Michael DiNicola writes:

I have a question regarding my method of solving the Module 8 Homework, problem 8.1.

Part A. I found the security market line using the given risk free rate of 8%, market risk premium of 7%, and opportunity cost of capital of 15%. This expresses the security market line by the equation: Return on Project = .08 + .07 × Beta

I plugged in the Betas for each project (these are given in the homework) and saw where the "Return on Project" fell relative to the Expected Return (Expected Return was also given in the homework). If the "Expected Return" was higher than the "Return on Project" (above the security market line), I said that the project should be accepted (I accepted projects 1 and 3). Is this the correct method?

NEAS Answer: You have answered Part B here. Part A says that if the firm expects a 15% return on each project (based on the firm's cost of capital), it takes Projects #3 and #4 and rejects Projects #1 and #2. Part B says: if we use the required return for each project based on its beta, then the required return for Project #1 is 8% + 50% × 7% = 11.5%. The expected return is 12%, so the project should be accepted.

Part B. I used each projects Beta (given in the homework) and calculated its return using the equation above for the security market line. This always lands the project on the security market line; so according to this method, any project should be accepted (which is why it is not the relevant criterion). Is this answering the question appropriately?

NEAS Answer: (See above)