
FIN516 WEEK 7 - HOMEWORK

Problem 31-1 on Exchange Rates based on Chapter 31 International Corporate Finance

(Excel file included)

You are a U.S. investor who is trying to calculate the present value of a €5 million cash inflow that will occur 1 year in the future. The spot exchange rate is $S = \$1.25/€$ and the forward rate is $F1 = \$1.215/€$. You estimate that the appropriate dollar discount rate for this cash flow is 4% and the appropriate euro discount rate is 7%.

- a. What is the present value of the €5 million cash inflow computed by first discounting the euro and then converting it into dollars?

$$PV = (5 \text{ million} / (1 + .07)) \times 1.25 = \$5.841121.50 \text{ million} = \$5.84 \text{ million}$$

- b. What is the present value of the €5 million cash inflow computed by first converting the cash flow into dollars and then discounting?

$$PV = (5 \text{ million} \times 1.215) / (1 + .04) = \$5.841346.15 \text{ million} = \$5.84 \text{ million}$$

- c. What can you conclude about whether these markets are internationally integrated, based on your answers to parts (a) and (b)?

These markets are not internationally integrated because the answers to (a) and (b) are not the same.

Problem 31-2 on Currency Appreciation based on Chapter 31 International Corporate Finance

(Excel file included)

Mia Caruso Enterprises, a U.S. manufacturer of children's toys, has made a sale in Cyprus and is expecting a C£4 million cash inflow in 1 year. The current spot rate is $S = \$1.80/C£$ and the one-year forward rate is $F1 = \$1.8857/C£$.

- a. What is the present value of Mia Caruso's C£4 million inflow computed by first discounting the cash flow at the appropriate Cypriot pound discount rate of 5%, and then converting the result into dollars?

$$PV = 4 \text{ million} / (1 + .05) \times 1.80 = \$6.857143 \text{ million} = \$6.87 \text{ million}$$

- b. What is the present value of Mia Caruso's C£4 million inflow computed by first converting the cash flow into dollars, and then discounting at the appropriate dollar discount rate of 10%?