INTERNATIONAL CORPORATE FINANCE I

Fall 2008 at ICU

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Problem Set 2

(October 14; Due date: October 21)

Question 1.

An investor is considering an asset allocation between two stocks of portable music player.

	Mean	Standard Deviation
Banana	5%	18%
Cherry	12%	24%

(i)   Suppose an investor can afford only one of the stocks. Which company's stock will s/he buy?

(ii)   Suppose *Banana*'s mean return was 12% and *Cherry*'s was 5%. Standard deviations are the same. Will your answer to the previous question change?

(iii)   Numerical question:

You are the manager of a huge investment fund so that you can buy any combination of two stocks. Moving the weight (w_1) on *Banana*'s stock in portfolio from 0 to 1, calculate the standard deviations of the portfolio returns for ***corr*(Banna, Cherry) = [*-1.0, -0.5, 0, 0.5, 1.0*]**. Draw the graphs of the standard deviations of the portfolio against w_1.

Question 2.

You are a financial officer of a foreign company which is preparing to enter into the coffee chain business in Japan. Your job includes estimation of the weighted average cost of capital (WACC) for the coffee chain business. To carry out this job, you collected the financial data of existing three coffee chains in Japanese market:

	Beta(β)	D	E
Company A	.75	400	9,600
Company B	1.08	21,000	79,000
Company C	1.00	23,000	77,000

Beta(β) :   CAPM beta of the company's equity

D :   Book value of firms' debt

E :   Market valuation of total equity

(1) Suppose risk-free rate was 3% and average market portfolio return was 8%. Calculate the weighted average cost of capital for this business using above financial data, i.e., as the average of other three existing firms' WACC.

(2) Your company will finance 50% of its financial needs by debt and 50% by equity. Because your company finances so much by debt, you have to assume non-zero beta of your company's debt. Suppose the beta for debt of your company was 0.1. Given that information, calculate the (expected) equity beta of your company.