

## Assignment 1 (REQUIRED)

Submission Deadline and Location: Oct 2 in Class

Total Marks: 30

### **Part A True/ False/ Uncertain Questions**

*Explain why the following statement is True, False, or Uncertain according to economic principles. Use diagrams and / or numerical examples where appropriate. Unsupported answers will receive no marks. It is the explanation that is important.*

#### **A1. [10 Marks]**

If the interest rate parity holds, other things remaining constant, an increase in the U.K. nominal interest rate will increase the current value of the U.S. dollar against the British pound. [Diagrams Required]

**Part B****Problem Solving Questions****[20 Marks]****B1. [20 Marks]**

*Read each part of the question very carefully. Show all the steps of your calculations to get full marks.*

Use the asset approach to exchange rate determination discussed in class to answer the following questions. The interest rate on US dollar denominated assets maturing in one year is 10% and the interest rate on comparable Canadian dollar denominated assets is 8%.

- 1) Consider two possible expectations for the direct spot exchange rate between the Canadian dollar and the U.S. dollar (Canadian dollars per one U.S. dollar) in one year: (1) the spot rate will fall by 5 Canadian cents or (2) the spot rate will rise by 3 Canadian cents (note that these changes are in absolute levels, *not* in percentage terms). Determine the current equilibrium spot rate under each scenario. Explain which expectation for the future spot rate makes sense, justify your answer, and provide economic intuition for your result. [8 marks]
- 2) Using the expectation scenario from part (A) that makes sense, determine the equilibrium spot rate when the US interest rate rises to 12%. Determine whether the Canadian dollar appreciated or depreciated in response to this change and provide economic intuition for your finding. Show the effects on the equilibrium spot rate on a diagram. [7 marks]
- 3) Suppose, instead, that the spot rate is expected to decrease by  $\alpha$  percent over the next year. Explain whether or not you can determine the equilibrium spot rate in this scenario and justify your answer. Determine the value of  $\alpha$  which is consistent with our model. [3 marks]
- 4) Suppose interest rates are as given initially (10% and 8%) and the current spot rate equals 2 Canadian dollars per U.S. dollar. Calculate the forward discount or forward premium. [2 marks]