

### Session 3: Post Class tests

1. You have been asked to value the chemical division of a multi business conglomerate and have been provided with the cash flows for the division. What discount rate would you use to discount this cash flow?

	Year 1	Year 2	Year 3
Earnings before interest and taxes (1- tax rate)	\$100	\$105	\$110
- Reinvestment in chemical business =	\$20	\$22	\$25
Cash flow	\$80	\$83	\$85

- The cost of equity of the company
  - The cost of capital of the company
  - The cost of equity for the chemical business
  - The cost of capital for the chemical business
  - None of the above
2. 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?
- Continue to use it the 10-year bond rate the risk free rate since you have no choice
  - Switch to using the US treasury bill rate, since default is less likely in the short term
  - Estimate a default spread for the US government and reduce the treasury bond rate by that spread
  - Use the rate on a 10-year Swiss Government bond, denominated in Swiss francs (since the Swiss government has no default risk)
  - None of the above
3. You are valuing a Spanish company in Euros. Which of the following would you use as your risk free rate in your valuation?
- The rate on Spanish government ten-year euro bond (5%)
  - The highest of the 10-year, euro denominated government bond rates (9%).
  - The lowest of the 10-year, euro denominated government bond rates (1.5%)
  - The lowest of the European government bond rates, which is the Swiss Government bond rate, denominated in Swiss francs (0.75%)
  - None of the above
4. 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?
- The rate on a Peruvian 10-year Sol denominated bond (6%)
  - The rate on a Peruvian 10-year US \$ denominated bond (3.5%)
  - The rate on a Peruvian 10-year Sol denominated bond minus CDS spread
  - The rate on a 10-year US treasury bond (2%)

- e. None of the above
5. 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