

FINA 1082 – Financial Management
Portfolio Theory II
Tutorial Questions for Lecture 7

These questions do not need to be submitted and will be discussed in Tutorial 7. Note that detailed answers to these questions will only be provided in tutorials. This policy is in place to ensure that you attend your tutorial regularly and receive timely feedback from your tutor. If you are unsure of your answers you should check with your tutor, a pit stop tutor or the lecturer.

A. Multiple Choice Questions**A1.** The capital market line:

- a. Describes the set of all efficient portfolios that lie above the mean-variance efficient frontier.
- b. Equation is the same as that for the Capital Asset Pricing Model (CAPM)
- c. Has a slope equal to the ratio of the expected return on the market to the expected standard deviation of the portfolio.
- d. Contains the set of all efficient portfolios, but all portfolios and all stocks lie on the security market line in an efficient market that is in equilibrium.

A2. In capital market theory, the goal of diversification is to minimize:

- a. Unsystematic risk
- b. Systematic risk
- c. Beta
- d. Downside risk

A3. When constructing unleveraged portfolios consisting of risky assets, investors only consider the set of portfolios that reside:

- a. On the efficient frontier
- b. Above the efficient frontier
- c. Below the security market line
- d. On the security market line

A4. In order to maximize diversification benefits, an investor should add a security with a correlation to the existing portfolio *closest to*:

- a. -1.0
- b. -0.5
- c. 0.0
- d. 1.0

A5.

A portfolio contains \$40,000 in bonds and \$60,000 in stocks. The expected return on bonds is 7% with standard deviation of 1%. The expected return on the stocks is 12% with a standard deviation of 8%. Assuming that the bonds and stocks are uncorrelated, determine the standard deviation of the above bond and stock portfolio.

- a. 5.0%
- b. 4.8%
- c. 4.6%
- d. 4.2%

A6. An analyst compiled the following information about A Corporation's common stock returns:

Range of Returns	Observations within Range
-10 up to 0%	30%
0 up to 10	30%
10 up to 20	40%

The analyst considers constructing a portfolio with 60% of assets in A Corp. shares and the rest in a one-year treasury bill yielding 5%. The expected return and standard deviation of this portfolio are closest to:

	Expected Return	Standard Deviation
a.	5.6%	3.1%
b.	5.6%	5.0%
c.	6.0%	3.1%
d.	6.0%	5.0%

A7.

Which of the following statements is **most** accurate?

- a. The only relevant measure of risk is an asset's correlation with the market portfolio.
- b. All portfolios on the capital market line lie above all of the portfolios on the mean-variance efficient frontier.
- c. Investors prefer combinations of the risk-free asset and any other risky asset portfolio to combinations of the risk-free asset and the market portfolio.
- d. Only efficient portfolios lie on the capital market line, but all portfolios and all stocks lie on the security market line in an efficient market that is in equilibrium.

- a. In
- b.

B. Problems