

# ECON 4420/5420

## Quiz #2 (Answers)

Last Name: \_\_\_\_\_, First Name: \_\_\_\_\_

### Part A (6 points)

State whether you think each of the following questions is true (**T**), false (**F**), or uncertain (**U**)

- (1) [2 points] [ **F** ] Buying and selling in the foreign exchange market are dominated by central banks
- (2) [2 points] [ **T** ] A depreciated currency lowers the price of exports relative to the price of imports
- (3) [2 points] [ **U** ] If dollar interest rate is 8% and euro interest rate is 6%, then an investor should invest only in dollars

### Part B (14 points)

- (1) [10 points] Exchange Rates
  - (a) [2 points] How many British pounds would it cost to buy a pair of American designer jeans costing \$45 if the exchange rate is 1.50 dollars per British pound?  
*When  $E = \$1.5/\pounds$ , a pair of American designer jeans costs  $\pounds 30$*
  - (b) [2 points] How many dollars would it cost to buy an Edinburgh Woolen Mill sweater costing 50 British pounds if the exchange rate is 1.80 dollars per one British pound?  
*When  $E = \$1.8/\pounds$ , a sweater costs \$90*

- (c) [2 points] What is the exchange rate between the dollar and the British pound *in American term* if a pair of American jeans costs 50 dollars in New York and 100 Pounds in London?

$$E = \$0.5/\pounds$$

- (d) [2 points] What is the exchange rate between the dollar and the British pound *in European term* if a pair of American jeans costs 30 dollars in New York and 15 Pounds in London?

$$E = \pounds 0.5/\$$$

- (e) [2 points] Assume that there is no transactions costs and consider three currencies - the dollar, the yen, and the pound. Suppose that you get price quotations of  $E_1 = \$1.50/\pounds$ ,  $E_2 = \$0.50/\yen$ , and  $E_3 = \yen 3.0/\pounds$ . Is the opportunity to earn riskless arbitrage profits available? Explain

*No. An arbitrage strategy is to put 1.5 dollars to buy one pound, sell that pound for 3.0 yen, and then sell the yen for 1.5 dollars each. You begin with 1.5 dollars and end up with 1.5 dollars*

- (2) [4 points] Rate of Return

- (a) [2 points] In the beginning of 2006, you pay \$100 for a share of stock that pays you a dividend of \$1 at the beginning of 2007. If the stock price rises from \$100 to 109 per share over the year, what is the rate of return over 2006?

$$10 \% \left( = \frac{(\$109 + \$1) - \$100}{\$100} \right)$$

- (b) [2 points] Suppose that interest rate on a dollar deposit is 2% per year. What is the rate of return from a dollar deposit?

*A currency's interest rate is the amount of a currency an individual can earn by lending a unit of the currency for a year. The rate of return for a deposit in domestic currency is the interest rate that the bank deposit earns. Therefore, the rate of return from a dollar deposit is 2%*