

Answers to POLICY ASSIGNMENT 1 (30 points)

- 1) (5 points) What policy actions did the Fed and the Reserve Bank of Australia take in May 2019? Can you explain these decisions in terms of the Taylor Rule discussed in class?
- The Fed left policy interest rates unchanged. In terms of the Taylor Rule, the news on the ‘output’ side or the ‘inflation’ side was not significant enough for the Fed to feel inclined to change rates. The news on the ‘output’ side was mixed, though a bit better than the Fed had expected at its last meeting. Other things equal, this would have argued for the Fed to at least consider raising rates. The news on the ‘inflation’ side was that inflation remained well below the target of 2 percent. Other things equal, this would have argued for the Fed to at least consider lowering rates. With not much additional information—and with the information suggesting offsetting directions in any case—the Fed chose to stay put.
 - The RBA left policy interest rates unchanged. In terms of the Taylor Rule, the news on the ‘output’ side was that the economy seemed a bit weaker relative to conditions at the time of the last meeting, while the news on the ‘inflation’ side was that inflation was quite a bit weaker than expected. Both developments should have led the RBA to consider lowering rates, though the new developments in either ‘output’ or ‘inflation’ were not so dramatic as to necessarily require immediate action. In the end, the RBA may have decided that lowering rates before a national election was not wise (though they are unlikely to have stated this publicly); no central bank follows the Taylor Rule to a ‘T’ and impending national elections are one circumstance under which central banks may choose inaction unless economic circumstances really call for immediate action.

Note: Both central banks recently released the minutes of their meetings, which might be fun to skim.

- 2) (5 points) What policy action will the Bank of Canada take at its meeting on June 5? You should (i) predict the action; (ii) state the reasoning the central bank will give to explain its action. Your answer should be in the format of previous announcements (for example, their April 24 decision: <https://www.bankofcanada.ca/2019/04/fad-press-release-2019-04-24/>).

Notes on how I expected you to go about answering the question: The latest information available on the ‘output’ side before you had to turn in your assignment suggested that Canadian real GDP for the first quarter was going to be reasonably solid, after earlier indications that conditions were much softer. See for example: <https://www.fxstreet.com/news/canada-manufacturing-shipment-data-consistent-with-a-09-q1-gdp-growth-nbf-201905161832>. The Bank itself will have the advantage of seeing the 1st quarter GDP number before making its decision and it is likely to mention this in its statement—so in grading this assignment I looked for whether you mentioned the 1st quarter GDP release (even though, unlike the Bank, you would have to make a guess of what the number was likely to be). On the ‘inflation’ side, the latest information available to you was that there was a small uptick in inflation in April (see, for example: <https://www.cbc.ca/news/business/inflation-rate-april-1.5136520>) -- this isn’t enough of a change to make the Bank panic and raise rates. So basically, you had to make a judgment and prediction about the ‘output’ side: if you thought that was fairly weak, you would predict that the Bank would cut rates; if you thought the ‘output’ number was decent, you would predict that they would stay put. We’ll see what happens on June 5!

- 3) (10 points) In class, we discussed Okun's Law—the cyclical relationship between the labor market (employment and unemployment) and real GDP for the United States. Carry out a similar analysis to see how well Okun's Law holds for Tennessee and Louisiana.

See spreadsheet for regression results. Okun's Law holds well for Tennessee but not for Louisiana. For Tennessee, the R-square values of the regression are decent and the 'Okun coefficient' (the responsiveness of unemployment to output) is close to the national average. For Japan, the R-square values are abysmal and the Okun coefficient is very small and not statistically significantly different from zero.

Additional notes: A conjecture would be that this difference is due to Louisiana's dependence on oil production—it might be that variations in oil production can be carried out by varying the intensity with which (physical) capital is used but without needing too much variation in the labor input.

- 4) (10 points) In class, we discussed Okun's Law—the cyclical relationship between the labor market (employment and unemployment) and real GDP for the United States. Carry out a similar analysis to see how well Okun's Law holds for Spain and Japan.

See spreadsheet for regression results. Okun's Law holds very well for Spain and less so for Japan. In Spain, the R-square values of the regression are high and the 'Okun coefficient' (the responsiveness of unemployment to output) is large (in absolute terms). In Japan, the R-square values are lower and the Okun coefficient is small (in absolute terms), though it is statistically significantly different from zero.

Additional notes: The difference between the two countries may be due to the substantial use of temporary contracts in Spain and the tradition of providing 'lifetime employment' in Japan. This means that in Spain when demand falls, companies have the flexibility to fire workers (since many are on short term contracts) and to hire people easily when demand is high. This generates the Okun large coefficient (in absolute terms) in Spain: unemployment is very responsive to output conditions. In Japan, when demand falls, companies try to keep workers on and adjust through other channels; by the same token, when demand is high, companies don't rush out and hire workers since they know that they let them go easily in bad times. This generates a small Okun coefficient (in absolute terms) in Japan: unemployment is not very responsive to output conditions.