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Econ 345 International Finance Prof. Kasa Fall 2016

PROBLEM SET 1 (Solutions)

1. (25 points). Read the article from *The Economist* entitled "Two Out of Three Ain't Bad", which is posted on the class website. According to this article, what is the open-economy 'policy trilemma'? Provide examples of countries that have chosen each corner of the trilemma triangle. Near the end of the article, it discusses recent research by Helene Rey, from the London Business School. In what sense does her work suggest that in the modern world, the trilemma might actually be just a 'dilemma' (i.e., countries really only have one choice)?

The Open-Economy Policy Trilemma refers to trade-offs that must be made when choosing among the following three desirable policies: (1) Stable exchange rates, (2) An independent monetary policy aimed at domestic macroeconomic conditions, and (3) Open capital markets that allow savers to achieve the highest returns, and borrowers to acquire funds at the lowest cost. According to the trilemma, a country can only choose <u>two</u>, not all three. Picking two requires you to sacrifice the third. We will have much more to say about the nature of these trade-offs later on. For now, you should just be aware of some real-world examples. Canada and the USA are examples of countries that have opted for (2) and (3), and therefore their exchange rates fluctuate in response to supply and demand changes. Hong Kong and the individual countries within Europe are examples of countries that have opted for (1) and (3). Hong Kong pegs its currency to the US dollar, while the individual euro countries have the ultimate fixed exchange rate (i.e., a common currency). As a result, they are not able to use monetary policy to set their own interest rates. Finally, China is the leading example of a country that has opted for (1) and (2). It has a fixed exchange rate (more or less pegged to the US dollar), and an independent monetary policy. To make this work, it must impose capital capital controls, that restrict the flow of money into and out of the country.

The research by Helene Rey cited by the article suggests that these days there might only be <u>two</u> options. The option of choosing (2) and (3) [open capital markets and an independent monetary policy] has largely disappeared in a world dominated by massive flows of private capital. Remember, the central bank can only really control <u>one</u> interest rate (e.g., the fed funds rate in the USA). All the other rates are 'spreads' over this rate. Rey argues that these days, a country's credit spreads are largely determined by US monetary policy. For example, although the Bank of Canada continues to alter its 'Bank Rate' in an effort to steer domestic credit conditions, its leverage in doing this has diminished over time as Canadian banks and businesses can increasingly tap into the US financial markets.

2. (25 points). Suppose Donald Trump gets elected. Nobody knows what this would mean. For the sake of argument, let's suppose he 'gets tough' with China and Mexico, and imposes barriers to US imports from those countries. Given what you know about the Balance of Payments, what might be the effect on the US financial account? How would this change in the US financial account affect US interest rates and investment spending? How would the change in interest rates affect the value of the US dollar, and how would this affect US imports?

If trade restrictions reduce the US current account deficit (by reducing imports), this will necessarily reduce the US financial account surplus (i.e., capital inflows into the US will decrease). Hence, another way of looking at it is that the same increase in the US current account could be be achieved if <u>China gets tough with the USA</u>. Suppose China decides to stop buying US bonds. US interest rates will rise and the dollar will depreciate. The depreciation of the dollar will reduce demand for Chinese exports, which is the equilibrating response to their reduced willingness to lend.

Either way, it is important to remember that any short-run changes in the current account might trigger market responses that ultimately offset them. For example, an increase in Net Exports will tend to raise spending and incomes, but this will increase money demand, which will then increase interest rates, which will then <u>appreciate</u> the exchange rate and crowd-out Net Exports (as well as crowding-out domestic investment). At the end of the day, net exports and output might change very little. Currency appreciation has nullified the effects of the import restrictions.

Clearly, keeping track of all these opposing forces is difficult. That's why it pays to learn the DD-AA model!