

B.Sc. International Business and Politics  
International Economics  
Copenhagen Business School

Final Exam  
October 19, 2009

*Note: Your grade depends not just on the right answer but on **the quality of the explanation and illustrations** you provide. Write as clearly as possible, but keep it concise and to the point. When you draw diagrams, make sure they are also clearly labeled.*

**Problem 1 (Total points 20, 4 points each)**

Assess whether the following statements are true or false, and explain briefly why.

- a) The US is more productive than Thailand in producing both computers and corn, so there is nothing to be gained from international trade between the two countries.
- b) Export subsidy helps countries to improve their term of trade, or TOT.
- c) The interest rate in the US is 5%, and the interest rate in Japan is 0.5%; the current spot exchange rate between US and Japan is 0.01 \$ per Yen and the expected exchange rate will be 0.012 \$ per Yen in one year. According to the information provided above, investors will be able to make profits within one-year time horizon if they borrow Yen and invest in US \$. (Note: it's safe to assume the interest rates will stay unchanged during the timeframe.)
- d) The reason that prices in developing countries are generally lower than developed countries is the labor productivity in developing countries is much lower in both tradable and non-tradable sectors.
- e) Holding investment and government spending constant, a current account surplus simply means a country produces more than it consumes; a current account deficit simply means a country consumes more than it produces.

## Problem 2 (Total points 30)

- a) Uncovered interest parity (UIP) condition is written as  $R = R^* + (E^e - E) / E$ . Explain intuitively what it means and why you expect it to hold, or not hold. (5 points)
- b) Write down the covered interest parity (CIP) condition in a similar fashion, and explain what it means intuitively. (5 points)
- c) Now let's rewrite interest parity condition in a) with US dollar and Euro, so we have,  $R_{\$} = R_{\text{€}} + (E^e_{\$/\text{€}} - E_{\$/\text{€}}) / E_{\$/\text{€}}$ . Draw a diagram to show the equilibrium when the parity condition holds. (3 points)
- d) Now there is a drop of Euro interest rate, draw a new diagram to show how this change of Euro interest rate will change the exchange rate between US dollar and Euro. (3 points)
- e) Now, there is a sudden drop of money supply in the US. Show how this change of money supply will change the exchange rate between \$ and Euro in the short run (and compare it with the equilibrium in c). Use diagrams, if necessary, to help you explain. (6 points)
- f) Finally, explain intuitively why an increase of money supply in the US will cause an overshooting of dollar exchange rate in the short run. Can you use the same intuition to explain an under-shooting of the dollar (i.e., overshooting on the down side) when money supply declines? (8 points, use graphs if necessary)

**Problem 3 (Total points 25)**

- a) What is TOT, or terms of trade? (2 points)
- b) What is consumer surplus and producer surplus, respectively? Draw graphs to illustrate and label clearly. (6 points)
- c) When home country, a large country, imposes a tariff on foreign imports, what are the impacts on home country's welfare? Draw a diagram and explain. Clearly label your graph. (10 points) (\*Hint: welfare is a sum of gains/loss of three segments: consumer, producer and government.)
- d) If home country is a small country, what are the welfare impacts? How is it different from the case in c)? Draw a diagram and explain. Clearly label your graph. (7 points)

**Problem 4 (Total points 25)**

The following questions are related to the issue of *trade and inequality*.

The US imports huge amount of goods from China each year. Because the labor cost in China is much cheaper (3% of US level according 2007 estimate), those imported goods tend to drive down the price of similar products in the US. Let's assume the US has two sectors: high-tech and low-tech, the latter of which is in direct competition with China.

- a) What is the impact of China's imports on relative wages between the two sectors in the US? Explain within the context of Stolper-Samuelson theorem. (5 points)
- b) If above effect as implied by Stolper-Samuelson theorem persists (because China is such a populous country), what impact would it have on the career choices of US labor force in the future? Imagine you are the parents who will be helping your children choose their college majors and career. (5 points)
- c) Based on your answer in b), how would this new landscape in career choices affect the future growth rate of the US? Is this impact going to be positive or negative? What is your assessment and explain why you think so. (5 points)
- d) Based on your answer in c), how will the wage inequality in the US be further affected? Essentially, this is your prediction of future US inequality, assuming everything else being equal. (2 points)
- e) Now let's turn to China: What's the prediction of China's wage in tradable sectors? Will it rise or fall? What about the wage in non-tradable sectors? Be sure to explain why you think so. (8 points)