Answer on Question #83883 - Economics - Finance

Question:

Stock A is currently earning a return of 10% and has a beta of 0. 75, whilst Stock B is earning 15% and has a beta of 1.5. The rate of return on the market is 12% and a risk free asset yields 5%. According to the CAPM:

a. Stocks A and B are earning equilibrium returns

b. Stock A is overpriced and stock B is underpriced

c. Stock A is underpriced and stock B is overpriced

d. Stocks A and B are overpriced.

Answer

d. Stocks A and B are overpriced.

We can find the required return on financial asset by the formula of CAPM:

$r_e = r_f + \beta(r_m - r_f)$

where

r_f–risk-free rate

r_m- market return

β- stock Beta

$r_e(A) = 0.05 + 0.75 * (0.12 - 0.05) = 0.1025$=10.25%

$r_e(B) = 0.05 + 1.5 * (0.12 - 0.05) = 0.155$=15.5%

Expected returns on the stocks are 10% and 15% respectively. Both the stocks are overpriced.

Question:

Firm A has a value of £200 million and Firm B has a value of £140 million. Merging the two companies would allow cost savings with a present value of £30 million. If Firm A purchases Firm B for £150 million, how much do the shareholders of firm A gain from this merger:

a. £20 million

b. £30 million

c. £40 million

d. £50 million

Answer

a. £20 million

$Acquirer's\ gain = Synergies - Premium = S - (P_t - V_t)$

where

P_t- price paid for the target company;

V_t- pre-merger value of the target company;

$30 - (150 - 140) =$ £20 million