Reading 42: Portfolio Risk and Return: Part II

Question #1 of 69

Which of the following is the *most accurate* description of the market portfolio in Capital Market Theory? The market portfolio consists of all:

A) risky assets in existence.

B) risky and risk-free assets in existence.

C) equity securities in existence.

Question #2 of 69

An analyst has developed the following data for two companies, PNS Manufacturing (PNS) and InCharge Travel (InCharge). PNS has an expected return of 15% and a standard deviation of 18%. InCharge has an expected return of 11% and a standard deviation of 17%. PNS's correlation with the market is 75%, while InCharge's correlation with the market is 85%. If the market standard deviation is 22%, which of the following are the betas for PNS and InCharge?

	Beta of PNS	Beta of InCharge
A)	0.66	0.61
B)	0.92	1.10
C)	0.61	0.66

Question #3 of 69

Which of the following is NOT an assumption of capital market theory?

A) The capital markets are in equilibrium.

B) Interest rates never change from period to period.

C) Investors can lend at the risk-free rate, but borrow at a higher rate.

Question #4 of 69

What is the expected rate of return on a stock that has a beta of 1.4 if the market risk premium is 9% and the risk-free rate is 4%?

A) 13.0%.

B) 11.0%.

C) 16.6%.

Question #5 of 69

The stock of Mia Shoes is currently trading at $15 per share, and the stock of Video Systems is currently trading at $18 per share. An analyst expects the prices of both stocks to increase by $2 over the next year and neither company pays dividends. Mia Shoes has a beta of 0.9 and Video Systems has a beta of (-0.3). If the expected market return is 15% and the risk-free rate is 8%, which trading strategy does the CAPM indicate for these two stocks?

	Mia Shoes	Video Systems
A)	Buy	Buy
B)	Buy	Sell
C)	Sell	Buy

Question #6 of 69

The expected rate of return is 1.5 times the 16% expected rate of return from the market. What is the beta if the risk free rate is 8%?

A) 3.

B) 2.

C) 4.

Question #7 of 69

Which of the following is *least likely* considered a source of systematic risk for bonds?

A) Market risk.

B) Purchasing power risk.

C) Default risk.

Question #8 of 69

Portfolios that represent combinations of the risk-free asset and the market portfolio are plotted on the:

A) capital market line.

B) utility curve.

C) capital asset pricing line.

Question #9 of 69

An active manager will *most likely* short a security with an expected Jensen's alpha that is:

A) zero.

B) negative.

C) positive.

Question #10 of 69

Which of the following statements about systematic and unsystematic risk is *most* accurate?

A) The unsystematic risk for a specific firm is similar to the unsystematic risk for other firms in the same industry.

B) As an investor increases the number of stocks in a portfolio, the systematic risk will remain constant.

C) Total risk equals market risk plus firm-specific risk.

Question #11 of 69

An equally weighted portfolio of a risky asset and a risk-free asset will exhibit:

A) more than half the returns standard deviation of the risky asset.

B) less than half the returns standard deviation of the risky asset.

C) half the returns standard deviation of the risky asset.

Question #12 of 69

Which of the following statements about the capital market line (CML) is *least* accurate?

A) Investors choose a portfolio on the CML by varying their weightings of the risk-free asset and the market portfolio.

B) The CML will not be a linear relationship if investors' borrowing and lending rates are not equal.

C) The market portfolio lies on the CML and has only unsystematic risk.

Question #13 of 69

Which of the following statements about risk is NOT correct?

A) Total risk = systematic risk - unsystematic risk.

B) The market portfolio consists only of systematic risk.

C) Unsystematic risk is diversifiable risk.

Question #14 of 69

All portfolios on the capital market line:

A) are unrelated except that they all contain the risk-free asset.

B) contain different risky assets.

C) are perfectly positively correlated.

Question #15 of 69

Mason Snow, CFA, is considering two stocks: Bahre (with an expected return of 10% and a beta of 1.4) and Cubb (with an expected return of 15% and a beta of 2.0). Snow uses a risk-free of 7% and estimates that the market risk premium is 4%. Based on capital market theory, Snow should conclude that:

A) only Bahre is underpriced.

B) neither security is underpriced.

C) only Cubb is underpriced.

Question #16 of 69

What is the risk measure associated with the CML?

A) Beta.

B) Market risk.

C) Standard deviation.

Question #17 of 69

Which is NOT an assumption of capital market theory?

A) Investments are not divisible.

B) There are no taxes or transaction costs.

C) There is no inflation.

Question #18 of 69

A portfolio's excess return per unit of systematic risk is known as its:

A) Sharpe ratio.

B) Jensen's alpha.

C) Treynor measure.

Question #19 of 69

In Fama and French's multifactor model, the expected return on a stock is explained by:

A) firm size, book-to-market ratio, and price momentum.

B) excess return on the market portfolio, book-to-market ratio, and price momentum.

C) firm size, book-to-market ratio, and excess return on the market portfolio.

Question #20 of 69

The market portfolio in Capital Market Theory is determined by:

A) a line tangent to the efficient frontier, drawn from any point on the expected return axis.

B) the intersection of the efficient frontier and the investor's highest utility curve.

C) a line tangent to the efficient frontier, drawn from the risk-free rate of return.

Question #21 of 69

The expected rate of return is twice the 12% expected rate of return from the market. What is the beta if the risk-free rate is 6%?

A) 4.

B) 3.

C) 2.

Question #22 of 69

For a stock with a beta of 1.25, what is its expected return according to the CAPM when the risk-free rate is 6% and the expected rate of return on the market is 12%?

A) 13.5%.

B) 31%.

C) 10%.

Question #23 of 69

The slope of the characteristic line is used to estimate:

A) risk aversion.

B) beta.

C) a risk premium.

Question #24 of 69

The expected market premium is 8%, with the risk-free rate at 7%. What is the expected rate of return on a stock with a beta of 1.3?

A) 16.3%.

B) 17.4%.

C) 10.4%.

Question #25 of 69

A plot of the expected returns and standard deviations of each possible portfolio that combines a risky asset and a risk-free asset will be:

A) a curve that approaches an upper limit.

B) convex to the origin.

C) a straight line.

Question #26 of 69

The *slope* of the capital market line (CML) is a measure of the level of:

A) expected return over the level of inflation.

B) risk over the level of excess return.

C) excess return per unit of risk.

Question #27 of 69

What is the required rate of return for a stock with a beta of 1.2, when the risk-free rate is 6% and the market risk premium is 12%?

A) 15.4%.

B) 20.4%.

C) 13.2%.

Question #28 of 69

A stock's abnormal rate of return is defined as the:

A) actual rate of return less the expected risk-adjusted rate of return.

B) expected risk-adjusted rate of return minus the market rate of return.

C) rate of return during abnormal price movements.

Question #29 of 69

The following information is available for the stock of Park Street Holdings:

- The price today (P_0) equals $45.00.
- The expected price in one year (P_1) is $55.00.
- The stock's beta is 2.31.
- The firm typically pays no dividend.
- The 3-month Treasury bill is yielding 4.25%.
- The historical average S&P 500 return is 12.5%.

Park Street Holdings stock is:

A) undervalued by 3.7%.

B) undervalued by 1.1%.

C) overvalued by 1.1%.

Question #30 of 69

If the risk-free rate of return is 3.5%, the expected market return is 9.5%, and the beta of a stock is 1.3, what is the required return on the stock according to the capital asset pricing model?

A) 7.8%.

B) 11.3%.

C) 12.4%.

For an investor to move further up the Capital Market Line than the market portfolio, the investor must:

A) borrow and invest in the market portfolio.

B) reduce the portfolio's risk below that of the market.

C) diversify the portfolio even more.

In the context of the capital market line (CML), which of the following statements is CORRECT?

A) Market risk can be reduced through diversification.

B) Firm-specific risk can be reduced through diversification.

C) The two classes of risk are market risk and systematic risk.

Given the following data, what is the correlation coefficient between the two stocks and the Beta of stock A?

- standard deviation of returns of Stock A is 10.04%
- standard deviation of returns of Stock B is 2.05%
- standard deviation of the market is 3.01%
- covariance between the two stocks is 0.00109
- covariance between the market and stock A is 0.002

	Correlation Coefficient	Beta (stock A)
A)	0.5296	2.20
B)	0.5296	0.06
C)	0.6556	2.20

An investor believes Stock M will rise from a current price of $20 per share to a price of $26 per share over the next year. The company is not expected to pay a dividend. The following information pertains:

- $R_F = 8\%$
- $ER_M = 16\%$
- Beta = 1.7

Should the investor purchase the stock?

A) Yes, because it is undervalued.

B) No, because it is overvalued.

C) No, because it is undervalued.

Question #35 of 69

An analyst has estimated the following:

- Correlation of Bahr Industries returns with market returns = 0.8
- Variance of the market returns = 0.0441
- Variance of Bahr returns = 0.0225

The beta of Bahr Industries stock is *closest* to:

A) 0.57.

B) 0.67.

C) 0.77.

Question #36 of 69

Which of the following statements about portfolio management is *most* accurate?

A) The security market line (SML) measures systematic and unsystematic risk versus expected return; the CML measures total risk.

B) Combining the capital market line (CML) (risk-free rate and efficient frontier) with an investor's indifference curve map separates out the decision to invest from the decision of what to invest in.

C) As an investor diversifies away the unsystematic portion of risk, the correlation between his portfolio return and that of the market approaches negative one.

Question #37 of 69

According to capital market theory, which of the following represents the risky portfolio that should be held by all investors who desire to hold risky assets?

A) The point of tangency between the capital market line (CML) and the efficient frontier.

B) Any point on the efficient frontier and to the right of the point of tangency between the CML and the efficient frontier.

C) Any point on the efficient frontier and to the left of the point of tangency between the CML and the efficient frontier.

If the standard deviation of the market's returns is 5.8%, the standard deviation of a stock's returns is 8.2%, and the covariance of the market's returns with the stock's returns is 0.003, what is the beta of the stock?

A) 0.89.

B) 0.05.

C) 1.07.

The beta of stock D is -0.5. If the expected return of Stock D is 8%, and the risk-free rate of return is 5%, what is the expected return of the market?

A) +3.0%.

B) -1.0%.

C) +3.5%.

Beta is a measure of:

A) total risk.

B) company-specific risk.

C) systematic risk.

Portfolios that plot on the security market line in equilibrium:

A) may be concentrated in only a few stocks.

B) must be well diversified.

C) have only systematic (beta) risk.

A portfolio to the right of the market portfolio on the capital market line (CML) is created by:

A) fully diversifying.

B) holding both the risk-free asset and the market portfolio.

C) holding more than 100% of the risky asset.

Question #43 of 69

One of the assumptions underlying the capital asset pricing model is that:

A) there are no transactions costs or taxes.

B) each investor has a unique time horizon.

C) only whole shares or whole bonds are available.

Question #44 of 69

Which of the following statements regarding the Capital Asset Pricing Model is *least* accurate?

A) It is when the security market line (SML) and capital market line (CML) converge.

B) It is useful for determining an appropriate discount rate.

C) Its accuracy depends upon the accuracy of the beta estimates.

Question #45 of 69

Charlie Smith holds two portfolios, Portfolio X and Portfolio Y. They are both liquid, well-diversified portfolios with approximately equal market values. He expects Portfolio X to return 13% and Portfolio Y to return 14% over the upcoming year. Because of an unexpected need for cash, Smith is forced to sell at least one of the portfolios. He uses the security market line to determine whether his portfolios are undervalued or overvalued. Portfolio X's beta is 0.9 and Portfolio Y's beta is 1.1. The expected return on the market is 12% and the risk-free rate is 5%. Smith should sell:

A) both portfolios X and Y because they are both overvalued.

B) portfolio Y only.

C) either portfolio X or Y because they are both properly valued.

Question #46 of 69

Which of the following is the vertical axis *intercept* for the Capital Market Line (CML)?

A) Expected return on the portfolio.

B) Expected return on the market.

C) Risk-free rate.

An analyst collected the following data for three possible investments.

Stock	Price Today	Forecast Price*	Dividend	Beta
Alpha	25	31	2	1.6
Omega	105	110	1	1.2
Lambda	10	10.80	0	0.5
*Expected price one year from today.				

The expected return on the market is 12% and the risk-free rate is 4%. Assuming that capital markets are in equilibrium, what is the required return for Omega?

A) 17.4%.

B) 1.2%.

C) 13.6%.

The expected rate of return is 2.5 times the 12% expected rate of return from the market. What is the beta if the risk-free rate is 6%?

A) 5.

B) 3.

C) 4.

An analyst collected the following data for three possible investments.

Stock	Price Today	Forecast Price*	Dividend	Beta
Alpha	25	31	2	1.6
Omega	105	110	1	1.2
Lambda	10	10.80	0	0.5
*Expected price one year from today.				

The expected return on the market is 12% and the risk-free rate is 4%. According to the security market line (SML), which of the three securities is correctly priced?

A) Alpha.

B) Lambda.

C) Omega.

Question #50 of 69

A stock that plots below the Security Market Line *most likely*:

  A) is below the efficient frontier.

  B) has a beta less than one.

  C) is overvalued.

Question #51 of 69

Which of the following measures produces the same portfolio rankings as the Sharpe ratio but is stated in percentage terms?

  A) Jensen's alpha.

  B) M-squared.

  C) Treynor measure.

Question #52 of 69

Consider the following graph of the Security Market Line (SML). The letters X, Y, and Z represent risky asset portfolios and an analyst's forecast for their returns over the next period. The SML crosses the y-axis at 0.07.
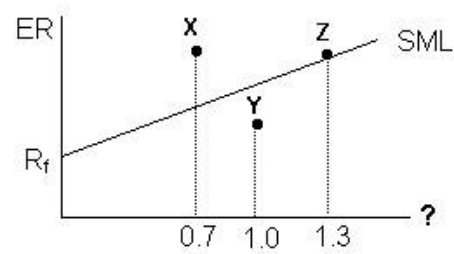
The expected market return is 13.0%.

Using the graph above and the information provided, the analyst *most likely* believes that:

  A) Portfolio X's required return is greater than its forecast return.

  B) the expected return for Portfolio Z is 14.8%.

  C) Portfolio Y is undervalued.

Question #53 of 69

Level I CFA candidate Adeline Bass is a member of an investment club. At the next meeting, she is to recommend whether or not the club should purchase the stocks of CS Industries and MG Consolidated. The risk-free rate is at 6% and the expected return on the market is 15%. Prior to the meeting, Bass gathers the following information on the two stocks:

	CS Industries	MG Consolidated
Current Market Value	$25	$50
Expected Market Value in One Year	$30	$55
Expected Dividend	$1	$1
Beta	1.2	0.80

Bass should recommend that the club:

A) purchase both stocks.

B) purchase CS only.

C) purchase MG only.

Question #54 of 69

Based on Capital Market Theory, an investor should choose the:

A) market portfolio on the Capital Market Line.

B) portfolio that maximizes his utility on the Capital Market Line.

C) portfolio with the highest return on the Capital Market Line.

Question #55 of 69

The correlation of returns on the risk-free asset with returns on a portfolio of risky assets is:

A) negative.

B) positive.

C) zero.

Question #56 of 69

Which of the following is an assumption of capital market theory? All investors:

A) have multiple-period time horizons.

B) select portfolios that lie above the efficient frontier to optimize the risk-return relationship.

C) see the same risk/return distribution for a given stock.

Question #57 of 69

For a security with a beta of 1.10 when the risk-free rate is 5%, and the expected market risk premium is 5%, what is the expected rate of return on the security according to the CAPM?

A) 10.5%.

B) 5.5%.

C) 15.5%.

Question #58 of 69

Which of the following is the risk that disappears in the portfolio construction process?

A) Unsystematic risk.

B) Interest rate risk.

C) Systematic risk.

Question #59 of 69

Consider a stock selling for $23 that is expected to increase in price to $27 by the end of the year and pay a $0.50 dividend. If the risk-free rate is 4%, the expected return on the market is 8.5%, and the stock's beta is 1.9, what is the current valuation of the stock? The stock:

A) is overvalued.

B) is correctly valued.

C) is undervalued.

Question #60 of 69

In equilibrium, investors should only expect to be compensated for bearing systematic risk because:

A) nonsystematic risk can be eliminated by diversification.

B) individual securities in equilibrium only have systematic risk.

C) systematic risk is specific to the securities the investor selects.

Question #61 of 69

The market model of the expected return on a risky security is *best* described as a(n):

A) single-factor model.

B) two-factor model.

C) arbitrage-based model.

Question #62 of 69

Question ID: 415037

In the context of the CML, the market portfolio includes:

A) the risk-free asset.

B) 12-18 stocks needed to provide maximum diversification.

C) all existing risky assets.

Question #63 of 69

Question ID: 415064

When the market is in equilibrium:

A) investors own 100% of the market portfolio.

B) all assets plot on the SML.

C) all assets plot on the CML.

Question #64 of 69

Question ID: 415052

Beta is *least* accurately described as:

A) a measure of the sensitivity of a security's return to the market return.

B) the covariance of a security's returns with the market return, divided by the variance of market returns.

C) a standardized measure of the total risk of a security.

Question #65 of 69

Question ID: 710161

A stock has a beta of 1.55 and an expected return of 17.3%. If the risk-free rate is 8%, , the expected market risk premium is:

A) 14.0%.

B) 12.0%.

C) 6.0%.

Question #66 of 69

Question ID: 415048

A model that estimates expected excess return on a security based on the ratio of the firm's book value to its market value is *best* described as a:

A) multifactor model.

B) market model.

C) single-factor model.

Question #67 of 69

The beta of Stock A is 1.3. If the expected return of the market is 12%, and the risk-free rate of return is 6%, what is the expected return of Stock A?

A) 14.2%.

B) 15.6%.

C) 13.8%.

Question #68 of 69

Given the following information, what is the required rate of return on Bin Co?

- inflation premium = 3%
- real risk-free rate = 2%
- Bin Co. beta = 1.3
- market risk premium = 4%

A) 10.2%.

B) 16.7%.

C) 7.6%.

Question #69 of 69

An analyst wants to determine whether Dover Holdings is overvalued or undervalued, and by how much (expressed as percentage return). The analyst gathers the following information on the stock:

- Market standard deviation = 0.70
- Covariance of Dover with the market = 0.85
- Dover's current stock price (P_0) = $35.00
- The expected price in one year (P_1) is $39.00
- Expected annual dividend = $1.50
- 3-month Treasury bill yield = 4.50%.
- Historical average S&P 500 return = 12.0%.

Dover Holdings stock is:

A) overvalued by approximately 1.8%.

B) undervalued by approximately 1.8%.

C) undervalued by approximately 2.1%.