MASTER OF BUSINESS ADMINISTRATION (FINANCIAL MARKETS) (MBAFM)

Term-End Examination ()()(),9

December, 2013

MCT-080 : PORTFOLIO MANAGEMENT

Time : 3 hours   *Maximum Marks : 100*

PART-A

1. Each question carries 2 marks, while choosing your answer, give brief justification (reason) for your answer. **10x2=20**

   (a) The return on major asset classes have historically exhibited :

       (i) Positive skewness and negative excess kurtosis.

       (ii) Negative skewness and negative excess kurtosis.

       (iii) Positive skewness and positive excess kurtosis.

       (iv) None of the above.

   (b) Stock A has 70% systematic risk and 30% unsystematic risk while Stock B has 30% unsystematic risk 70% systematic risk. Both have identical total risk. In equilibrium as per the CAPM theory :

       (i) B will have a higher expected return than A

       (ii) B will have a lower expected return than A

       (iii) B will have the same expected return as A.

       (iv) The return on B cannot be determined.

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(c) The correlation between the returns on two stocks, A and B, can best be described as :

   (i) Covariance between the returns on A and B divided by the variance of returns on A.

   (ii) Covariance between the returns on A and B divided by the variance of returns on B.

   (iii) Covariance between the returns on A and B divided by the product of the standard deviation of A and standard deviation of B.

   (iv) None of the above

(d) An investor puts 70% of his portfolio into a risky asset offering 12% return with a standard deviation of returns of 8% and the balance in a risk free asset offering 7%. The expected return and standard deviation of his portfolio are.

   (i) Expected return of 10.5% and standard deviation of 8.0%.

   (ii) Expected return of 12.0% and standard deviation of 5.6%.

   (iii) Expected return of 12.0% and standard deviation of 8.0%.

   (iv) Expected return of 10.5% and standard deviation of 5.6%.

(e) As per the arguments put forward by the behavioural psychologists :

   (i) People view all decisions through the transparent and objective lens of risk and return

   (ii) People process data appropriately and correctly.

   (iii) People are guided by reason and logic.

   (iv) None of the above

(f) The expected return on SPIROTEX will be 18%. It has a beta of 1.20 and the expected market return will be 15%. The risk free rate is 6%. Based on this data, one can conclude that :

    (i) The stock is correctly valued

    (ii) The stock is undervalued

    (iii) The stock is overvalued

    (iv) The information is inadequate

(g) Which of the following statements about the SML and CML is least accurate :

    (i) Securities that plot above the SML are overvalued.

    (ii) CML uses total risk on the X-aixs.

    (iii) All properly priced securities will plot on the SML in equilibrium.

    (iv) The CML is a special case of the CAL.

(h) Adding the risk free asset to a portfolio of risky assets will :

    (i) Increase portfolio standard deviation

    (ii) Decrease portfolio standard deviation

    (iii) Will have no effect on the portfolio standard deviation

    (iv) None of the above.

(i) The investment needs of endowment and foundations can be best described as :

    (i) Long time horizon, high risk tolerance and high liquidity needs.

    (ii) Long time horizon, low risk tolerance and high liquidity needs.

    (iii) Long time horizon, low risk tolerance and low liquidity needs.

    (iv) Long time horizon, high risk tolerance and low liquidity needs.

(j) The covariance of the market's returns with the stock returns is 0.0054. The standard deviation of the market's returns is 0.06. What is the stock's beta ?

(i) 0.09   (ii) 1.50

(iii) 1.00   (iv) None of the above

PART-B

Attempt **any two** questions. Each question carries **20** marks   **20x2=40**

2. The risk free rate is 7% and the expected return on the market portfolio is 15% with a standard deviation of 20%. Calculate the expected return and standard deviation of returns for portfolios that are 30%, 60% and 120% invested in the market portfolio.

3. Two risky assets have variances of returns of 0.0625 and 0.0324 respectively. The assets standard deviation of returns is 25% and 18% respectively. Calculate the variance and standard deviations of portfolio returns for an equal weighted portfolio of the two assets when their correlation of returns is 1, 0.5, 0 and -0.5.

4. Based on the following information calculate the mean return, sample variance, sample covariance and correlation for the two series.

Year	Return on Stock A	Return on Stock B
2007	$+0.10$	$+0.20$
2008	-0.15	-0.20
2009	$+0.20$	-0.10
2010	$+0.25$	$+0.30$
2011	-0.30	-0.20
2012	$+0.20$	$+0.60$

PART-C

5. What do you understand by the Arbitrage Pricing Theory (APT) and how does it differ from the CAPM ? Is the APT able to explain the expected returns better than CAPM ? Discuss.

6. Explain the capital market line (CML) with the help of a suitable diagram. How does it differ from the security market line (SML) ? Discuss.

7. Discuss the investment concerns with respect to liquidity, time horizon, taxation, legal/regulatory factors and unique needs/preferences.

8. What is frame dependence ? Discuss the prospect theory, mental accounting, narrow framing, behavioural portfolios and shadow of the past.

9. What are the major components of an Investment Policy Statement (IPS) ?

10. Discuss any ten of the Zurich Axioms.