

銘傳大學 101 學年度研究所碩士班招生考試

風險管理與保險學系碩士班

第二節

「財務管理」試題

(第 1 頁共 2 頁) (限用答案本作答)

可使用計算機 不可使用計算機

1. Last year Honda Corp. had sales of \$500,000, operating costs of \$450,000, and year-end assets of \$355,000. The debt-to-total-assets ratio was 17%, the interest rate on the debt was 7.5%, and the firm's tax rate was 35%. The new CFO wants to see how the ROE would have been affected if the firm had used a 50% debt ratio. Assume that sales, operating costs, total assets, and the tax rate would not be affected, but the interest rate would rise to 8.0%. By how much would the ROE change in response to the change in the capital structure? (12%)

2. Lin Corp. is planning its operations for next year, and the CEO Jeremy wants you to forecast the firm's additional funds needed (AFN). Data for use in your forecast are shown below. Based on the AFN equation, what is the AFN for the coming year? Dollars are in millions. (11%)

Last yr's sales	\$350	Last yr's accounts payable	\$40
Sales growth rate	30%	Last yr's notes payable	\$50
Last yr's total assets	\$580	Last yr's accruals	\$30
Last yr's profit margin	5%	Target payout ratio	60%

3. Assume that you manage a \$10.00 million mutual fund that has a beta of 1.05 and a 9.50% required return. The risk-free rate is 4.20%. You now receive another \$8.50 million, which you invest in stocks with an average beta of 0.65. What is the required rate of return on the new portfolio? (11%)

4. In order to accurately assess the capital structure of a firm, it is necessary to convert its balance sheet figures from historical book values to market values. Orange Corporation's balance sheet (book values) as of today is as follows:

Long-term debt (bonds, at par)	\$23,500,000
Preferred stock	2,000,000
Common stock (\$10 par)	10,000,000
Retained earnings	4,000,000
Total debt and equity	\$39,500,000

The bonds have a 8.4% coupon rate, payable semiannually, and a par value of \$1,000. They mature exactly 10 years from today. The yield to maturity is 11%, so the bonds now sell below par. What is the current market value of the firm's debt? (11%)

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5. HTT Company's last dividend was \$1.25. The dividend growth rate is expected to be constant at 30% for 3 years, after which dividends are expected to grow at a rate of 6% forever. If the firm's required return (r^s) is 11%, what is its current stock price? (11%)
6. Assume that you are the financial staff of BigRock Inc., and you have collected the following data: The yield on the company's outstanding bonds is 7.75%, its tax rate is 40%, the next expected dividend is \$0.65 a share, the dividend is expected to grow at a constant rate of 6.00% a year, the price of the stock is \$19.00 per share, the flotation cost for selling new shares is $F = 10\%$, and the target capital structure is 45% debt and 55% common equity. What is the firm's WACC, assuming it must issue new stock to finance its capital budget? (11%)
7. You have been hired by a new firm that is just being started. The CFO wants to finance with 60% debt, but the president thinks it would be better to hold the debt ratio to only 10%. Other things held constant, and based on the data below, if the firm uses the higher debt ratio, by how much would the ROE change, i.e., what is $ROE_{New} - ROE_{Old}$? (11%)
8. Cannon Corp. is considering issuing 15-year, 8% annual coupon, \$1,000 face value convertible bonds at a price of \$1,000 each. Each bond would be convertible into 25 shares of common stock. If the bonds were not convertible, investors would require an annual yield of 10%. The stock's current price is \$25.00, its expected dividend is \$2.50, and its expected growth rate is 8%. The bonds are noncallable for 10 years. What is the bond's conversion value in Year 5? (11%)
9. Suppose the March CBT Treasury bond futures contract has a quoted price of 88-30. If annual interest rates go down by 3.75 percentage point, what is the gain or loss on the futures contract? (Assume a \$1,000 par value) (11%)

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試題完
End of exam