

## FIN 5535 Project 1

Due date: 11/18/2012

The sample period for this project is from 10/10/2012 to 11/13/2012.

If your NSU ID number ends with an odd number, then do case 1 Japanese yen. Otherwise, do case 2, Euros.

Case 1. At the start of the sample period, you receive 12,500,000 Japanese yen, which you plan to sell at the end of sample period.

Case 2. At the start of the sample period, you receive 125,000 Euros, which you plan to sell at the end of sample period.

Since the foreign exchange rate fluctuates, the value at the end of the sample period is uncertain. You decide to hedge your spot position by shorting 1 futures contract expiring in December 2012. Your goal is to hedge the risk of your long currency position.

### Questions:

1. Collect daily spot prices (=foreign exchange rates) and currency futures prices for your assigned currency for the entire sample period. Construct a spreadsheet showing both prices for the sample period. See note #1-3 below for details.
2. Calculate the futures margin change and margin balance (assuming 0 initial margin balance) for the sample period.
3. Calculate the values of your unhedged spot position (in \$ US), and the values of your hedged position (spot + futures) for the sample period. Calculate the net gain/loss of your spot position and hedged position at the end of the sample period.
4. Calculate the standard deviation of the values of your spot position and your hedged position.
5. Was your hedge successful? What do you mean by a successful hedge?

### Notes:

1. Use [http://futures.tradingcharts.com/currency\\_futures.html](http://futures.tradingcharts.com/currency_futures.html) to collect the currency futures data. For spot exchange rates click on "FOREX CHARTS" on the menu bar

from the link. You only need collect the Close prices for spot prices and futures prices. You do not need to collect Open/High/Low/Volume data. Once you find the correct chart, if you hover your mouse over the the chart, you may find historical prices. If you can't find the historical prices, I suggest you should collect the data daily.

2. Be sure you collect and sort your data in ascending order (oldest to latest).
3. Futures prices should be converted from cents to dollars (US). Make sure the spot rates use the same quote as the futures prices. Please note that some currencies use different quote system. If you want to know more about the individual futures contract, see <http://www.cmegroup.com> for how futures prices are quoted. As of 10/8/2012, 1 JPY is worth 0.0128 USD and 1 Euro is worth 1.2964 USD. The futures price converted should be roughly the same as these figures.
4. I attached the Canadian Dollar futures example without formulas. Remember Canadian Dollar spot rates are usually quoted as CAD/USD, which may be different from your currency.

