

Problem 1. Consider the United States and the countries it trades with the most (measured in trade volume): Canada, Mexico, China, and Japan. For simplicity, assume these four are the only countries with which the United States trades. Trade share (trade weights) and US nominal exchange rates for these four countries are as follows:

Country (currency)	Share of Trade	\$ per FX in 2015	\$ per FX in 2016
Canada (dollar)	36%	0.8271	0.6892
Mexico (peso)	28%	0.0683	0.0538
China (yuan)	20%	0.1608	0.1522
Japan (yen)	16%	0.0080	0.0086

- Compute the percentage change from 2015 to 2016 in the four US bilateral exchange rates (defined as US dollar per unit of foreign exchange, or FX) in the table provided.
- Compute the percentage change in the nominal effective exchange rate for the US between 2015 and 2016 (in US dollars per foreign currency basket).
- Based on your answer to part (b), what happened to the value of the US dollar against this basket between 2015 and 2016? How does this compare with the change in the value of the US dollar relative to Mexican peso? Explain your answer.

Problem 2. While on a trip to Baja California, Mexico, in January 1994, Mary bought a house worth 150,000 MXN (i.e. Mexican pesos). At that time, 1 USD was worth 3.10 MXN. One year later 1 USD was worth 5.64 MXN. Use this information to answer the following questions. Round your answer to the nearest whole number.

- In USD, how much was Mary's house worth when she bought it?
- All else equal, in USD, how much was Mary's house worth one year later?
- All else equal, did the value of Mary's house in USD increase or decrease due to exchange rate changes between the Mexican peso and the dollar?

Problem 3. Consider a Dutch investor with 1,000 euros to place in a bank deposit in either the Netherlands or Great Britain. The (one-year) interest rate on bank deposits is 2% in Britain and 4.04% in the Netherlands. The (one-year) forward euro-pound exchange rate is 1.53 euros per pound and the spot rate is 1.5 euros per pound.

- Is the forward market in equilibrium?
- What is the forward premium?
- What is the expected depreciation of the euro (against the pound) over one year?