

- 1) Use the following information on US-Russian exchange rates, US wheat prices, and Russian vodka prices to answer the questions that follow. Assume that the US interest rate increased from 3% to 4%. (10 pts)

US Interest Rate	3%	US Interest Rate	4%
Exchange Rate	100 rubles/ 1 \$	Exchange Rate	200 rubles/ 1\$
Price of US Wheat	\$ 5/ bushel	Price of US Wheat	\$ 5/ bushel
Price of Russian Vodka	1,000 rubles / case	Price of Russian Vodka	1,000 rubles / case

- a) What is the Price of 1 bushel of US Wheat in Russia **before** and **after** the interest rate changes?
- b) What is the Price of 1 case of Russian Vodka in the US **before** and **after** the interest rate changes?
- c) Will Russians likely buy more/less/same amount of US wheat **after** the change in the interest rate?
- d) Will Americans likely buy more/less/same amount of Russian vodka **after** the change in the interest rate?
- e) Based on **part c)** and **part d)**, will US Net Exports likely increase/decrease/stay the same **after** the change in the interest rate?
- f) By construction, Purchasing Power Parity holds for both of these goods in this case, but in reality, would you expect PPP to hold true for Vodka and Wheat? Explain.
- g) Name a government policy (fiscal or monetary) that could have caused this chain of events (be specific).
- 2) You have just opened your new online stock trading account with Ameritrade. You have decided to purchase 100 shares of Kmart stock. You pay \$10 a share for the stock. Currently Kmart pays no dividends. One year from now you expect the price of the stock to be \$15 a share. The cost of this trade is just \$8.
- a) What is the expected rate of return on this trade? (Hint: This rate is a percentage, so the information given must be put into a percentage form)
- b) If the interest rate is 5%, should you make the above online stock purchase? Briefly explain.
- c) Suppose Kmart decides to pay 10 cents a share as a dividend to investors. Recalculate the expected rate of return on the above trade. Would your answer to b) change given this new information? Briefly explain

- 3) Evaluate each of the following statements as True/False and then briefly explain your answer.
- a) I am thinking of purchasing stock in Microsoft. The antitrust judgement against them is already accounted for in today's stock price and I do not anticipate any more news involving Microsoft to come out. Therefore I know that the price of Microsoft's stock tomorrow will simply be the price of Microsoft's stock today.
  - b) PG&E (a stable utility company) and Green Mountain Electric Company (a not so stable utility company) both have a stock price of \$30. Since I am a risk-averse person, I would actually be willing to pay more than \$30 to purchase stock in PG&E.
  - c) Assume that the interest rate is 5% and that it will always be 5%. I loan \$500 dollars to friend who will pay the money back (with no interest) 5 years from now. The present discounted value of that IOU is  $\$500/(1.05)$ .