SIMON FRASER UNIVERSITY
Department of Economics

Econ 345   Prof. Kasa
International Finance   Spring 2013

MIDTERM EXAM
(Solutions)

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

1. When a country's currency appreciates, its net exports increase.

   FALSE/UNCERTAIN. *If the Marshall-Lerner condition holds, this statement is false. However, it could be true if the Marshall-Lerner condition does not hold.*

2. When a country's interest rates increase, its currency appreciates.

   UNCERTAIN. *It depends on why the interest rate is increasing. If it's because the real interest rate is rising then the statement is true. However, if it's because expected inflation is rising then it is false.*

3. Rapid productivity growth causes current account deficits.

   TRUE. *By definition, $CA = S - I$. Rapid productivity growth will increase investment. At the same time, it will tend to reduce saving, since people expect their incomes to be higher in the future (assuming the productivity increase is expected to be persistent). The only way this could be false is if the productivity increase is temporary, which provides weak incentives to invest (since it takes awhile for capital to become productive), and at the same time would encourage saving, since incomes would be lower in the future.*

4. If Canada's annual interest rate is 2% and the U.S. annual interest rate is 4%, then investors must be expecting the Canadian dollar to appreciate by 2% during the next year.

   TRUE. *If Candadian interest rates are lower than US interest rates, then the only reason people would continue to invest in Canada is if they expect the Canadian dollar to appreciate, so that the exchange rate gain compensates for the lower interest rate. Of course, this assumes investors are risk neutral. Another reason US interest rates could be higher is if US assets are viewed as being riskier.*

   The following questions are short answer. 20 points each.

5. Using the Balassa-Samuelson theory, explain why using market exchange rates to compare GDP levels across countries tends to exaggerate differences in living standards across countries. (In practice, the Penn World Tables corrects for this by using 'PPP-adjusted' exchange rates when converting foreign currency GDPs to US dollar terms).

   According to the Balassa-Samuelson theory, countries with relatively high productivity in their tradeable goods industries will tend to have relatively high price levels, since the relative price of

nontraded goods (like services) will be higher. This is because the nontradeable goods industries have to compete with the tradeable goods industries for labor. High wages in the tradeable goods sector (due to relatively high productivity), will bid up wages and costs in the nontradeable goods sector. These higher costs will then be passed on in the form of higher prices (ie., zero profit constraint). As a result, rich countries, where tradebable goods productivity tends to be relatively high, will appear to have 'overvalued' exchange rates if PPP is evaluated using market exchange rates and broad-based price indices, which include both traded and nontraded goods. This will tend to exaggerate differences in the standard of living if market exchange rates are used to compare GDP levels, since price levels are lower in poor countries. If you adjust them upwards so that they are the same as those in rich countries (in practice, the USA price level is used), then this effectively boosts their GDP, and reduces the differences in GDP levels across countries.

6. Suppose you are an economic advisor in a country that is currently in a recession. The prime minister has asked you to assemble a policy package that will restore full employment without affecting the current account. Using the DD-AA model, describe a package of monetary and fiscal policies that will due the job. (Hint: Assume the country has a flexible exchange rate).

   Assuming the Marshall-Lerner condition holds, the XX schedule is upward sloping and flatter than the DD curve. (The XX curve represents combinations of E and Y that keep the current account constant. See Figure 17, pg. 161 in the textbook). Either a fiscal expanion or a monetary expansion can be used to increase Y back to full employment. However, a fiscal expansion 'worsens' the current account, while a monetary expansion 'improves' the current account. What is needed is a <u>combination</u> of monetary and fiscal expansion, which moves the economy up along the XX curve.

7. Suppose the US economy goes over the 'fiscal cliff' (i.e., 'automatic' government spending cuts take place). Use the DD-AA model to illustrate the effects of this on US output, the value of the US dollar, and the US current account. Bonus: Discuss the effects on Canada.

   I will answer this from a Keynesian perspective, which focuses on the aggregate demand effects of the government spending cuts. There could be productivity/supply-side effects as well, which could be important. (Don't penalize students for discussing these, but they do not need to mention this for full credit). The spending cuts would shift the DD curve up and to the left. (See Figure 11 on pg. 153 in the text, which depicts the case of a spending increase). Lower spending will depress output (remember, this is a Keynesian model!), which then lowers the interest rate in the domestic asset markets. Lower domestic (real) interest rates then cause the domestic currency to depeciate, which increases net exports (assuming the Marshall-Lerner condition holds). This increase in net exports mitigates the decline in domestic output, but does not offset it (i.e., there is 'crowding-in' rather than crowding-out in this case). At the new intersection of DD and AA, output is lower, the value of the US dollar is lower (i.e., E is higher), and the US current account 'improves'.

   Canada would get screwed for two reasons. Lower output and income in the US means lower demand for Canadian exports. At the same time, a weaker US dollar would decrease the price competitiveness of Canadian exports, which would further reduce Canadian exports. (Of course, a stronger Canadian dollar would be good news for people who like to shop in Bellingham!).