

國立臺灣師範大學 107 學年度碩士班招生考試試題

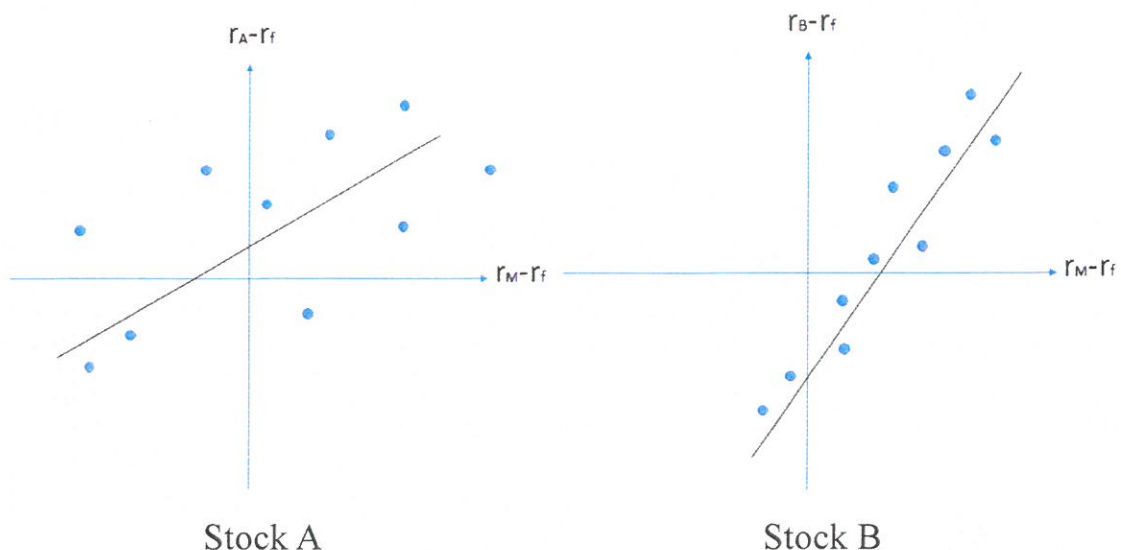
科目：財務管理

適用系所：管理研究所

注意：1.本試題共 2 頁，請依序在答案卷上作答，並標明題號，不必抄題。2.答案必須寫在指定作答區內，否則依規定扣分。

There are four questions for 100 points. Answer the questions either in Chinese or in English. These problems are free response. Partial credit will be given. However, a correct answer may not receive full credit if the justification is incomplete or incorrect. Unsupported answers will receive no credit.

- (25 points) You are a sales person at JP Morgan (JPM, henceforth). Your client is currently invested in both an actively managed product (70%) and a riskfree asset (30%). Your client wants to move his risky assets to Goldman Sachs (Goldman, hereafter). Your client ponders whether to switch 70% that is invested in JPM's fund into Goldman's fund, which is a passive fund reflecting the S&P 500 index. JPM's active product produces an expected return of 18% and has a standard deviation of 28%. Goldman's passive product, that mimics the S&P 500 index, yields an expected rate of return of 13% with a standard deviation of 25%. Assume that the risk-free rate is 8%. Explain to your client the disadvantage of the switch. (Hint: compute each portfolio's Sharpe ratio and compare the ratios.)
- (25 points) Consider the following two regression lines for Stock A and B in the following figure. r_A is the return on Stock A, r_B is the return on Stock B, r_M is the return on the market portfolio, and r_f is the risk-free rate.



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- a) [10 points] Which stock has higher firm-specific risk?
- b) [10 points] Which stock has greater systematic risk? Which stock has higher covariance with the market?
- c) [5 points] Which stock has higher alpha?

No analytic solution is required. You only need to discuss your answer.

3. (25 pts) Your uncle, Mr. Wang, holds his portfolio 100% in ASUS and TSMC. He believes that other Taiwanese companies are not safe at all. He is not sure about the details, but has heard some things. In particular, he tells you that:
- a. [10 points] I have to invest with the best firms in Taiwan.
 - b. [10 points] Both companies have done well in the past few years, so I should stay 100% invested in them.
 - c. [5 points] They pay dividend frequently, which is a good source of income for old people like me.

Explain that each of his justification is subject to faulty reasoning.

4. (25 points) Interpret the Sharpe and Jensen measures of portfolio performance evaluation, and discuss the situations in which each measure is the most appropriate measure.