

Mutual Funds

Kiran Jy.

classmate

Date

Page

1) Sharpe ratio = $\frac{ER - RF}{\sigma_p}$

2) Treynor ratio = $\frac{ER - RF}{\beta}$

3) $\sigma_x = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$

4) $\beta = \text{cor.}(xy) \times \frac{\sigma_x}{\sigma_y}$; $\sigma_m = \sqrt{\frac{\sum (Y - \bar{Y})^2}{n}}$

$\text{cor.}(xy) = \frac{\text{COV of } xy}{\sigma_x \cdot \sigma_y}$

$\text{COV of } xy = \frac{\sum (x - \bar{x})(y - \bar{y})}{n}$

5) Jensen Alpha = $ER - RF - \beta(RM - RF)$

6) Performance index = $\frac{ER(P)}{IC}$

7) FAMA's measure of Net selectivity
= $R_p - [RF + \frac{1}{\sigma_m} (R_m - RF)]$

8) Mutual fund return = $\frac{\text{Your return (Investor's ret)} + R \cdot C}{100 - I \cdot E}$

9) Morning star index = $\text{Expected return} - \text{Riskless}$

$\Rightarrow \sigma_x = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$

$\sigma_y = \sqrt{\frac{\sum (Y - \bar{Y})^2}{n}}$

$\text{Covariance } xy = \frac{\sum (x - \bar{x})(Y - \bar{Y})}{N}$

$\text{Correlation } (xy) = \frac{\text{COV } xy}{\sigma_x \sigma_y}$

$\beta = r_{xy} \frac{\sigma_x}{\sigma_y} = \frac{\text{COV } xy}{\cancel{\sigma_x \sigma_y}} \times \frac{\cancel{\sigma_x}}{\sigma_y}$
 $= \frac{\text{COV } xy}{\sigma_y^2}$