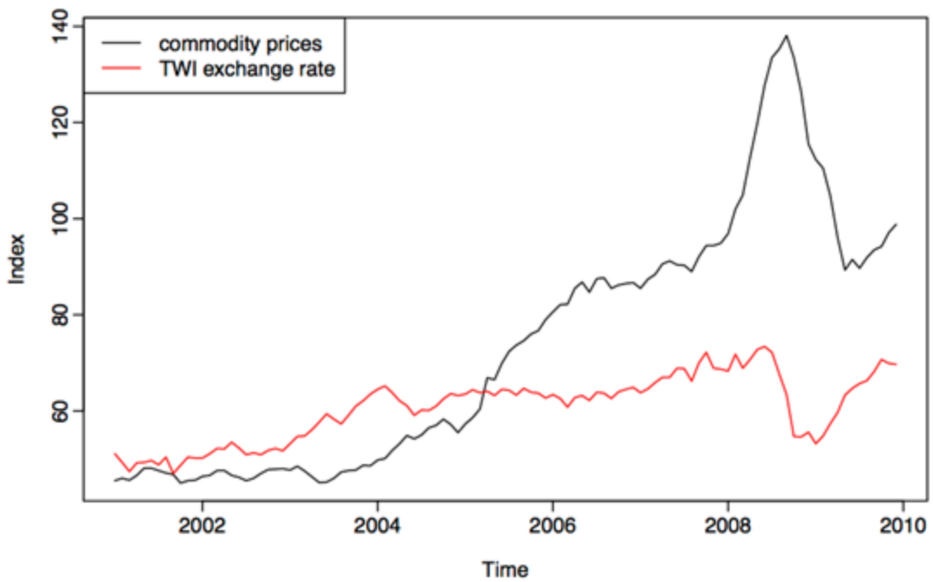
Introductory Macroeconomics

In-Tutorial #10
Week Starting 17th May 2021

Questions.

1. The following graph shows data on the average price of commodities (i.e., primary goods that Australia exports) and an index of Australia's trade weighted nominal exchange rate (foreign currency/AUD).[1] Explain why we may expect to see a positive relationship between commodity prices and the Australian trade weighted exchange rate? If anything, the TWI exchange rate leads commodity prices. That is movements in the exchange rate occur prior to movements in commodity prices. Why do you think that may occur?



2. Greece is a member of the Eurozone. It uses the Euro as its main currency. Hence, the Greek currency is fixed relative to other members of the Eurozone but the value of Euro fluctuates relative to other currencies. Hence we can view the Greek currency as being flexible relative to countries outside the Eurozone. Also note that for a prolonged period of time, the Greek government was spending more than it was raising in tax revenue. Creative accounting understated the size of government borrowing until the late 2000s before the real size of the government debt and deficit was revealed.

[1] A trade weighted nominal exchange rate is an average of the value of the Australian dollar against Australia's twenty largest trading partners. The weights reflect the importance of a country in trade.

(a) Suppose Greece had its own currency, say the Drachma, and a flexible exchange rate. Describe what would have happened to the exchange rate when the real size of the government debt was revealed? What effect would this change in the exchange rate have upon the real economy in Greece?

(b) Greece is a member of the Eurozone. What effect upon the Euro did revealing the size of government debt have upon the value of the Euro? What effect would this change in the exchange rate have upon the real economy in Greece?

(c) What do you think were the costs for Greece of joining the Euorzone, and what do you think have been the benefits?

3. We can think of Australia as a currency union. Each state in Australia uses the same currency. But different states in Australia have experienced different economic conditions over the last two decades. The mining boom has had beneficial effects for people in West Australia and Queensland. The decline of manufacturing sectors has had negative outcomes for people in South Australia and parts of Victoria and Tasmania.

   (a) What effect did the mining boom had upon the value of the Australian dollar?

   (b) What impact does this change in the Australian dollar have upon the real economy relative to an environment in which the Australian dollar was fixed?

   (c) If we look at economic performance across Australian states, there is much less variability in economic outcomes, than if we look at economic performance across European countries. For instance, unemployment rates in Australian states are much more similar than unemployment rates in European countries. Why do you think this is the case?

Solutions to In-Tutorial Work.

1. One of the major Australian exports are commodities and the price of commodities proxies, at least partly, for the demand for these commodities. An increase in the demand for commodities will be associated with an increase in demand for the AUD as foreigners will seek to import more commodities produced in Australia.

   Commodity prices are probably at least partly predictable based upon forecasts of world economic growth. During periods of high global growth, there is an increased demand for resources, and this leads to higher commodity prices.

   If people predict that the price of a financial asset will rise in the future then there will be an incentive to purchase the asset today (in the present) to achieve some capital gain from the increase in price. Applied to exchange rates, if people believe the AUD will become more valuable in the future due to higher predicted commodity prices, they will increase demand for the AUD today to try and achieve some profit from future AUD appreciation.

2. (a) If the Greek economy had its own currency and the real size of government debt was revealed, we would expect that there would be a large depreciation of the Drachma. The fact that the government would have a good chance of defaulting on debt, would reduce the incentive for foreigners to invest in the country and lower the exchange rate. The lower exchange rate would typically be beneficial for Greek firms seeking to export (their goods would now be relatively cheap) and beneficial for Greek firms trying to compete with foreign imports (foreign goods would now be relatively expensive).

   This change in the exchange rate would increase net exports and help raise the level of output in the economy.

   (b) Since Greece is a member of the Eurozone, the value of the Euro depends not only on the Greek situation but also on other economies such as Germany and Spain. Greece is a small member of the Eurozone, so large problems in Greece only have a moderate impact upon the value of the Euro. It may still depreciate and stimulate exports and reduce imports, but not to the extent that would happen if Greece had its own currency.

   Furthermore, countries within the Eurozone area have the same currency. Hence, although Greece may become more competitive as a result of devaluation of Euro relative to countries outside the Eurozone, it does not gain any competitive advantage from a depreciation relative to countries inside the Eurozone.

   (c) The benefits of joining the Euro have typically been associated with stable trade and capital flows associated with reduced exchange rate risk within the Eurozone. The costs for Greece of joining the Euro is that it has lost control, to a large extent, of domestic monetary policy which is now set European Central Bank in Brussels or Frankfurt.

3. (a) The mining boom has led to an appreciation of the Australian dollar. We can think of this in a demand and supply setting. There has been an increased demand of goods produced in Australia from overseas. This leads to an increase in demand of the AUD and an appreciation.

   (b) The appreciation of the Australian dollar reduced the demand for our exports and increased our demand for imports. This moderated to some degree the increase in output and reduced inflationary pressures.

(c) First, in the Australian economy, the federal government makes large transfers across states to equalise economic activity. If some states are booming they are taxed large amounts and if other states are in recession, they receive large transfers through unemployment benefits. These transfers (and other deliberate economic policy, like building submarines in South Australia) should make labour market outcomes more similar within a country. These mechanisms do not necessarily work within the Eurozone.

Second, the labour market is more integrated between Australian states than it is between European countries. In Australia, unemployed workers in a depressed region have the ability to move to regions where job prospects are relatively good. This should help equalise unemployment differences across regions in Australia. Workers are also able to move within the Eurozone, but the barriers of moving are larger. For example, language barriers are much more difficult to overcome in Europe, where a Greek worker may have to learn German to participate in the Berlin labour market.