## ECONOMICS 6002 CLASS 18 DYNAMIC ECONOMETRIC MODELS

- 1. Distributed Lag structures
  - a. Polynomial (Almon) Distributed Lags
  - b. Geometric (Koyck) Distributed Lags
    - i. Partial Adjustment Models
    - ii. Adaptive Expectations Models
  - c. Autoregressive (Rational) Distributed Lags
- 2. Lagged Dependent Variable Models: Statistical Properties
  - a. A lagged dependent variable is neither fully exogenous, nor fully endogenous. It is generally called *predetermined*.
  - b. OLS is consistent, but biased in small samples, if disturbance is serially independent
    - i. The bias is weak, and OLS is usually the estimator of choice
  - c. OLS is inconsistent if disturbance is autocorrelated
- 3. Lag Length specification
  - a. Simple-to general vs general-to-simple
  - b. Hypothesis testing vs model selection criteria

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