

考 試 科 目	財務管理	所 別	4/21 金融學系金融管理組	考 試 時 間	2 月 26 日 ( 日 ) 第 3 節
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I. Explain the following terms briefly (24 %, each 4 %)

- (1) Dividend smoothing.
- (2) MM's Proposition II.
- (3) The pecking order theory.
- (4) Callable bonds.
- (5) WACC.
- (6) SML.

II. Computational Questions (36 %, each 6 %)

1. A firm with 2,000 outstanding shares selling for \$10 each does not have the cash to pay its dividend. In an ideal MM world, how many new shares must be sold and at what price to pay a \$2 dividend per share to old shareholders?
2. What is the expected return on equity for a firm with a 14% expected return on assets that pays 9% on its debt, which totals 70% of assets?
3. What was the market price of a share of stock before a rights issue if one share of new stock could be purchased at \$100 for every four shares that were previously owned? The stock price after the successful rights issue was \$200.
4. A firm with an asset beta of 1.0 has a debt beta of zero when 20% of the capital structure is debt, and is estimated to have a debt beta of 0.15 if debt went as high as 50% of the capital structure. What is the range for the equity beta under these circumstances?
5. A portfolio of three stocks with total market value of \$1,000,000 currently has a beta of 1.4. In light of an expected market downturn, you wish to reduce the portfolio beta to no more than 1.0. Two stocks are likely candidates for sale, one with a beta of 1.8 and a market value of \$200,000 and the other with a beta of 1.5 and a market value of \$250,000. Assuming that you could find one appropriate stock to replace these two, what should be its beta?
6. Calculate the nominal return, real return, and risk premium for the following common stock investment:  
(Both treasury bill yield and inflation rate are annual rates)

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Purchase price	\$60.00 per share
Dividend	\$3.50 per year
Sales price	\$73.00 per share
Treasury bill yield	8.5%
Inflation rate	7.5%

### III. Short Answer Questions (12 %, each 6 %)

1. If interest tax shields are valuable, why don't all tax-paying firms borrow as much as possible?
2. The stock of Newmont Mining, the world's largest gold producer. Do you think the company will have high or low volatility? High or low beta? Explain your answer.

### IV. Questions (28 %)

1. From late 2009, fears of a sovereign debt crisis developed among investors concerning rising government debt levels across the globe together with a wave of dowgrading of government debt of certain European states.
  - a. Briefly describe the cause of the European sovereign debt crisis. (4%)
  - b. What happened of the Euro/Dollar exchange rate under the European sovereign debt crisis? Explain your answer. (4%)
  - c. If you are working for a multinational firm with Euro income, how do you hedge exchange risk caused by the European sovereign debt crisis? (4%)
2. Suppose that instead of plowing money back into lucrative ventures, Blue Skies' management is investing at an expected return on equity of 10%, which is below the return of 12% that investors could expect to get from comparable securities.
  - a. Find the sustainable growth rate of dividends and earnings in these circumstances. Assume a 60% payout ratio. (4%)
  - b. Find the new value of its investment opportunities. Explain why this value is negative despite the positive growth rate of earnings and dividends. (6%)
  - c. If you were a corporate raider, would Blue Skies be a good candidate for an attempted takeover? (6%)