

## Session 5: Post Class tests

1. Every business faces risk. As a business owner, which of the following is the best approach to dealing with risk:
  - a. Avoid all risk at any cost
  - b. Take every risk that you can. You are in business to take risks.
  - c. Expose yourself to risks where you expect to get a return high enough to compensate you for the risk taking.
  - d. Take only those risks where you are guaranteed a good outcome.
  - e. Avoid those risks where you feel that there might be a bad outcome.
2. Most risk and return models in finance define risk in terms of variance or standard deviation of actual returns around an expected return. Assume that you were looking at the following investments and you can pick only one.
  - a. Investment A: Expected Return = 2%, Standard deviation = 0%
  - b. Investment B: Expected Return = 20%, Standard deviation = 25%
  - c. Investment C: Expected Return = 10%, Standard deviation = 10%
  - d. Investment D: Expected Return = 10%, Standard deviation = 15%
  - If your objective were to minimize risk, which investment would you take?
  - If your objective were to maximize return, which one would you take?
  - Which of these investments would you never take?
3. A key insight in risk and return models in finance is that some risks are diversifiable and others are not. This is followed by the assumption that the marginal investor in the company is diversified. Assume that you know the proportion of stock held by different groups and how much trading they account for. Determine which group is most likely to contain the marginal investor?

Investor Group	% of stock held	% of overall trading
a. Founder/Insiders	30%	5%
b. Government	15%	5%
c. Domestic mutual funds	20%	30%
d. Individual investors	15%	15%
e. Foreign mutual funds	20%	45%

4. The argument for diversification is simple and intuitive. By spreading your bets, you improve your risk/return trade off. But most of us stop diversifying at some point (30 stocks, 40 stocks, etc.). Which of these reasons explains why?
  - a. The marginal benefits of diversification get smaller with each additional investment.
  - b. There are trading and transactions costs associated with adding each investment.
  - c. There is a monitoring cost with each additional investment in your portfolio
  - d. We want to pick the “best” stocks, so that we can beat the market, not just match it.
  - e. All of the above

5. In the CAPM, all of an investment's exposure to market risk is captured in one number: the beta. In the APM and the multifactor models, you allow for multiple sources of market risk and estimate an investment's risk exposure with betas against each market risk factor. Though the latter are "better" models, insofar as they give you more flexibility, they have never acquired a following in corporate finance. Why is that?
- a. The CAPM works so well that you do not need other models
  - b. The CAPM does a better job of explaining past returns than the APM and multifactor models
  - c. It is impossible to estimate the multiple betas in the APM and multifactor models.
  - d. The CAPM does at least as good a job as the APM and multifactor models in forecasting future returns, and it is more intuitive and less work.
  - e. None of the above