**FIN333 Global Finance**

Homework Assignment 4

Please submit your homework on CourseSite in a single file in .pdf format with file name as ‘your last name FIN333HW4.pdf’. The deadline is Dec.10th 11:59 pm.

*\*You need to show your work to get credit.*

1. (70 points) Boeing just signed a contract to sell a Boeing 787 aircraft to British Airways. British Airways will be billed £26 million which is payable in one year. The current spot exchange rate is $1.40/£ and the one-year forward rate is $1.43/£. The annual interest rate is 6.0% in the U.S. and 5.0% in UK. The premium for a one-year put or call option with the exercise rate of $1.43/£ is 1%. Boeing is concerned with the volatile exchange rate between the dollar and the pound and would like to hedge exchange exposure. Four alternatives are available to Boeing to manage the exposure: 1) remain unhedged; 2) hedge in the forward market; 3) hedge in the money market; or 4) hedge in the options market.
2. What action does Boeing need to take for each hedging alternative?
3. Calculate the future dollar proceeds of the sale to British Airway under the four alternatives if the spot exchange rate becomes $1.45/£ in one year.
4. Calculate the future dollar proceeds of the sale to British Airway under the four alternatives if the spot exchange rate becomes $1.40/£ in one year.
5. At what future spot exchange do you think Boeing will be indifferent between the option and money market hedge?
6. At what future spot exchange do you think Boeing will be indifferent between the option forward hedge?
7. At what dollar interest rate do you think Boeing will be indifferent between the forward and money market hedge?
8. Illustrate the future dollar proceeds of the sale to British Airway under the four alternatives.
9. (30 points) Calculate the **cumulative translation adjustment (CTA)** for this U.S. MNC translating the balance sheet and income statement of a French subsidiary, which keeps its books in euro, but that is translated into U.S. dollars using the current rate method, the reporting currency of the U.S. MNC. The subsidiary is at the end of its first year of operation. The historical exchange rate is $1.60/€1.00 and the most recent exchange rate is $1.50/€. The average exchange rate is $1.55/€.

