Economics 880 Fall 2008 Bruce Hansen

Economics 880 is an empirical research paper course designed for second year Ph. D. students in economics.

The objective of the empirical research paper is to provide you with experience in applying the statistical and econometric methods examined in Economics 709-710. Your task is to take a published article of interest, replicate its numerical results, and then extend the analysis in some way. Possible extensions include different data and modifications of model specification.

The paper should run about 15-20 pages (double spaced) and should <u>not</u> contain raw computer output. The objective of your project should not be to calculate many numbers, nor to perform a long series of tests, but rather to learn something about some interesting parameter(s). The paper will be evaluated with respect to clarity of exposition, thoroughness of description of the data and methods, competence in using the methods, and thoughtfulness in interpreting results. Complexity of economic theory and econometric methods <u>does not</u> carry weight in the evaluation. Appropriateness of the theory and methods to the project does carry weight. So does good writing. The paper <u>must</u>:

- 1. Specify an econometric model.
- 2. Identify at least one parameter of central interest in the model.
- 3. Describe the data.
- 4. Describe the estimation method.
- 5. Explain why the estimation method is appropriate for estimation of the econometric model and the parameters of central interest.
- 6. Report parameter estimates and standard errors for the estimates.
- 7. Compute a confidence interval for a parameter of interest.
- 8. Execute a hypothesis test concerning a parameter of interest.
- 9. Interpret the economic (or sociological, or financial) magnitude of the parameters, in particular focusing on those of central interest.

Examples of parameters of interest/tests include

- 1. Constant returns to scale (for Cobb-Douglas, the sum of a set of coefficients)
- 2. The response of inflation to an increase in interest rates, or the change in the response between the pre-1980 and post-1980 periods
- 3. Testing whether an estimated demand system is homogeneous of degree zero in prices
- 4. Testing whether a single set of parameters is adequate for modeling behavior of two demographic groups (old vs. young, black vs. white)

Examples of methods of interpretation include:

- 1. Computing how many more years of schooling we expect a girl to complete if her mother graduated from college rather than just high school, and explaining whether, in your view, the resulting value is large and important or small and unimportant.
- 2. Computing how much less variable inflation would be if an alternative monetary policy were followed, and explaining whether, in your view, the resulting value is large and important or small and unimportant.
- 3. Computing the upper bound on the welfare effect on the representative consumer of a change in zoning regulations, and explaining whether, in your view, the resulting value is large and important or small and unimportant

Econ880 Schedule

Monday, September 8. Class meets, 2:30pm.

Monday, October 6, 5:00PM. Proposal Due

The objective of the proposal is to protect you against getting started on an infeasible or unacceptable project. The proposal should be about 3-4 pages (double spaced). Be sure to include:

- -Title of project, as well as your name, e-mail address and office phone number
- -Complete citation for the article or other previous research that forms the starting point for your analysis. (A photocopy of the article would be appreciated.)
- -Statement of the objective of the project.
- -Indication of the estimation method to be used.
- -Description of your data source, including approximate sample size. Make sure that the data you want are actually accessible and that estimation by the proposed method is computationally feasible.
- -Specification of a central parameter of interest.

Number the pages of the proposal, to facilitate me making references.

Even if the article that forms the starting point is attached, the proposal should be self-contained; it should not be necessary for me to read the attached article to find variable definitions, and certainly not to understand what you plan to do.

In cases where the proposal is not acceptable, a suitably revised proposal must be submitted.

Class Presentations

November 10, 17, and 24

These class meetings will be devoted to student presentations of their work in progress. Each student should be prepared to explain the project succinctly in a presentation of 5 to 10 minutes, followed by comments and questions as time permits. Clearly written handouts should be distributed, and prepared slides should be used: given the shortness of time, blackboard writing should be avoided.

I will assign presentation times (randomly).

Submission of paper

For fall grading, turn it in by Friday, December 12. Otherwise, turn it before Monday, February 9, at 5:00PM.

There is no penalty for handing in the paper after December 12 (your temporary course grade will be "Incomplete"), provided that I receive the final submission by February 9. Along with your paper, please hand in a photocopy of the article that forms the basis for your own paper.

SOME PREVIOUS ECONOMICS 880 PAPER TOPICS

The Significance of Reputation Effects in the Indian Software Industry

The Effect of Reduction of Standard Working Hours on the Employment and Total Working Hours Consumption risk sharing in models with non-traded goods

Returns to a GED: Controlling for Selection into GED Status Using Pre-GED Wages

The Aggregate Production Function and Human Capital

Exchange Rate Regimes and the Response to External Shocks

The SETAR Approach to U.S. Inflation Rates

Patterns of Subprime Mortgage Lending and the Community Reinvestment Act

Measuring the Market Power in the British Electricity Spot Market after 15 Years of Privatization **Emerging Markets Business Cycles**

Empirical Test of the Balassa-Samuelson Theory Using Heterogeneous Panel Cointegration Tests Nominal Rigidity and Exchange Rate Persistence

Global Production Sharing: Empirical Evidence of Its Contribution to the Growth of World Trade Currency Crisis Differences in Emerging Markets

How do the Real Exchange Rates Move? Evidence from U.S. Real Exchange Rates

The Gravity Model and Trade in Services

Welfare Impact of Discount Airlines

Excess sensitivity of consumption

Expected returns and risk factors in the Russian stock market

An out-of-sample analysis of exchange rate volatility

Analysis of self-employment in the US in the 1980's and 1990's

The effects of industrial and university R and D on technological innovation

Income mobility in the United States

Determinants of child care wages in Dane county

Inflation and price variability: evidence from Turkey

Testing the separability of electricity supply utilities in the US

Variance in stock market returns, dividend yield, and earnings price ratio

Credit rationing and housing loan demand

Natural monopolies and economies of scale: a case study of the Korean Electric Company

Chinese consumption function: theory and empirical analysis

Wage dispersion and the stock market: implications of technological change in a matching model framework

Testing nonlinearity and Asymmetry of Japanese GDP

Brother correlations in permanent income: evidence from the National Longitudinal Survey of Youth

House specialization: a comparison of cohabitors and married men

Quality matters: a semi-parametric analysis of productivity in the Indian iron and steel industry

An empirical analysis of the effects of credit card ownership on the demand for money

Roommate effects and classroom performance among UW students