

## Homework No. 1, Econ 955

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Due Date: February 28, 2011

Download the data of the Conley and Taber paper and its matlab code. Then answer the following question. The data and matlab code are provided by Taber.

**Question 1** (25 pts) Derive the difference in difference estimation of the Georgia Hope policy effect as described in the paper using the standard error specified by cluster method in stata, with state controls as just Georgia and other states. Do the same with the full set of state dummies as state controls and the cluster method in stata base don states.

**Question 2** (25 pts) Then, do the same with full set of state dmmies as state controls and Conley and Tabler method.

**Question 3** (25 pts) Generate policy randomly for 50% of the states with randomly drawn starting year of the policy, and estimate the policy effect, with the full sets of state controls, and estimate the policy effect. with standard error using the cluster method in state based on state.

**Question 4** (25 pts) Choose one state and assume the policy effect starting year of 1993, and derive the policy effect with cluster method in stata with the state controls as just policy state and other states with state cluster method, and with full sets of state dummies as state controls and for standard error cluster methods based on states, and with full sets of state dummies for state controls with Conley and Taber method.