

Session 6: Post class test solutions

- 1. b. Equity risk premiums should rise.** If companies try to manage and manipulate earnings, investors trust those earnings numbers less. If they trust the earnings numbers less, equities will become riskier. Thus, earnings management, in general, even if it makes earnings smoother will make them less reliable and equity risk premiums should rise.
- 2. True.** While actual equity risk premiums can be negative (in a period where stocks do badly and bonds do well), the expected equity risk premium should be positive, if investors are rational.
- 3. b. Risk premium is 4.5%, Standard error is 2%.** A risk premium in a hurdle rate will get compounded over time and is therefore better computed using the geometric averages. The standard error is computed by dividing the standard deviation of 20% by the square root of 100.
- 4. c. A historical risk premium with only ten to fifteen years of data will have a very high standard error.** You need a lot of historical data to be able to estimate an equity risk premium with any degree of precision. While you should be concerned about changing business risk profiles, that is a far smaller problem.
- 5. a. 11.75% or d. 10.5%.** There are two solutions. My preferred one is to take the default spread and scale it up to reflect the higher risk in equities ($5\% \times 30/24 = 6.25\%$) and to add this to the mature market premium (5.5%). My second best solution is to just add the default spread to the mature market premium ($5.5\% + 5\% = 10.5\%$)