

## Session 6: Post class test solutions

1. **e. All of the above.** Regression betas can be dangerous as a result of each and every one of these. They can be most dangerous when they look good, since that can be accomplished by using a narrow market index.
2. **d. A regression of the stock returns against the MSCI.** If your marginal investors are globally diversified, they will measure risk against a global equity index.
3. **c. A simple average of betas of 85 emerging market steel companies.** For the law of large numbers to work in your favor, you want larger samples rather than smaller ones. Using weighted averages also undercuts the benefits of averaging, since it counts the larger firms more and the smaller firms less.
4. **a. Higher than 0.80.** Having higher fixed costs should increase your beta. If you want to work out by how much, here is what you would do:
  - Unlevered beta for business = Unlevered Beta / (1 + FC/VC)
  - Unlevered beta for business =  $0.80 (1 + 50/50) = 0.40$
  - Unlevered beta for company =  $0.40 (1 + 70/30) = 1.33$
5. **c. A ratio of the standard deviation in your company's earnings relative the average standard deviation in earnings of other companies in the market.** All of the other measures are price based, in one way or the other or build on traditional portfolio theory.