**Session 3: Post Class tests**

1. In valuation, your risk free has to be a long term, default-free rate. When valuing a company in US dollars, we often use the 10-year US T. bond rate as the risk free rate. In the last few years, there have been questions about whether the US treasury is really default-free. If you share these concerns, which of the following will you do, assuming that you are still estimating cash flows in US dollars?
   a. Continue to use it the 10-year bond rate the risk free rate since you have no choice
   b. Switch to using the US treasury bill rate, since default is less likely in the short term
   c. Estimate a default spread for the US government and reduce the treasury bond rate by that spread
   d. Use the rate on a 10-year Swiss Government bond, denominated in Swiss francs (since the Swiss government has no default risk)
   e. None of the above

2. You are valuing a Spanish company in Euros. Which of the following would you use as your risk free rate in your valuation?
   a. The rate on Spanish government ten-year euro bond (5%)
   b. The highest of the 10-year, euro denominated government bond rates (9%).
   c. The lowest of the 10-year, euro denominated government bond rates (1.5%)
   d. The lowest of the European government bond rates, which is the Swiss Government bond rate, denominated in Swiss francs (0.75%)
   e. None of the above

3. You are valuing a Peruvian company in US dollars. The Peruvian government has a CDS (Credit Default Swap) that is trading at 1%. Which riskfree rate would you use in your valuation?
   a. The rate on a Peruvian 10-year Sol denominated bond (6%)
   b. The rate on a Peruvian 10-year US $ denominated bond (3.5%)
   c. The rate on a Peruvian 10-year Sol denominated bond minus CDS spread
   d. The rate on a 10-year US treasury bond (2%)
   e. None of the above

4. What would you use as your risk free rate if you were valuing a Peruvian company in Peruvian Sol? (You can still assume that the Peruvian sovereign CDS is trading at 1%.)
   a. The rate on a Peruvian 10-year Sol denominated bond (6%)
   b. The rate on a Peruvian 10-year US $ denominated bond (3.5%)
   c. The rate on a Peruvian 10-year Sol denominated bond minus the Peruvian CDS spread (6%-1% =5%)
   d. The rate on a 10-year US treasury bond (2%)
   e. None of the above
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1. **c. Estimate a default spread for the US government and reduce the T. bond rate by that spread.** You could obtain the spread for the US sovereign CDS and net it out from the US treasury bond rate. You cannot use as short term rate or a rate from a bond denominated in a different currency.

2. **c. The lowest of the 10-year, euro denominated government bond rates (probably ECB or German 10-year).** The Spanish 10-year bond rate is not risk free and the Swiss government bond is in a different currency.

3. **d. The rate on a US T.Bond.** If the valuation is done in dollars, the Sol rate is not the right riskfree rate. The Peruvian dollar bond rate has default risk in it (it is trading at a higher rate than the T.Bond)

4. **c. The rate on the Peruvian Sol bond, net of the CDS spread (6%-1% = 5%).** There is a small mismatching problem since the CDS spread is in US$ terms, but there is no easy way to get the default spread in Sol.