

## ASSIGNMENT 1 ECO6193

Due date: Thursday – September 25<sup>th</sup>, 2014 (at the start of class)

Note: I will be going over the answers in class on September 25<sup>th</sup>, 2014. As such, late assignments will not be accepted.

The assignment must be typed. Handwritten assignments will not be accepted. Your table of summary statistics (see problem 2d) should be presented as is typically done in economic papers. See Table 1 in Brochu and Zhou (2009) for an example.

You are to load the April, 2014 Canadian Labour Force Survey (LFS). It can be accessed through the ODESI database that is available through the library website. You should download both the LFS dataset and also the codebook. The codebook describes the variables that are available in the LFS files.

Please note that your assignment must be typed. You must also include a copy of your STATA log file. The log file must be generated using one STATA do-file

1. Provide one short paragraph describing the LFS dataset (100 words or less). Make sure to address the following issues: What is the purpose of the LFS? What is the population of interest? What is the unit of observation (i.e. individual, firm, province or country)? Are you dealing with cross sectional or longitudinal data? How many observations are there in the April 2014 LFS?
2. Assume that you are interested in measuring the effect of gender on wages; you want to see if there is gender discrimination in the Canadian labour market.
  - a) Provide a short paragraph describing your population of interest. Make sure to justify the restrictions imposed in your sample. See the data section in Brochu and Zhou (2009) for an example of how to go about it.
  - b) Create a sample that reflects your population of interest. How many observations were dropped following each restriction you imposed? How many observations are in your restricted sample?
  - c) Create a working dataset that consists of a gender dummy (a female or male dummy, your choice), ten province dummies, three education dummies, the hourly wage (in dollars), and the sample weight. Your education dummies must be mutually exclusive, and exhaust the sample of interest. The same holds true for your province dummies. Please note that the working dataset should not have any missing observations, i.e. all your variables should have the same number of observations.
  - d) Create a table of summary statistics (mean and standard deviation) for your variables (i.e. gender, provinces (10), education (3) and hourly wage. The first column is for the unweighted statistics, and the second is for the

weighted ones. Briefly interpret your summary statistics. Does the use of weights dramatically affect your findings?

**Important:**

Quoting the work of others word-for-word (with the appropriate citation and the use of quotation marks) is rarely done in economic papers. As such, you must use your own words in both the assignments and the essay.

It should also be noted that plagiarism will be strictly enforced, and this holds true for both the assignments and the essay. You are not, for example, allowed to cut and paste sentences or part of sentences from other sources and call it your own. Please do not hesitate to contact me if you have any doubt as to what is, and is not, plagiarism.

**References**

Brochu, P. and L. Zhou (2009) 'Is job insecurity on the rise? Evidence from Canadian perception data,' *Canadian Journal of Economics* 42(4), 1305-1325.