SIMON FRASER UNIVERSITY
Department of Economics

Econ 345 — Prof. Kasa
International Finance — Fall 2016

FINAL EXAM
(Solutions)

Questions 1-5. Answer True, False, or Uncertain. Briefly explain your answer. No credit without explanation (8 points each).

1. Because China has a fixed exchange rate, it cannot control its own money supply.

   TRUE/UNCERTAIN. *In general, this is true. However, there are a couple circumstances that would allow China to retain some control over its money supply, even though it fixes its exchange rate: (1) Capital controls, and (2) Sterilized intervention. For full credit, they should mention at least one of these qualifications.*

2. Currency crises are caused by greedy speculators.

   FALSE/UNCERTAIN. *Of course, crises <u>might</u> be caused by greedy speculators, but the point of what we discussed in class is that they might not be. According to 1st generation models, crises are caused by inconsistent macroeconomic policies. According to 2nd generation models, they could be caused by self-fulfilling doubts about the government's resolve to maintain the peg.*

3. Exchange rate devaluations increase domestic output.

   UNCERTAIN. *The key thing is whether the devaluation is <u>expected</u> or <u>unexpected</u>. Unexpected devaluations tend to increase output, since they basically amount to a monetary expansion. However, expected future devaluations tend to be contractionary, since they raise interest rates and depress spending. Bonus: An important real-world consideration is the extent to which the country has unhedged foreign liabilities. However, I'd be surprised if anyone mentioned this, since we didn't discuss it in class.*

4. China's output would be more stable if it allowed its exchange rate to be more flexible.

   UNCERTAIN. *It depends on the nature of the shocks. If China is mainly subject to real/DD-curve shocks, then flexible rates would produce more stability. However, if it is mainly subject to financial market/AA-curve shocks, then fixed rates would produce more stability.*

5. Monetary expansion in the USA causes output in China to fall.

   FALSE. *US monetary expansion produces lower interest rates in the USA. For China to maintain its fixed rate against the dollar, it must lower interest rates too. This increases output in China.*

   The following questions are short answer. 30 points each.

6. Since Trump's election, tensions between the USA and China have increased. There is concern that China will retaliate if Trump continues to provoke them. In particular, it is sometimes argued that China could threaten to sell its holdings of US Treasury securities. Use the DD-AA model to illustrate the effects of this policy on both China and the USA. Do you think it is a credible threat? What other policies could China enact at the same time that might make it more credible?

By itself, China's threat to sell US Treasury securities is not very credible, mainly because it would likely hurt China, and might even help the USA. If all it did was sell fx reserves, China's money supply would contract, and its AA curve would shift down. In response, China's currency would appreciate, interest rates would rise, and its output would fall. In the USA, the opposite occurs. Its AA curve shifts out (since R^* rises), and its currency depreciates. The weaker dollar stimulates US exports, and US output rises. There are two caveats, however: (1) US interest rates would rise in response to the sale of US Treasury securities, and this would likely shift the US DD-curve to the left, if spending depends negatively on interest rates, (2) China is a major market, and so if China's output falls, this would reduce demand for US exports.

There is a simple strategy China could follow to avoid being hurt by the sale of US securities. It could simply buy domestic assets to offset the sale of its US assets (ie, 'sterilize' the sale). This would prevent the money supply from falling, and might even prevent the RMB from appreciating. The RMB would still likely appreciate somewhat if there is a risk premium, since the public would be holding more dollar bonds, and fewer RMB bonds. With sterilzation, it is much more likely that the US is harmed by the sale, since the main effect would be higher US interest rates.

7. The European economies have been struggling in recent years. Many people blame it on their Monetary Union (i.e., the Euro). In fact, before the advent of the Euro many economists argued that it was going to be a mistake (at least in terms of narrow economic objectives). Using Mundell's Optimum Currency Area criteria, explain how economists came to this conclusion. What do you think Europe could have done differently to avoid its current difficulties?

   The first part of the question is straight from the notes. They should mention Mundell's four OCA criteria

   (a) *Extent of bilateral trade*
   (b) *Correlation of business cycles*
   (c) *Factor mobility*
   (d) *Fiscal transfers*

   Economists who evaluated European integration along these dimensions typically concluded that Europe fell short of the threshold that would yield net benefits from monetary integration, mainly because factor mobility and fiscal transfers were far lower than within the USA and Canada.

   The second part of the question is far more difficult and open-ended, so please be generous with partial credit. Of course, one simple answer is that they should have avoided a common currency in the first place! But given the monetary union, most people argue that fiscal policies needed to be more coordinated across countries. They tried to do this with the Growth and Stability pact, but it proved to be nonenforceable. Other people have argued that it is mainly Germany's fault, and that Germany should be more willing to monetize the deficits of countries experiencing large (temporary!) fiscal deficits. Germans would no doubt argue that deficits in countries like Greece and Italy were <u>not</u> temporary. But I guess what I was looking for was some combination of greater fiscal coordination, and more flexibility on Euro area monetary policy.