Department of Economics
Carleton University
ECON 3220 - Assignment
Winter 2016
Due: Beginning of Class on March 11th, 2016

You can work on this on your own, or with one partner. If there are $N >= 2$ names on the submitted work, then the maximum (percentage) grade available to each person is $200/N$.

Features of a good assignment:

- Demonstrates an understanding of the relevant concepts and tools.

- Demonstrates an ability to find information.

- Clearly written and well organized.

- Spelling mistakes, typos and grammatical errors are either very infrequent or non-existent.

Some grading details.

- If there are more than 10 typos, spelling mistakes, or grammatical errors, two percentage points will be deducted from your grade for each typo, spelling mistake or grammatical error after the 10th. Make sure that you proofread your work.

- You have two months to do this assignment. Late assignments receive a grade of zero.

- Handwritten assignments and/or handwritten charts will receive a grade of zero.

The Penn World Table provides purchasing power parity and national income accounts converted to international prices for 189 countries for some or all of the years 1950-2010. You can find version 7.1 (189 countries, 1950-2010, 2005 as base year) of this data (and documentation) at

http://www.rug.nl/research/ggdc/data/pwt/pwt-8.1

Click on the link "Online data access tool" You will then see an HTML interface from which you can select data. Using the interface, select the following two variables for four countries and as many years as you can between 1950 and 2012:

- Population (in millions).

- Expenditure-side real GDP at chained PPPs (in mil. 2005US$)

For countries, select Canada, one OECD country that exports a lot of natural resources, one OECD country that does not export a lot of natural resources and a fourth country of your choice, that is not an OECD country but does rely on natural resource production. The idea for this assignment is that you will compare Canada with another developed economy that exports natural resources,

a developed country that does not export a lot of natural resources and developing country that exports natural resources. You will need to do a bit of research about different economies to select your countries for this assignment.

Once you have your data, get it into Excel or another software package that you can use to make charts. Divide the Real GDP series by the Population series to get Real Per Capita GDP.

Now do the following:

1. Explain why the countries that you have chosen fit the requirements for inclusion on this assignment. Provide some facts on natural resource export dependence. Provide sources for that information.

2. For each of the three variables (Real GDP, Population and Real GDP Per Capita), create a chart showing the series for the four countries. Make sure the your chart has an informative title, labels for the axes and a legend that helps the reader interpret the chart. Note: if the countries differ greatly in terms of the magnitude of a variable you may need to use more than one chart for that variable.

3. From your charts, rank the three countries according to a) size, b) standard of living, c) extensive growth and d) intensive growth. Are the rankings different if you do them for two sub-periods, 1950-1973 and 1974-2012?

4. If we interpret Real Per Capita GDP as a measure of the level of economic development, for your non-OECD country, by how many years does its development lag Canada's 2012 level of economic development? How about the other OECD countries' economic development? By how many years does Canada lag, or lead, your other OECD countries in terms of level of development?

5. With reference to the charts you have prepared:

   (a) Has Canada's abundance of natural resources resulted in greater development than otherwise? (Hint: compare Canada to the other OECD countries)

   (b) Does an abundance of natural resources lead to a high standard of living?

6. Do your charts provide empirical support for the "Staples Thesis" or Sachs and Warner's "Resource Curse"? To answer this question, you will need to read:

   • Melville H. Watkins (1963) "A Staple Theory of Economic Growth" *Canadian Journal of Economics and Political Science* 29, pp141-158.

   • Jeffrey D. Sachs and Andrew M. Warner (2001) "The Curse of Natural Resources" *European Economic Review* 45 pp827-838.