

國立臺灣科技大學  
九十一學年度碩士班招生考試試題

系所組別：財務金融研究所  
科 目：財務管理

總分 100 分

1. Eric and Christie are considering investing in a portfolio of two stocks, TSMC and UMC, but don't know what the right weight or percentage of each stock should be taken to minimize risk in their portfolio. A consultant is hired to provide them with the best solution. What is available to the consultant now is the basic statistics of the two stocks as shown in the following table. In addition, market analysts have calculated the correlation coefficient of the assigned two stocks as 0.6. If you were the consultant, how would you help Eric and Christie find the minimum-risk portfolio? (15 points)

	Expected Return	Standard Deviation
TSMC	16.4%	23.0%
UMC	19.3%	28.0%

2. Economics Minister Amber has held a common stock for three years, during which time she receives an annual dividend of \$12. The stock was sold for \$89 and generated an average annual return of 18%. What price was paid for the stock? (5 points)
3. An expert was expecting an 18% return on his portfolio with beta of 1.25 before the market risk premium increased from 8% to 10%. According to this change, what return will now be expected on the portfolio? (10 points)
4. Why would not all firms be 100% debt financed? And show why is it not a problem that MM's Proposition 1 may ignore the fact that individuals can deduct interest for personal income tax? Please compare the results of the above with the case that individuals are now allowed to deduct interest for personal tax. (20 points)



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5. (a) 企業有那些資本可供使用?請比較這些資金成本的高低  
(b) 企業의 加權平均資金成本(WACC)如何計算?如何運用?  
(15%)

6. (a) A. B. C 三種投資專案的報酬率與風險如下:

	報酬率	風險(標準差)
A	18%	8%
B	15%	5%
C	25%	13%

理性的決策者會選擇何種專案, 為什麼?

- (b) 企業進行風險管理的方法有那些?若你擔心股票投資組合的價值會因股價下跌而遭受損失, 請問你該如何避險?  
(15%)

7. 何謂最適資本結構?假設 Alternative Solution 公司目前的負債與權益比是最適的, 那麼在下面的情況下, 企業的資本結構必須進行何種調整才能達到最適?

- a、公司稅率增加
- b、公司為從事軟體開發的企業, 它準備擴建一棟辦公大樓
- c、管理者認為公司股票價值被低估
- d、公司淨營運資本(Net Working Capital)需求不斷下降
- e、公司被競爭對手併購

(20%)

