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Directed Readings in Time Series and Longitudinal Data Analysis

Week 1: Review of OLS and issues in the use of time series data

Dougherty, Christopher. 1992. *Introduction to Econometrics.* pp. 3-34.

Gujarati, Damodar. 1988. *Basic Econometrics*, 2nd Ed. Chapter 12.

Week 2: Difference Equations

Hamilton, James D. 1994. *Time Series Analysis.* Chapters 1 and 2.

Sprague, H. 1981. One-Party Dominance in Legislatures. *Legislative Studies Quarterly* 6:259-285.

Week 3: Box-Jenkins/ARIMA Models

Hamilton, James D. 1994. *Time Series Analysis.* Chapter 3.

Harvey, A. C. 1993. *Time Series Models*, 2nd Ed. Chapter 2.

Maddala, G. S. The Box-Jenkins Approach. Chapter 2, pp. 2-5. Typescript: Ohio State University

Li, R. P. and W. R. Thompson. 1978. The Stochastic Process of Alliance Formation Behavior. *American Political Science Review* 72:1288-1303.

Quinn, D. P. and R. Jacobson. 1989. Industrial Policy Through Restrictions on Capital Flows. *American Journal of Political Science* 33:700-736.

Weeks 4 and 5: Integration and Unit Root Tests

Maddala, G. S. Unit Roots ands Weiner Processes. Chapter 2, pp. 5-32. Typescript: Ohio State University.

Dickey, D. and W. A. Fuller. 1979. Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association* 74:427-31.

Phillips, P. C. B. and P. Perron. 1988. Testing for a Unit Root in Time Series Regression. *Biometrika* 75:335-346.

Kwiatkowski, Denis, P.C.B. Phillips, Peter Schmidt and Yongcheol Shin. 1992. Testing the Null Hypothesis of Stationarity against the Alternative of a Unit Root. *Journal of Econometrics* 54:159-178.

Sims, C. A. 1988. Bayesian Skepticism on Unit Root Econometrics. *Journal of Economic Dynamics and Control* 12:463-474.

Week 6: Multivariate Models: Intervention Analysis and Distributed Lag Models

Gujarati, Damodar. 1988. *Basic Econometrics*, 2nd Ed. Chapter 16: "Autoregressive and Distributed Lag Models".

Box-Steffensmeier, Janet M. and Tse-Min Lin. 1995. A Dynamic Model of Campaign Spending in Congressional Elections. *Political Analysis* 6.

Box, G. E. P. and G. C. Tiao. 1975. Intervention Analysis with Applications to Economic and Environmental Problems. *Journal of the American Statistical Association* 70:70-79.

Harvey, A. C. 1993. *Time Series Models*, 2nd Ed. p. 152-163.

Alt, J. 1986. Political Parties, World Demand, and Unemployment. *American Political Science Review* 79:1016-1040.

Rasler, K. and W. Thompson. 1985. War and the Economic Growth of the Major Powers. *American Journal of Political Science* 29:513-538.

Wood, B. D. and R. W. Waterman. 1991. The Dynamics of Control of Bureaucracy. *American Political Science Review* 85:801-828.

Week 7: Causality

Granger, C. W. J. and P. Newbold. 1974. Spurious Regressions in Econometrics. *Journal of Econometrics* 2:111-120.

Freeman, J. R. 1983. Granger Causality and the Time Series Analysis of Political Relationships. *American Journal of Political Science* 27:327-358.

Granato, J. and R. M. Smith. 1994. Exogeneity, Inference, and Granger Causality: Part 1, the Stationary Case. *The Political Methodologist* 5:24-28.

Granato, J. and R. M. Smith. 1994. Exogeneity, Inference, and Granger Causality: Part 2, the Case of Integrated Regressors. *The Political Methodologist* 6:23-26.

Reuveny, R. and H. Kang. 1996. International Trade, Political Conflict/Cooperation, and Granger Causality. *American Journal of Political Science* 40:943-970.

Week 8: Vector Autoregression Models

Hamilton, J. D. 1994. *Time Series Analysis*. Chapter 11.

Freeman, J. R., J. T. Williams and T. Lin. 1989. Vector Autoregression and the Study of Politics. *American Journal of Political Science* 33(November):842-877.

Williams, J. T. and B. K. Collins. 1997. The Political Economy of Corporate Taxation. *American Journal of Political Science*, 41(January): 00-00.

Week 9: Cointegration I

Granger, C. W. J. and R. F. Engle. 1991. Introduction. In Granger and Engle, *Long-Run Economic Relationships: Readings in Cointegration*. New York, Oxford University Press, pp. 1-16.

Murray, Michael P. 1994. A Drunk and Her Dog: An Illustration of Cointegration and Error Correction. *The American Statistician* 48(February):37-39.

Engle, Robert F. and Clive W. J. Granger. 1987. Co-integration and Error Correction: Representation, Estimation and Testing. *Econometrica* 55:251-276.

Engle, R. F. and B. S. Yoo. 1991. Cointegrated Economic Time Series: An Overview with New Results. In *Long-Run Economic Relationships: Readings in Cointegration*, Engle R. F. and C. W. J. Granger, eds. New York: Oxford University Press.

Week 10: Cointegration II - Error Correction Models

Beck, Nathaniel. 1993. The Methodology of Cointegration. *Political Analysis* 5:237-247.

Durr, Robert. 1993. An Essay on Cointegration and Error Correction Models. *Political Analysis* 5:185-228.

MacKinnon, James G. 1991. Critical Values for Cointegration Tests. In *Long-Run Economic Relationships: Readings in Cointegration*, Engle, Robert F. and Clive W. J. Granger, eds. New York: Oxford University Press.

Ostrom, Charles and Renee Smith. 1993. Error Correction, Attitude Persistence, and Executive Rewards and Punishments: A Behavioral Theory of Presidential Approval. *Political Analysis* 5:127-183.

Williams, John T. 1993. What Goes Around Comes Around: Unit Root Tests and Cointegration. *Political Analysis* 5:229-235.

Week 11: Special Topics I: Structural Breaks, Unit Roots, and Cointegration

Perron, Pierre. 1989. The Great Crash, the Oil Price Shock, and the Unit Root Hypothesis. *Econometrica*. 56:1361-1401.

Gregory, Allen W., and Bruce E. Hansen. 1996. Residual-Based Tests for Cointegration in Models with Regime Shifts. *Journal of Econometrics* 70:99-126.

Caldeira, G. A. and C. J. W. Zorn. 1998. "Of Time and Consensual Norms in the Supreme Court." *American Journal of Political Science* 42(July):874-902.

Week 12: Special Topics II: Fractional Integration (with an introduction to frequency domain processes)

Harvey, A. C. 1993. *Time Series Models*, 2nd Ed. Chapter 6 (especially sections 6.1-6.4, 6.7, 6.10)

Granger, Clive W. J. 1980. Long Memory Relationships and the Aggregation of Dynamic Models. *Journal of Econometrics* 14:227-238.

Box-Steffensmeier, Janet M. and Renee Smith. 1996. The Dynamics of Aggregate Partisanship. *American Political Science Review* 90(September):567-580.

Weeks 13 & 14: Presentation of Research Papers