**ECO 120: Macroeconomics**

**In-class Exercise**

**Exchange Rates**

**Directions:** Work in groups of up to four people and answer the following questions. All papers will be collected, but only one member’s paper will be randomly selected and graded and all members of the group will receive the same grade. Failure to complete the worksheet with a group will result in a 20 percentage point penalty.

By signing below, you agree that the following work represents the efforts of everyone in the group, and you are willing to accept as your own grade for the group project the grade earned from this representation of your group’s work. Every member must agree to these terms to earn a non-zero grade for this assignment.

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Directions: Whenever you are asked to “illustrate and describe...” you should show all appropriate graphical models, illustrate any changes in equilibrium, and explain the results.

1. Is a depreciation of the U.S. dollar a good thing or a bad thing for the United States? Explain.

2. Suppose Brazil experiences a severe recession which results in high unemployment and low incomes. Describe the impact on international trade between Brazil and Argentina, one of its major trading partners, and describe and illustrate the impact on the exchange rate between the Brazilian Real and the Argentine Peso.

3. Suppose interest rates increase in both Europe and the United States, but the increase in Europe is larger. Illustrate and describe the impact on the U.S Dollar / Euro exchange rate. Does the U.S. Dollar appreciate or depreciate? Does the Euro appreciate or depreciate? What happens to the quantity of trading between two currencies?
4. Suppose there is an increase in the average level of income in the United States, while the average level of income stays the same in countries that use the Euro as their currency.

(a) Describe and illustrate the impact on the exchange rate between U.S. dollars and Euros.

(b) Did the U.S. dollar appreciate, depreciate or neither? Did the Euro appreciate, depreciate or neither? Was the change in the exchange rate associated with a good thing or a bad thing for the United States.

5. Suppose there is an increase in demand among European countries (that use the Euro) for information technology services produced in the United States.

(a) Describe and illustrate the impact on the exchange rate between U.S. dollars and Euros.

(b) Did the U.S. dollar appreciate, depreciate or neither? Did the Euro appreciate, depreciate or neither? Was the change in the exchange rate associated with a good thing or a bad thing for the United States.
6. Suppose American telecommunication companies reveal technological breakthroughs that will result in production of technological devices that are highly profitable, and therefore financial investment in these companies very profitable. Suppose also that the American companies have patents on their products, so competing companies in Japan will not be able to produce similar products for years.

(a) Describe and illustrate the impact on the exchange rate between the U.S. dollar and Japanese Yen.

(b) Did the U.S. dollar appreciate, depreciate or neither? Did the Japanese Yen appreciate, depreciate or neither? Was the change in the exchange rate associated with a good thing or a bad thing for the United States.

7. The 2009 American Recovery and Reinvestment Act (stimulus spending bill) included a “Buy American” clause which required public construction projects that used stimulus dollars to use materials produced in the United States. Suppose this causes a reduction in demand in the U.S. construction industry for steel that is produced in India.

(a) Describe and illustrate the impact on the exchange rate between the U.S. dollar and Indian Rupee.

(b) Did the U.S. dollar appreciate, depreciate or neither? Did the Indian Rupee appreciate, depreciate or neither? Is this what you expected?
8. Suppose the U.S. dollar vs. Euro exchange rate is currently 1.25 USD/Euro.

(a) A European business is interested in buying $1 million in telecommunications services from an American company. How much will it cost the European company in terms of Euros?

(b) Suppose the exchange rate changes to 1.31 USD/Euro. Did the U.S. dollar appreciate, depreciate or neither? Did the Euro appreciate, depreciate or neither?

(c) With an exchange rate of 1.31 USD/Euro, how much will the $1 million in telecommunications services cost the European company in terms of Euros? Would this change in exchange rate likely cause the European company to buy more telecommunication services from the United States, or less? Was the change in the exchange rate associated with a good thing or a bad thing for the United States.

9. Is a depreciation of the U.S. dollar a good thing or a bad thing? Explain.

10. Think about how you accomplished the general education learning outcome to improve your creative and critical thinking skills. What model did you use? Describe some aspects of a real world scenario that you better understand with the model.