

## Session 5A: Post class test solutions

1. **e. All of the above.** Historical ERP are a function of your estimation choices, backward looking, noisy and move in counter intuitive ways. If stocks have a really bad year, as they tend to during a crisis, the historical risk premium will get smaller, not larger.
2. **d. 400 years.** If annual returns are independent, the standard error is the standard deviation divided by the square root of the number of years of returns that you have. With a 20% standard deviation, that would require 400 years.
3. **c. You will understate the equity risk premiums for illiquid markets.** Less liquid markets often have lower volatility, because prices don't move unless there is trading.
4. **c. 10%.** The country risk premium is 4%, obtained by multiplying the default spread of 2% by the relative standard deviation of equity (to bond) of 2 (24%/12%). This has to be added to the mature market equity risk premium of 6% to get to the total equity risk premium of 10%.
5. **e. 6.6%.** the weighted average based upon the value that the company attaches to its operations in the countries (60% US, 40% Mexico). You want to use value weights for equity risk premiums optimally. In practice, we use revenues, assets or operating income as proxies but only because we do not have access to value.