidence from U.S. Regions

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## Instructions for Replication of Results

The accompanying packet contains all the data sets and program files that are necessary for replicating tables and figures in the paper. We have provided data sets coded from various original data sources in the folder **coded data**. These data will be called in the **preamble** Stata program files that prepare appropriate data sets for regressions. The Stata program files for regressions are in the folder **do files**. Folder **for regressions** saves intermediate data sets for different regression analyses. Upon successful execution of these do files, regression outputs will be saved in **tables** folder. Program files for the model part are in folder **matlab codes**. The figures are all directly created in Excel file **Figures for Paper**, which can be found in the root folder.

Note that the directories in all the do files are defined as locals, so please modify the locals so that the main directory is where you have saved the packet. To successfully output tables, **outreg2** is needed. One can install this module by typing “`ssc install outreg2`” in Stata command window. For more detailed descriptions of data sets and program files, please see below:

### *In folder “coded data:”*

**fiscal\_stimulus\_coded.dta:** This data file is coded from various data sources including annual primary military spending data, subcontract data, population data, state outputs data, employment data, etc.

**cpi\_ACCRA\_reg.dta:** This is the CPI data from ACCRA at regional level.

**cpi\_delnegro\_reg.dta:** This is regional level CPI data calculated from the state level CPI data. The original CPI data was constructed by Macro Del Negro (1998).

**cpi\_regional2.dta:** This is the regional CPI data from BLS. The reason we also publish these regional CPI data is that we constructed our main data set “fiscal\_stimulus\_coded” at the state level, and analyses are done at both state and region levels. To keep consistency among the “preamble” prior to analyses, these regional CPI data are not merged until other variables are aggregated at regional level.

**outputshare.dta:** This contains data on shares of sector output over the entire sample period. These numbers are used to construct “weights” in Table IV.

### *In folder “do files:”*

**Preambles:** These do files use files from “coded data” folder and prepares data sets in “for regression” for analysis.

**Table II\_III Row 1 preamble\_states.do:** Prepare for the results in row “Prime Military Contract” and states columns in Table II and Table III. This file is also a preamble file for Table I and Table V.

**Table II\_III Row 1 preamble\_regions.do:** Prepare for the results in row “Prime Military Contracts” and regions columns in Table II and Table III.

**Table II\_III Row 2 preamble\_states.do:** Prepare for the results in row “Prime Contracts plus Military Compensation” and states columns in Table II and Table III.

**Table II\_III Row 2 preamble\_regions.do:** Prepare for the results in row “Prime Contracts plus Military Compensation” and regions columns in Table II and Table III.

**Analysis do files:** These do files creates the results in the tables. Table I.do, Table{II, III, IV}\_states.do, Table{II, III, IV}\_regions.do, Table V.do

### *In folder “matlab codes:”*

**Functions** needed for the programs are “gensys.m,” “qzdiv.m,” “qzswitch.m,” “VarImpulse.m,” and “VarSimulation.m.” **Programs** that produce the results reported in Table VI - Table IX: “runBasic.m,” “runBasicGHH.m,” “runBondsOnly.m,” “runCapitalGHH.m,” and “runHetCapitalGHH.m.” Please find below the detailed instructions on how to change the parameters to reproduce results in Table VI - Table IX, respectively.

**Table VI**

Program to run: runBasic.m

| Row | $\alpha$  | $\rho_G$ | Monetary policy       | NoTaxes | BalanceBudget |
|-----|-----------|----------|-----------------------|---------|---------------|
| 1   | 0.75      | 0.933    | Taylor basic          | 1       | 0             |
| 2   | 0.75      | 0.933    | Constant real rate    | 1       | 0             |
| 3   | 0.75      | 0.933    | Constant nominal rate | 1       | 0             |
| 4   | 0.75      | 0.85     | Constant nominal rate | 1       | 0             |
| 5   | $10^{-6}$ | 0.933    | Taylor basic          | 1       | 0             |
| 6   | $10^{-6}$ | 0.933    | Taylor basic          | 0       | 1             |

**Table VII**

Program to run: runBasicGHH.m

| Row | $\alpha$  | $\rho_G$ | Monetary policy       | NoTaxes | BalanceBudget |
|-----|-----------|----------|-----------------------|---------|---------------|
| 1   | 0.75      | 0.933    | Taylor basic          | 1       | 0             |
| 2   | 0.75      | 0.933    | Constant real rate    | 1       | 0             |
| 3   | 0.75      | 0.933    | Constant nominal rate | 1       | 0             |
| 4   | 0.75      | 0.50     | Constant nominal rate | 1       | 0             |
| 5   | $10^{-6}$ | 0.933    | Taylor basic          | 1       | 0             |
| 6   | $10^{-6}$ | 0.933    | Taylor basic          | 0       | 1             |

**Table VIII**

Row 1 is the same as row 1 in Table VI. Row 4 is the same as row 5 in Table VI.

Program to run for rows 2, 3, 5, and 6: runBondsOnly.m

| Row | $\alpha$  | FederallyFinanced | LocallyFinanced |
|-----|-----------|-------------------|-----------------|
| 2   | 0.75      | 0                 | 1               |
| 3   | 0.75      | 1                 | 0               |
| 5   | $10^{-6}$ | 0                 | 1               |
| 6   | $10^{-6}$ | 1                 | 0               |

**Table IX**

Please note that the results from running `runHetCapitalGHH.m` will not exactly replicate the results in the published version of the paper. This is because we have subsequently corrected small errors in this program. Please refer to the Erratum associated with our paper for details about this.

| Row | Program to run                  | $\alpha$  |
|-----|---------------------------------|-----------|
| 1   | <code>runBasicGHH.m</code>      | 0.75      |
| 2   | <code>runHetCapitalGHH.m</code> | 0.75      |
| 3   | <code>runCapitalGHH.m</code>    | 0.75      |
| 4   | <code>runHetCapitalGHH.m</code> | $10^{-6}$ |