國立臺灣科技大學

八十九學年度碩士班招生考試試題

系所組別： 管理研究所甲組

科　目： 財務管理

一、(20分) 請以相關之財務觀念理論評析下列之敘述：

1、 A 股票的價格波動顯然較 B 股票要高得多，然而其長期平均報酬率卻較 B 股票低，這根本是否違反了「高風險、高報酬」之基本原理。

2、某紡織公司總經理向董事會建議：「由於紡織業目前沒什麼新投資機會，本公司應趁此機會採多角化經營策略，積極跨入電子、金融等行業，以分散經營風險，為股東謀取最大福利」。

3、某公司財務經理宣稱：「本公司最近發行之一批可轉換公司債其票面利率才 0.5%，資金成本實在夠低廉，因此可轉換公司債可說是最理想之籌資工具」。

4、由於公司之加權平均資金成本遠較銀行定存利率高，因此公司資金不管如何均不應投資在銀行定存。

5、根據 MM 定理，資本結構不影響公司價值，公司應儘量使用負債，以發揮槓桿效果，提高公司股東權益報酬率 ROE。

二、(15分) 林氏公司之相關資料如下：股票貝它係數為 1.2，平均 ROE 為 16%，去年度 EPS 為$5，預計三年內不發放現金股利以維持高度之成長率，以後則維持盈餘發放股利比率為 60%。假設無風險利率為 7%，市場報酬率為 17%。請問林氏公司股票目前價值應為多少？其中其公司維持價值與成長機會價值各為多少？林氏公司面臨的問題在那裡？

三、(15分) The total market value of King's Company stock is $6 million, and the total value of its debt is $4 million. The treasurer estimates that the beta of the stock currently is 1.5 and that the expected risk premium on the market is 10%. The Treasury bill rate is 4%.

1. What is the required rate of return on King's stock?
2. What is the beta of the company's existing portfolio of assets? The debt is perceived to be virtually risk-free.
3. Estimate the company's cost of capital assuming a tax rate of 40%.
4. Estimate the discount rate for an expansion of the company's present business.
5. Suppose the company wants to diversify into the manufacture of personal computer (PC). The beta of PC manufacturers with no debt outstanding is 1.2. What is the required rate of return on King's new venture?

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四、Please answer the following short questions.

(Note: your answers from (a) to (f) are correct only if they are within the range of five percent above or below the prices closed on April 07, 2000)

(a) The gold price per ounce in the commodity market? **(3 points)**
(b) The U.S. 30-year Treasury's yield? **(3 points)**
(c) The crude oil price per barrel in the commodity market? **(3 points)**
(d) The exchange rate between the euro and the dollar (euro/per dollar)? **(3 points)**
(e) The London Interbank Offered Rate, or LIBOR, for U.S. dollars, for maturity of one month? **(3 points)**
(f) The prime rate in the U.S.? **(3 points)**
(g) What is the main cause of the collapse of Long Term Capital Management (LTCM), a hedge fund founded by Myron Scholes and Robert Merton? **(3 points)**
(h) What is the Market Value Added (MVA), also called Management Value added? (please show the formula)**(3 points)**
(i) What is the Economic Value Added (EVA)? (please show the formula) **(3 points)**

五、Due to the lowered interest rates in mortgages, Mr. Letterman has decided to refinance his home. Eight years ago, he obtained an NT$8,500,000, 30-year mortgage with a fixed rate of 9 percent. Today he can get a 30-year mortgage for the currently outstanding balance at 6 percent. This loan, however, requires him to pay a NT$30,000 appraisal fee and 2 points at the time of the refinancing. (Hints: (1) 1 point equals 1 percent of the amount borrowed, and (2) ignore tax considerations)

(a) What is the outstanding balance on the loan today? **(3 points)**
(b) How much will the monthly payments be after he refinancing? **(3 points)**
(c) By how much will the monthly payments drop if he refinances? **(3 points)**
(d) How much is the upfront cash outlay required for him to obtain refinancing? **(3 points)**
(e) Ignoring time value considerations, how many months must he stay in the house to make the refinancing worthwhile? (i.e., how many months are required for the payment savings to equal the dollar outlays required to refinance?) **(3 points)**
(f) Redo the previous problem, discounting the monthly savings at 6 percent. Now how many months must he stay in the house to make the refinancing worthwhile? **(3 points)**
(g) For the drop in monthly payments calculated above, how much is attributable to the lower interest rate, and how much is attributable to the fact that he has extended the remaining maturity of his mortgage from 22 years to 30 years? **(5 points)**