

Discounted Cash Flow Part 2 Practice Problem

Re-working the Gentex exercises from class is also good practice.

1. You are doing a valuation on "Go Nuts 4 Donuts" and you have calculated the equity value as \$150 million. There are currently 10 million shares outstanding. There are 2.5 million restricted stock units that have vested and another 3 million that have not vested. Options outstanding are 10 million with an exercise price of \$8.
 - (a) What is the value of the firm per share only accounting for restricted stock?
 - (b) What is the value of the firm per share accounting for all equity compensation under the treasury stock methods?
 - (c) What is the value of the firm per share accounting for all equity compensation under the treasury stock method assuming the proceeds from the exercise of options are used to repurchase shares at the current stock price of \$19?
 - (d) What is the value of the firm per share if you valued the options using Black Scholes and got a value of \$3.77 per option.
2. The company you valued has an equity value of \$100 million. You discover the company has a minority passive stake with a book value of \$3 million and a price to book ratio of 3.5 for that industry. The company also has a majority active position with a book value of minority interest of \$4.5 million with an industry price to book of 5.2. The initial financial statements were fully consolidated. What should be the new valuation of equity?
3. A firm has a BV of debt of \$200 million with 5 years to maturity on average. You estimate the cost of debt to be 7.2%. The income statement shows \$26 million in interest expense. What would you estimate the market value of the debt to be?
4. What is the value per share if you expect cash flows to grow at 3% forever and non-cash net income was \$20 million, depreciation and amortization was \$2 million, total investments (capex and changes in net working capital) were \$6 million and you issued \$5 more million in debt than you repaid. You estimate a beta of 1.1 and assume a risk free rate of 1.5% and a market risk premium of 7%. The firm has \$3 million in cash holdings and 5 million shares outstanding, assume no equity compensation outstanding or expected.

Answer to above problems

- 1) a) \$11.54, b) \$10, c) \$7.98, d) \$8.64
- 2) \$87.1 million
- 3) \$247.31 million
- 4) \$70.37