

Autocorrelation

Lecture 19

- Durbin's h-statistic
- Autoregressive Distributed Lag model & Finite Lags
- Koyck Transformation
- Testing in the presence of higher order serially correlated forms.
- Seasonality

- (Note: should also look at Chapter 13 of the book: Stock and Watson as well as indicated parts of Chapter 12 from the reading list).

Returning to the Durbin-Watson Econ 140

- Last time we talked about how to test for autocorrelation using the Durbin-Watson test
- We found autocorrelation in the model in L_18.xls:

$$Y_t = a + bX_t + e_t$$

- DW test gave figure of 0.331. D_L critical value= 1.475
- Reject $H_0: \rho = 0$
- Indication of positive first order autocorrelation.
- Note, no lagged regressors in the model.
- If we reject null - need an estimate for ρ for generalized least squares estimation.