

**Practice Problems D: Exchange Rates & Crises**

Revised: September 12, 2014

This will not be collected or graded, but it's a good way to make sure you're up to speed. We recommend you do it before the next class.

1. *Purchasing power parity for Big Macs.* The Economist reports the following data for local prices of Big Macs and US dollars in July 2014:

	Big Mac Price (Local Currency)	Exchange Rate (LCUs per Dollar)
Argentina	21	8.17
Brazil	13	2.22
China	16.9	6.20
Euro Area	3.68	0.74
Japan	370	101
United States	4.80	1.00

Notes: LCU = Local Currency Units

- (a) What is the dollar price of a Big Mac in each of these locations?
 - (b) Which country has the cheapest Big Macs?
 - (c) What exchange rates for the first three currencies would equate the dollar prices of Big Macs to the US price?
 - (d) Based on Big Mac prices, which currencies would you say are undervalued relative to the US dollar?
2. *Foreign exchange reserves.* Countries often buy and sell foreign currency as part of their day-to-day central bank operations.
- (a) Describe the central bank's balance sheet. Where do foreign exchange reserves appear?
 - (b) If private citizens choose to buy foreign currency from the central bank, what happens to the central bank's balance sheet? What limits how much of this the central bank can do?
3. *The trilemma in action.* In 1992, the Bank of England found that its commitment to maintain a quasi-fixed parity of the pound against the Deutschemark forced it to raise short-term interest rates during a recession. What were its choices? How does this illustrate the trilemma?

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4. *Crisis triggers.* Economic crises have been with us throughout recorded history. Although they often come as a surprise, their forms are familiar from past experience.
- (a) What are the classic crisis triggers?
 - (b) What indicators would you use to assess each source of crisis risk?
 - (c) What are the standard responses to each one?
 - (d) What would you do now if you were the benevolent dictator of the European Union?