
FUNDAMENTAL PRINCIPLES OF RELATIVE VALUATION**Problem 1**

a & b. The difference is in the denominator and which one will give you the highest value will depend upon whether you are under a growing earnings environment or a declining earnings environment. In boom times, with increasing earnings, you would expect the current PE to give you the highest value. In periods of declining earnings, the forward PE will give you the highest value.

Problem 2

a & b. The numerator looks at overall firm value but the denominator is a measure of equity earnings. Firms with substantial leverage will have high values for this ratio, not because they are overvalued, but because of the inconsistency in measurement.

Problem 3

a & b. Multiples cannot be less than zero but can have very high positive values. This is because most multiples are viewed as non-meaningful if they are negative and are removed from the distribution.

c. As a consequence of the positive skewness, the averages are going to get pulled up by the outliers. An analyst comparing an individual firm's multiple to the average will conclude (wrongly) that many of them are undervalued.

Problem 4

There are two consequences. One is, as referenced in problem 4, the averages will be pulled up by the skewed distribution. The other is that you lose a fair number of firms in your sample, creating a potential bias in the sample.