ECON 5350 Problem Set #6

Due: Thursday, October 15, 2009

Collect quarterly U.S. macro data on CPI inflation (π_t) and unemployment (u_t) between 1970:1 and 2005:4. Using GAUSS, estimate the following three Phillip's curves using a least squares criterion:

- $\pi_t = \beta_1 + \beta_2 u_t + \epsilon_t$
- $\pi_t = \beta_1 + \beta_2 (1/u_t) + \epsilon_t$
- $\pi_t = \beta_1 + \beta_2 (\frac{u_t^{\lambda} - 1}{\lambda}) + \epsilon_t$.

Graph the data and estimated regression equations (this can be done in Microsoft Excel). Perform a t test for the significance of β_2 and discuss the results. Calculate the goodness of fit for the three models and use macro theory to explain the results.