

SIMON FRASER UNIVERSITY
Department of Economics

Econ 345
International Finance

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MIDTERM EXAM
(Solutions)

Questions 1-4. Answer True, False, or Uncertain. Briefly explain your answer. No credit without explanation (10 points each).

1. Countries should avoid having current account deficits.

FALSE/UNCERTAIN. *For the same reason it can make sense for an individual to borrow (e.g., based on expectations of higher future income), it sometimes makes sense for countries to borrow. Of course, borrowing too much can produce trouble, and the same is true for countries.*

2. Expansionary fiscal policy causes current account deficits.

TRUE/UNCERTAIN. *Fiscal expansions raise interest rates and appreciate the currency. This will cause a current account deficit as long as the Marshall-Lerner condition holds.*

3. Higher foreign interest rates cause the domestic currency to depreciate.

UNCERTAIN. *This is true if the foreign real interest rate is higher. If foreign rates are higher because foreign inflation is higher, then the domestic currency would appreciate.*

4. Expansionary monetary policy in the USA reduces output growth in Canada.

TRUE/UNCERTAIN. *Expansionary monetary policy in the USA causes the US dollar to depreciate, which increases US net exports as long as the Marshall-Lerner condition holds. As a result, Canadian net exports decline, which tends to reduce Canadian output. However, there is an income effect at work too. Higher US output will also produce higher demand for Canadian goods, which may offset the decline produced by the higher price of Canadian goods.*

The following questions are short answer. 20 points each.

5. Suppose the 12-month forward price of the euro in terms of C\$ is 1.05 C\$ per euro. Suppose the spot price of the euro in terms of C\$ is 1.00. Next, suppose that currently the annual interest rate in Canada is 5%, while the annual interest rate in Europe is 2%. There are no transactions costs. Is there an arbitrage opportunity here? If so, explain exactly how you would take advantage of this situation to make riskless profits.

Covered Interest Parity requires

$$\frac{F}{E}(1 + R^*) = 1 + R$$

where F is the forward price of the euro, and E is the spot price. Substituting in the give information we find

$$(1.05)(1.02) > 1.05$$

Hence, the covered rate of return on the euro investment is higher, despite the lower interest rate. To make riskless profits you should borrow low and lend high, i.e., borrow as many Canadian dollars as

you can at 5%, convert them to euro at the spot rate, invest the euro at 2%, and simultaneously sell the euro proceeds at the current forward rate.

6. Britain recently voted to leave the EU. Although they are technically still in the EU, the effects are already being felt. The British pound has weakened, and contrary to many predictions, the economy seems to be doing pretty well (for the moment). Use the DD-AA model to illustrate how prospects of leaving the EU might actually produce positive short-run effects on the British economy. Do you think these effects will last? Again, use the DD-AA model to illustrate the longer term effects on Britain (i.e., after Britain formally leaves the EU).

Of course, this is a difficult question. What I'm really looking for is some story that makes sense within the context of the DD-AA model. The particular assumptions they make are not so important, so be generous with the partial credit. Here is one possible story - The current decline the pound is simply the result of expectations of a weaker pound in the future. An increase in E^e shifts up the AA curve, producing a current decline in the pound. This will tend to strengthen net exports and stimulate output, as you move up along the DD curve. Why might people expect a weaker future pound? Basically, because Britain will have less access to the EU market, in both goods and financial services. Reduced exports to the EU will produce a left shift in the DD curve, and weaken the pound. Note that no shift in the DD curve has happened yet, since Britain is still in the EU! So for now the effects on the British economy could actually be positive. But once the DD curve shifts left, British output may begin to suffer. (Note: A somewhat more sophisticated story was advanced by Krugman in one of his NY Times columns, which focused on financial services and the 'home market effect'. The basic idea is pretty similar though).

7. China has (approximately) a fixed exchange rate against the US dollar. It also has faster productivity growth than the USA. Use the Balassa-Samuelson model to explain why these two facts tend to create inflationary pressures in China.

Balassa-Samuelson implies that rapid productivity growth produces higher wages and prices in the non-tradeable goods sector (which must compete with the more productive tradeable goods sector for workers). Higher NT prices produce a real exchange rate appreciation. In countries with flexible exchange rates this can be accomplished by having the nominal exchange rate appreciate. However, in countries like China, with fixed nominal exchange rates, the only way to produce a real appreciation is for domestic inflation to be higher than foreign inflation.