ECON 5110 Problem Set #5

Due: Tuesday, May 6, 2014

Use the annual data in corn.xlsx to predict corn prices using three different versions of the cobweb model:

- rational expectations;
- naïve expectations;
- recursive least squares learning.

The cobweb model is an extension of the one presented in class. The model includes shift variables for demand and supply:

$$\begin{aligned} d_t &= \alpha_0 - \alpha_1 p_t + \alpha_2 x_t + \nu_t^d \\ s_t &= \beta_0 + \beta_1 E_{t-1}^* p_t + \beta_2 z_t + \nu_t^s \\ d_t &= s_t, \end{aligned}$$

where x_t is annual real GDP growth and z_t is a weather-related variable. Which model fits the data best? Discuss your results.