Prof. Valerie Ramey UCSD, Winter 2014 Econ 281 – 2nd Half

Project 3: Reproducing Beaudry-Portier (AER 2006) with New Data Due Friday March 14, 2014, 11 am

You may turn this homework in electronically. Please include your programs in the homework you turn in. As indicated in earlier e-mails and in class, you are encouraged to work together on this but you must turn in your own work.

- 1. I have collected all of the data for you in Beaudry_Portier_newdat.xlsx. So that you understand the data collected, quickly answer the following questions. Click cells in the Excel file to see links and formulas to answer the questions.
 - A. What is the source of the raw stock price data?
 - B. What is the source of the TFP data?
 - C. In the "finaldat" worksheet, I constructed the In TFP index in part by dividing another variable by 400. Why did I do that?
 - D. Are the functions "ln(x)" and "log(x)" the same in Excel?
 - E. The population series is a little different from the series used by Beaudry-Portier. What is the key way that it is different?
- 2. Run unit root and cointegration tests on lsp (log real per capita stock prices) and ltfp (log index of TFP). You can use whatever one's you prefer and whatever software you prefer. Do you come to the same conclusions as Beaudry-Portier about unit roots and cointegration?
- 3. Use Beaudry and Portier's specification (i.e. VECM with 5 lags) and two ways of identifying the technology shock to reproduce Figures 1 and 2. (Note For estimating the cointegrating vector, dynamic OLS (from Stock and Watson 1993 Econometrica) or the Johanssen method are preferable, but you can use OLS if you are short on time.) Briefly note how your results are similar to or different from those of Beaudry-Portier.