Session 4: Post Class tests

1. Most analysts and appraisers get their equity risk premium by looking at the past: the historical risk premium is the difference between what you would have earned invested in stocks over a past period over what you would have earned on a risk free investment. Which of the following are problems with this approach?
   a. The estimate is “subjective”, since it depends upon the time period and averaging approach used.
   b. The estimate is backward looking
   c. The estimate has substantial standard error
   d. The estimate moves counter intuitively: down after crisis and up after prosperity
   e. All of the above

2. The annual standard deviation in stock returns is about 20%. Assuming that annual returns are independent of each other, how many years of historical data will you need to lower the standard error in your estimate to 1%?
   a. 25 years
   b. 100 years
   c. 200 years
   d. 400 years
   e. None of the above

3. To estimate equity risk premiums for emerging markets, some analysts use the relative standard deviation approach, where they scale the standard deviation of the emerging market to that of the S&P 500 and multiply the US equity risk premium by this ratio. If you use this approach to compute the equity risk premium, which of the following “biases” are you most likely to be exposed to?
   a. You will understate the equity risk premiums for highly volatile markets
   b. You will understate the equity risk premiums for stable markets
   c. You will understate the equity risk premiums for illiquid markets
   d. You will understate the equity risk premiums for liquid markets

4. In the melded country risk premium approach, you estimate the country risk premium by multiplying the country default spread by the volatility of equity markets, relative to the volatility in government bonds in that market. Assume that your estimate for a mature market equity risk premium is 6%, that the default spread for Indonesia is 2% and that the standard deviation of Indonesian equities is 24% (while the standard deviation of the Indonesian government bond is 12%). Estimate the total equity risk premium for Indonesia
   a. 12%
   b. 8%
   c. 10%
   d. 6%
   e. 4%

5. Aspic Inc. is a US-based company that operates in two countries: the United States and Mexico. The total equity risk premium is 5% for the United States and
9% for Mexico. Which of the following estimates of the equity risk premium would you use for Aspic?

a. 5%: the US equity risk premium, because it is US based
b. 7%, a simple average of the US and Mexico equity risk premiums
c. 6.2%, the weighted average based upon the revenues that the company gets from the two countries (70% from US, 30% from Mexico)
d. 5.8%, the weighted average based upon the assets that the company has in the two countries (80% in the US, 20% in Mexico)
e. 6.6%; the weighted average based upon the value that the company attaches to its operations in the countries (60% US, 40% Mexico)