

ECO 120: Global Macroeconomics
Week 3 Homework: Market for Currencies

Directions: Notice that all problems ask you for a descriptive answer in addition to performing a calculation or manipulating a graphical model. For full credit, make sure that you do both. You may print these sheets and put your answers in the space provided or you may use your own paper to write your answers.

When you have finished, scan or take pictures of your work, combine all images to a single PDF file, assure that all pictures are oriented right-side up, and upload your work as a single PDF file to the Canvas Assignment area. You may use <https://online2pdf.com/> to combine your images to a single PDF file.

For problems 1, 2, and 3, read the scenario and do the following (in order):

- For each problem, draw both currency markets. Example: if you are asked a question on the exchange rate between U.S. Dollars and Euros, you should draw the market for U.S. Dollars and market for Euros. It is true that these two graphs are redundant, so every change in one market has a corresponding change in the other market.
- Make sure you correctly label each market, each axes.
- Determine if the scenario cause a shift in the demand and/or supply curve for each currency. If so, answer which curve(s), and which direction.
- Draw the supply and demand curves in both markets with appropriate shifts.
- Label the original and new equilibrium exchange rate and quantities.
- What is the impact of the relative value of each currency? What is the impact on quantity of currency traded?

1. India and China are major trading partners. Suppose a recession in China leads to a decrease in average income in China, leading people in China to have lower demand for goods and services produced in the rest of the world. Describe and illustrate the impact on the equilibrium exchange rate between Indian Rupee (INR) and the Chinese Yuan (CNY).
2. Suppose global demand for oil increases. Oil exports in Iraq are 99% of its total exports. Describe and illustrate the impact of the increase in oil demand on the equilibrium exchange rate between U.S. Dollars (USD) and Iraqi Dinars (IQD).

3. Suppose interest rates increase in both Japan and the Korea, but the increase is smaller in Japan than it is in the Korea. Illustrate and describe the impact on the Korean Won (KRW) / Japanese (JPY) exchange rate.
4. On September 16, 2022, the Swiss Franc (CHF) / Euro (EUR) exchange rate was $1 \text{ CHF} = 1.04 \text{ EUR}$.
- (a) Suppose a European person is buying a car in Switzerland for 22,000 CHF. What will be the price in Euros?
- (b) Suppose a Swiss is traveling in Spain, and hotel room costs 280 EUR. What is the cost in Swiss Francs?
- (c) In September 2021, the exchange rate was $1 \text{ CHF} = 0.92 \text{ EUR}$. From September 2021 to September 2022, did the Swiss Franc appreciate or depreciate against the Euro? Did the Euro appreciate or depreciate against the Swiss Franc?