Econ 420 – Neff

Final Paper

Fall 2012

Total: 100 points

Due Thursday, December 6 in class

NOTE: late work will NOT be accepted. No exceptions!

1. Part 1 – Lab

For the final paper, you will be modeling U.S. Construction Employment. The data is posted on Beachboard under “Course Documents” in the folder labeled “Final Paper”. The file only contains the series to be modeled. If you need a time trend or seasonal dummy variables, you will need to create them.

I expect everyone to do his or her own work. This is not a group project.

Estimate the “best” model of the series by using the techniques learned in this class. Once you have estimated the model you like best, do a one-step-ahead **static** forecast of construction employment for the month of November. Important: you must save your equation by clicking the “Name” button on the regression statistics window and giving your equation a name. You should also save the correlogram of your residuals in the same way, and make sure that your forecasted series is accessible. Failure to complete these step will result in a loss of points. Finally, you should save your eViews workfile under your first and last name.

You must submit your workfile to me through Dropbox on Beachboard no later than noon on December 6. Details will follow.

You may want to print some supporting documentation to attach to your write-up. REQUIRED: The regression statistics page. Other possible attachments include a line graph of the data, correlograms of the data and residuals, residual plot, etc. A general rule: if you are going to refer to the chart in your paper, it should be attached and appropriately referenced.

2. Part 2 – Write-up

* Analyze and report your results by writing a short report. The report MUST be typed, double-spaced, and be between 2-5 pages in length. At the top of the first page, please write your forecast of construction employment for November 2012 and box it in so that it is easy to find. If you do not complete this step, your forecast will not be considered in the contest described below.

As a reminder, a thorough analysis will include a(n)

* A brief discussion of the series you are modeling, and any special issues you think may apply (e.g.is the series expected to be highly seasonal?)
* discussion of what the line graph shows
* discussion of what the series correlogram shows
* whether your series has a unit root, and how you corrected for this (if applicable)
* evaluation of the model, including mention of the R2, AIC, BIC, p-values of coefficients and R2, residual plot and correlogram, and anything else you think is relevant.
* The forecast, including a confidence interval.

3. Grading

Your grade will be determined as follows:

Quality of model construction 40 points

(some examples of deductions: including irrelevant or inappropriate variables,

not reducing the residuals to white noise, not providing me with the complete eViews workifile, etc.)

Analysis of model and forecast 40 points

(some examples of deductions: poor description of methodology, lack of understanding of test statistics, failure to justify model, forecast done incorrectly, cited documents not attached, no confidence interval, etc.)

Quality of writing 20 points

(some examples of deductions: poor grammar, poor organization, unclear writing, typos, etc.)

TOTAL 100 points

Forecast Contest:

The most recent value of the series will become available on the morning of December 7, 2012. 10 points of extra credit will be awarded to the student(s) with forecasts closest to the actual value.