

## **Economics 475: Econometrics**

### **Final Project Description**

Your final project, worth 45% of your grade, will be to perform your own regression analysis and present your findings in written form due on the last day of class (when the final is normally scheduled).

Ultimately, what I would like to see in this paper is an estimation of the relationship between at least two variables. That is, to estimate how X influences Y. Don't take this to mean you only have to find two variables; hopefully you've already learned that omitting other variables can bias the estimated relationship between X and Y.

You may use any data that you can collect or create. I will be more than happy to share with you some data I use in my own research. Your project must test some theory which is clearly stated in your project. Ultimately the goal of econometrics is to support or refute hypotheses, thus your project will be graded on the clarity of your hypothesis and your use of econometrics to test this hypothesis.

Remember, there exist a number of possible outlets for good economic research project—for instance there is a student paper presentation/conference this year in Tacoma complete with prize money (see my webpage for a couple of examples). Further, there are a number of journals that specialize in student publications. Thus, think carefully about the data you choose to analyze.

A quality research paper takes time and structure. The format that I look for in these papers is:

1. An introduction describing the question/issue you are addressing and concluding with a statement of the hypothesis you will test.
2. A discussion of the relevant literature that has been written on the ideas you are addressing
3. A description of the theory you are testing as well as a description of how this theory fits in with the findings of the research described in part 2.
4. A description of your data (this includes a verbal description and a statistical description). This section should tie in with your theory; that is you should answer why this data is appropriate to use in measuring your data.
5. Your econometric findings. You should be sure to discuss your original findings as well as any corrections for violations of classical assumptions.
6. A conclusion that reviews your theory in light of your econometric findings.

Good economic writing is good writing in general. Thus be concerned with issues such as sentence structure and grammar. Further, most students writing their first econometrics paper tend to focus on the technical aspects of the paper while paying short attention to the theories under consideration. Although this course is one that focuses on the technical aspects of estimating relationships, good economic writing never stresses the technical aspect at the expense of the theory being tested. For good examples of this, I refer the student to "The Deadweight Loss of Christmas," by Joel Waldfogel. In short, remembering who your audience is will always improve your paper.

I expect you to include your regression findings in your paper and your original data and programming files delivered electronically to me. Your paper should be submitted physically (i.e. no electronic submissions will be accepted). Your data cannot be e-mailed to me, but instead can be included on a thumb drive, disk, or other method. Your data is due at the same time as your paper.

One issue which occasionally arises has to do with students using time series data rather than cross sectional data for their final project. As will be clear as the quarter progresses, 475 is a class that focuses on cross sectional (and, to a smaller extent, panel) data. WWU offers another class that focuses on time series data (470). Because I am not teaching the time series tools, you should ignore time series projects. If you have a question about the category your project falls into, be sure to ask.

You will be graded on the quality of your writing, the clarity of your hypothesis, the quality of your regressions, and your application of those regressions to the research question your paper addresses.

Finally, some words of advice. Invariably I have students spend too much time looking for the “right” data set. Although the right data is important to long term research, finding a perfect data set rarely happens nor is it good policy to for students to spend precious weeks throughout the short quarter looking for data. Rather, I would have you choose a data set early (like the first week of the quarter) and then apply what we learn throughout the course to your data. When it comes time to compile your results for your paper, you will find much of your work to be finished already.