Replication files for: Identifying Modern Macro Equations with Old Shocks

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1 Sample code

The folder `SampleCode` provides a simple illustrative code for computing Almon-lag based IV estimates and $AR_{a,s}$ robust confidence bounds. The code is written for the baseline equation

$$y_t = \gamma_b y_{t-1} + \gamma_f y_{t+1} + \lambda x_t + u_t \ ,$$

and uses a polynomial function of the lagged instruments to compute the IV estimates. Confidence bounds are computed by inverting the $AR_{a,s}$ statistic for each parameter over a grid $[-10, 10]$ with step-size 0.01. The function `SampleMain.m` is the main file that is supported by the `fSubSet2.m` function which computes the value of $AR_{a,s}$ under the subset null hypothesis.

2 Replication

The folder `EmpiricalStudy` contains the replication files for the empirical results. All data series used are stored in `Data_QJE.xlsx`

- Table III and Figures I-II-III are computed by the matlab code `RomerRomer.m`. The indicator `iForce` selects the forcing variable, either the unemployment gap or the output gap.

- Table IV and Figure V are computed by the matlab code `HFI.m`. The indicator `iForce` selects the forcing variable, either the unemployment gap or the output gap.

The folder `SimulationStudy` contains the replication files for the simulation results.

- Tables I and II are computed by the matlab code: `SimulationStudyMain.m`. This requires Dynare to simulate data from the structural model discussed in Appendix D. The required code is given in `HybridPC.mod`. The variances given in Table I are part of the output of `HybridPC.mod` and the results from Table II are found in `RejectionFrequencies.mat`.

- Tables 1,2 and 3 in the online web-appendix are computed by the matlab code: `SimulationStudyAppendix.m`. The data are simulated using `SimulateData.m` and the results are stored in `RejectionFrequenciesLARGE.mat`.