

7. (2 points) Match the term with the date:

Ex-Dividend Date _____	a. April 27, 2003
Declaration Date _____	b. May 16, 2003
Record Date _____	c. June 4, 2003
Payment Date _____	d. May 13, 2003

8) Agency conflicts between equityholders and debtholders can be minimized by creating contracts without restrictive covenants.

A) True B) False

9) Which of the following represents the perfect capital market view of capital structure?

- A) Corporate taxes cause debt to be cheaper than equity.
- B) Firm value depends only on its expected future operating cash flows and the cost of capital, not on how those cash flows are divided between the debtholders and the shareholders.
- C) Maximum firm value results from being essentially all-debt financed.
- D) none of the above

10) Which of the following represents the corporate tax view of capital structure?

- A) The value of the leveraged firm is equal to the value of the unleveraged firm plus the tax rate times the amount of debt.
- B) Firm value depends only on its expected future operating cash flows and the cost of capital, not on how those cash flows are divided between the debtholders and the shareholders.
- C) Corporate taxes cause debt to be more expensive than equity.
- D) Maximum firm value results from being essentially all-equity financed.

11) WACC equals _____.

- A) $(1 - L)r_e + L(1 - T)r_d$ where L is the leverage ratio consisting of debt divided by firm value
- B) $(1 - L)(1 - T)r_e + Lr_d$ where L is the leverage ratio consisting of debt divided by firm value
- C) $(1 - L)r_e + L(1 - T)r_d$ where L is the leverage ratio consisting of equity divided by firm value
- D) $(1 - L)r_d + L(1 - T)r_e$ where L is the leverage ratio consisting of debt divided by firm value

12. What is the optimal capital structure? Why?

13. What is dividend policy? What is the optimal dividend policy?

YOU HAVE 75 MINUTES TO COMPLETE BOTH PARTS OF THIS EXAM

Instructions:

- 1) The part of the exam is open book and open notes.
- 2) Partial points are based on readily observable evidence that you know at least part of the solution concept. The more evidence presented (and the clearer the evidence), the better the chance for partial points. In other words, SHOW ALL WORK!

1. (10 points) In 2002, the Lissa Company, a low growth firm, paid dividends of \$25,000,000 on after-tax net income (cash flow) of \$26,000,000. Capital budget projects totaled \$4,000,000 in 2001. 2002 was a normal year for earnings, dividends, and capital budgets. For the past 8 years, earning has grown at a constant rate of 5%. However, in 2002, earnings are expected to rise to \$28,000,000 and the firm expects to have profitable investment opportunities will grow to 8,000,000. It is predicted that Lissa will not maintain the 2002 level of earnings growth, and the company will return to it previous 5% growth rate. Lissa's target debt ratio is 20%.

a. Calculate Lissa's total dividends for 2003 if its dividend payment is set to force dividends to grow at the long-run growth rate in earnings.

b. Calculate Lissa's total dividends for 2003 if it continues its 2002 dividend payout ratio.

c. Calculate Lissa's total dividends for 2003 if it uses a pure residual dividend.

d. What is Lissa's 2003 end of year special dividend, if Lissa uses the residual method to calculate total dividends and the constant dividend payout ratio to calculate the 2003 regular dividend?

e. Of the choices above, which is Lissa's best choice of dividend policy? Why?

2. (Point values are as listed) Use the following information for the next several questions. Consider a world of perfect capital markets. This world has no corporate or personal taxes, all investors have homogeneous expectations, no bankruptcy costs, and M&M's no-tax theory of capital structure is true.

Company Y is financed has the following market value balance sheet:

Assets = \$ 450

Liabilities = \$0

Equity = \$450

The firm had \$45 in EBIT last year. The firm has 30 shares outstanding. The firm expects this same return for the foreseeable future. The firm is a zero growth firm that pays out all excess earnings as dividends. Any time the firm changes its capital structure, it changes only the debt/equity mix and does not change its total assets. The firm's liabilities consist entirely of perpetual debt. The firm's debt is risk-less, perpetual, selling at par, and has a 5% yield. If the firm were to change its capital structure, new debt would still have a 5% yield. The expected return on the market is 14%. Given this information, answer the following questions:

- a. (2 points) What is the firm's return on equity?

- b. (2 points) What is the firm's current weighted average cost of capital.

- c. (2 points) What is the beta of the firm's equity?

Now assume that the above firm issues enough debt to repurchase \$90 of stock. This change in capital structure reveals no new information about future firm prospects.

- d. (2 points) What is the overall firm's new WACC?

- e. (2 points) Write out the firm's new balance sheet.

- f. (2 points) What is the firm's new return on equity?

3. Now consider a DIFFERENT COMPANY in a world that of perfect capital markets, with one change, CORPORATE TAXES DO EXIST. This world has no personal taxes, all investors have homogeneous expectations, no bankruptcy costs, and M&M's (the textbook's) with corporate taxes theory of capital structure is true. Company Y is financed has the following market value balance sheet:

Assets = \$ 220 Liabilities = \$40
Equity = \$180

The firm had \$40 in EBIT last year. The firm has 20 shares outstanding. The firm expects the same return/profits for the foreseeable future. The firm is a zero growth firm that pays out all excess earnings as dividends. Any time the firm changes its capital structure, it changes only the debt/equity mix and does not change its total assets. Liabilities consist only of the firm's debt. The debt is riskless, perpetual, selling at par, and has an 8% pre-tax yield. If the firm were to change its capital structure, new debt would still have an 8% pre-tax yield. The firm's tax rate is 40%. Given this information, answer the following questions:

- a. (2 points) What is the current expected return on the firm's equity?

- b. (2 points) What is the firm's current WACC?

- c. (2 points) What is the value of the firm's tax shield due to the use of perpetual debt?

Now assume the firm issues \$40 in equity and repurchases \$40 in debt.

- d. (2 points) Write out the firm's new balance sheet after all of the changes.

- e. (2 points) What is the firm's Weighted Average Cost of Capital?