

These questions are all from our slides.

1. Trans Can Corporation
 - a. Currently No Debt
 - b. Number of Shares Outstanding is 400, Price per Share is \$20
 - c. Interest Rate is 10%
 - d. Issue \$4,000 in Debt to Buy Back Shares
 - e. Earnings 1,200 expected, \$400 during recession and \$2,000 during expansion
What is the EPS in recession without debt?
What is the EPS in recession with debt?
Under what condition that TCC with debt is better off than it is without debt?
2. Continue the TCC question, if strategy A says
Strategy A: Buy 100 Shares in Levered Trans Can Corporation
Can you come up a homemade leverage strategy that gives the same earnings as strategy A?
3. What are MM propositions?
4. What is the intuition that cost of equity is increasing with firm leverage under MM framework?
5. When we add corporate taxes into MM framework, cost of equity becomes lower or higher?
Why?
6. When we add corporate taxes into MM framework, cost of capital becomes lower or higher?
Why?
7. Lutheran Motors is an all equity firm with perpetual cashflows of \$10 million forever. There are 10 million shares outstanding. The cost of capital for the unlevered firm is 10%. Firm plans to build a new plant that will cost \$ 4 million. The plant is expected to generate additional cashflow of \$1 million forever. The firm will issue \$4 million of either equity or debt. Show the effects of different financing methods on value of firm, cost of equity and price per share. There are no taxes in the economy.
8. Water Corporate has a tax rate of 40% and expects EBIT of \$ 1 Million. Its entire earnings after taxes are paid out as dividends. The firm is considering two alternative capital structures. Under Plan I, Water Products has no debt in its capital structure. Under Plan II, the company would have \$ 4,000,000 of Debt, B. The cost of debt is 10%. What is the amount of Tax savings under plan II?
9. Dividend Airline is currently an all equity firm. Its management is considering changing its capital structure. The company has perpetual earnings \$ 166.67 before interest and taxes (EBIT). It faces corporate tax rate of 40% and thus has after tax cashflow of \$100. Its cost of debt capital is 10%. Unlevered firms in the same industry have cost of equity of 20%. The management wants to issue 200 of debt and use the proceeds to buy back the existing shares. What will be value of the firm, WACC and cost of equity after the debt issue?
10. Madoff, CEO of Rip-Off Inc, is evaluating his firm's capital structure. He expects that Rip-Off Inc will have perpetual EBIT of \$850,000. The after tax return on Rip-Off, if it were all equity firm, is

9.7%. Currently the firm has \$1.7 million debt outstanding and is subject to a corporate tax rate of 39%. The personal tax rate on interest income is 17.5% and the personal income tax rate on equity distribution is zero. The present value of combined distress and agency costs associated with debt are approximately 6% of the total value of the debt.

A) What is the value of the firm?

B) What is the added value of Rip-off's debt?

11. What is prepackaged bankruptcy? What is the main benefit of prepackaged bankruptcy?

12. Peter Parker owns 460 shares in Daily Bugle Inc (DB Inc). Daily Bugle will pay \$2 per share dividend after one year. After two years, Daily Bugle will pay a liquidating dividend of \$18.5673. The required rate of return on DB is 13%.

A) What is the current price of one share of DB Inc?

B) Peter Parker wants to receive equal amounts of money in each of the next two years.

How many shares should he buy or sell at time one to achieve it.