Exercise 7

International Economics

November 29, 2018

1. The following table shows the exchange rate between the euro and some other currencies in two different moments: Initial and Final

	Initial	Final
USD/EUR	1.22	1.16
GBP/EUR	0.70	0.79
CHF/EUR	1.72	1.62
SEK/EUR	10	12
JPY/EUR	83	150

   (a) Did the euro appreciate or depreciate to each one of those currencies during the period?

   (b) What currencies appreciated against the euro?

   (c) For which foreigners became European goods and services more expensive? For which did they became cheaper?

   (d) What happened to the price of foreign goods and services imported to the euro zone?

2. Calculate the value of the real exchange rate in each case based on the following information.

   (a) The nominal exchange rate euro-dollar is 1.20 dollar per euro, the price level in Europe is 110 and the price level in the U. S. is 140.

   (b) The nominal exchange rate is 0.7 pound sterling per euro, the price level in Europe is 110, the price level in Britain 100.

   (c) The nominal exchange rate euro-Japanese yen is 110 yen/euro, the price level in Europe is 110 and the price level in Japan is 10 000.

3. Knowing that the price of a Big Mac in Europe is € 3 and having the following information please solve the problems below.

	Price of a Big Mac	Nominal Exchange Rate
Denmark	27 DDK	7.5 DDK/EUR
Hungary	720 HUF	280 HUF/EUR
Switzerland	6 CHF	1.5 CHF/EUR

   (a) Calculate the rate predicted by the theory of purchasing power parity (PPP) per country. Are the PPP predictions fulfilled?
   (b) Calculate the price in euros of the Big Mac in each country.
   (c) According to the PPP, what should be the exchange rate between the Danish krone and the Swiss franc? What is the nominal exchange rate observed between those two currencies?
   (d) If prices increase more in Denmark than in the euro zone (e. g. the price of a Big Mac goes to 40 DDK in Denmark while it goes to 3.5 EUR in the euro zone), what has to happen to the exchange rate according to the PPP?

4. Suppose the United States and the European Union are the only countries participating in world trade. Consider the following cases:

   (a) The income in the United States increases.
   (b) Europe removes some restriction on the import of goods and services.
   (c) The U. S. applies new tariffs on imported goods and services.
   (d) The interest rate of the European Union decreases compared to the U. S. one.

   Ceteris paribus, what will be in each case the effect on

   (a) European exports and imports of goods, services and capital.
   (b) The supply function of euros.
   (c) The USD/EUR exchange rate.

5. Assume that good X is sold for \$ 8 per unit in the U. S. and for £ 5 in the United Kingdom.

   (a) Following the theory of PPP, what would be the parity exchange rate (\$/£)?
   (b) Assuming that the exchange rate market is 1.65 \$/£ and there are no transaction costs or barriers to trade, what operations should be made to benefit this arbitrage opportunity, and what benefits would result for each unit of good X?
   (c) Assuming proper operation of mechanisms and forces in the foreign exchange market, under what force and in what direction would change the exchange rate of 1.65 \$/£?

6. Please indicate where the following transactions would be recorded in a supposed Balance of Payments of Catalunya. In which column and what would be the sign?

   (a) A Japanese buys a bond of a Catalan company with a maturity of one year amounting to € 5 000.
   (b) A Catalan company pays € 80 000 for the purchase of a patent to a Russian company.
   (c) Catalan businessman sold his company to a Swedish businessman worth € 150 000.
   (d) A group of Catalans travel to Paris for sightseeing, spending € 7 000.
   (e) Catalan opening a checking account at a German bank, entering € 500.
   (f) Several Korean investors buy shares of the "Catalans' Catalan West" (with the intention of selling them when they trade 30% higher).
   (g) A Catalan restaurant buys a box of wine in California for € 250.
   (h) A Peruvian company purchases buses in the city of Barcelona and sends them to Peru.
   (i) A Frenchman working for a Catalan company puts his salary check, issued by a Catalan bank, into his bank account in Paris.