

UNIVERSITY OF NORTH CAROLINA
Department of Economics

Economics 275
Homework 3
Due October 11, 2000

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Fall 2000

The files strips99.doc, strips99.dat, tips99.doc, tips99.dat strips00.doc, strips00.dat, tips00.doc, and tips00.dat are available by anonymous ftp from host ftp.econ.duke.edu in directory pub/arg/data or click “Browse ftp site” on the course web page. The files strips99.dat and tips99.dat contain the data used in the yield curve example used in lecture to introduce the material in Chapter 1. Nonlinear Regression. The choice of a stochastic specification for the price level used in lecture,

$$\log p_T - \log p_t \sim N \left\{ (\rho^m - 1) [\log p_t - a - bm], \sigma_p^2 \left(\frac{1 - \rho^{2m}}{2 - 2\rho^2} \right) \right\}.$$

has little to recommend it other than it fits the data better than some other choices.

Assignment:

Do one of these two items:

1. Critique this choice of stochastic specification of the price level. Set forth the economic considerations that govern a choice of a stochastic specification for the price level. Choose one that satisfies your criteria, fit it to strips99.dat and tips99.dat, and compute the implied inflation forecast.
2. Run the lecture example on the strips00.dat and tips00.dat data, reproduce all the graphs shown in lecture, and compute the implied inflation forecast.