

**American University
School of International Service**

SIS 628: 007—Communicating Economics to Non-Economists

Jobs & Growth: Group Assignment (ANSWERS)

All assignments and exams should be submitted by email to ploungani@imf.org.

Please note that the email is an IMF address. Yes, you should send it to this IMF address. Yes, that means that you should *not* send it to the AU address. You can, *in addition to sending it to the IMF email*, send it through Blackboard but this is not essential.

This assignment should be sent by email to ploungani@imf.org by **5 pm on Feb. 6, 2019**. Your group should also prepare a PPT that you will present in class that day.

- 1) (10 points) Estimate the relationship between jobs and growth (i.e. Okun's Law) for Japan and Spain using the data provided. Estimate both the 'levels' version and the 'changes' version of the Law.

See spreadsheet.

- 2) (10 points) How well would you say Okun's Law holds in the two countries? Explain the reasoning for your answer.

Okun's Law holds well in Spain. The R^2 values are very high for both the levels and changes versions. For Japan, the Law holds well for the levels version (the R^2 is high) but not the changes version (the R^2 is low).

- 3) (10 points) What factors could account for the differences in how well Okun's Law holds for the two countries?

Temporary contracts are very prevalent among companies in Spain. When the economy is doing well, companies hire many workers on such contracts; when the economy is doing poorly, many of them are let go. Hence, the Okun coefficient, which measures how responsive the unemployment rate is to changes in the economy, is very high in absolute terms (0.8 or 0.9). In Japan, companies have a tradition of providing lifetime employment. When the economy is doing poorly, workers are not let go. But, by the same token, when the economy is doing well, companies are

cautious about hiring (because they realize that it won't be easy to let workers go if conditions worsen). Hence the Okun coefficient for Japan is small in absolute terms (about 0.1 or 0.2).

- 4) (10 points) How would you explain your answer to parts 2) and 3) above in plain English (e.g. to someone who does not have a background in economics)?

When the economy is doing well, companies feel there will be good demand for their products. They hire more workers to meet this demand, and this lowers the unemployment rate. When the economy is doing poorly, companies see demand weakening and lay off workers, thus raising the unemployment rate.

The extent to which companies hire or fire workers in response to changes in demand differs across countries based on their labor practices and culture.

In Spain, the norm is to hire many workers on temporary contracts. This means that companies hire a lot more workers when the economy is booming, knowing that if the economy slows down these workers can be let go easily (because they are on temporary contracts). This creates a very strong relationship in Spain between how the economy is doing and the unemployment rate.

In Japan, the norm has been 'lifetime employment'. Hence, when demand weakens, companies try not to fire too many workers; they may adjust in other ways like asking everyone to work fewer hours or assigning workers to other tasks or moving them to other locations where demand remains strong. When demand picks up, companies are cautious about hiring, knowing that letting workers go in tough times may be difficult; instead they may ask their existing workers to do overtime. Hence the relationship between how the economy is doing and the unemployment rate is weak.

You should prepare a Word document with your answers (Word Limit: 1600 words). You should also prepare a PPT to illustrate and explain your results to the class – you are free to choose what to show and how many slides to use as long as your presentation does not go over 15 minutes.

Both the Word document and the PPT should be sent to me by **5 pm on Feb. 6, 2019.**