

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.