

COMM 220 – PRACTICE PROBLEM SET 5

1. Tomatoes and potatoes are produced in both U.S. and Canada. U.S. can produce as much as 180,000 kg of tomatoes or at most 135,000 kg of potatoes in a year. Canada can produce 80,000 kg of tomatoes and 120,000 kg of potatoes.
 - (a) Which country has a comparative advantage in producing tomatoes and which country has a comparative advantage in producing potatoes? Explain.
 - (b) What would be the world gain in kg of tomatoes if the country has comparative advantage in the production of potatoes produces 30,000 kg more of potatoes and the other country produces 30,000 kg fewer of potatoes? What would be Canada's gain in kg of tomatoes if the two countries agree to trade 1 kg of potatoes for 1.05 kg of tomatoes?
 - (c) What would be the world gain in kg of potatoes if the country has comparative advantage in the production of tomatoes produces 30,000 kg more of tomatoes and the other country produces 30,000 kg fewer of tomatoes? What would be Canada's gain in kg of potatoes if the two countries agree to trade 1 kg of tomatoes for 1.05 kg of potatoes?

2. The one-year interest rate is 2.09% in Canada and 2.83% in Germany. The spot price of the Euro today is \$1.3230.
 - (a) What is the expected value of the Euro in a year?
 - (b) How would you arbitrage the market with \$1 million Canadian if the one-year forward price of the Euro is \$1.3168? How much arbitrage profit you would make on this transaction?
 - (c) How would you arbitrage the market with \$1 million Canadian if the one-year forward price of the Euro is \$1.3112? How much arbitrage profit you would make on this transaction?