

Quiz 2: Valuation

Answer all questions and show necessary work. Please be brief. This is an open books, open notes exam.

You have been asked to value Ruiz Enterprises, a small publicly traded retail company, and have been provided with the following estimates of earnings and cash flows for the company for the next 3 years:

<i>Expected growth</i>		8%	8%	8%
EBIT (1-t)	\$300.00	\$324.00	\$349.92	\$377.91
+ Depreciation	\$50.00	\$54.00	\$58.32	\$62.99
- Cap Ex	\$175.00	\$189.00	\$204.12	\$220.45
- Change in WC	\$75.00	\$81.00	\$87.48	\$94.48
FCFF	\$100.00	\$108.00	\$116.64	\$125.97
Cost of capital		12%	11%	10%

- a. Assuming that the firm has a stable return on capital, estimate the return on capital that the analyst is assuming for the first 3 years. (2 points)

- b. Now assume that cash flows after year 3 will grow 4% a year forever and that the return on capital used for the first three years will be earned in perpetuity on new investments. Estimate the terminal value for the firm. (2 points)

c. Ruiz Enterprises owns 75% of a Cora Inc, a private retail business, and the numbers in the table provided on the last page reflect full consolidation. Ruiz Enterprises does show minority interests of \$ 250 million on its balance sheet; the typical price to book value ratio for retail firms is 2.0. Assuming that Ruiz has \$ 1 billion in debt and \$ 400 million in cash outstanding currently, estimate the value of equity in the company. (2 points)

d. Finally, assume that Ruiz has 80 million shares outstanding today, and 20 million options that it has issued to managers over time, with an average strike price of \$ 20 and 3 years left to expiration. If each option has a value of \$10, estimate the value of equity per share. (1 point)

e. Ruiz Enterprises has its cash balance of \$ 400 million invested in treasury bills, earning 2% a year. An analyst argues that the market will discount the cash because the returns on cash are much lower than the returns that the firm is generating on its operating assets.

Do you agree?

(1 point)

i. Yes

ii. No

Explain:

f. As a final iteration, Ruiz is considering selling off some its more unprofitable stores to a competitor for \$ 250 million. The stores account for 10% of the current after-tax operating income but the earnings at these stores are flat (there is no growth expected, but the earnings will continue in perpetuity). Assuming that the cost of capital for these stores is 10% forever, what effect will this divestiture have on the value per share? (2 points)