

Quiz 3: Valuation

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

1. You are trying to attach a reasonable pricing to Renzi Stores, a mature retail firm that is planning to go public, based upon its characteristics and how the average retail company is being priced. You have been provided with the following information:

	Renzi Stores	Average Public Retail firm
EV/Sales	NA	0.80
After-tax Operating Margin	10%	6%
Expected Growth Rate (in perpetuity)	2%	2%
Reinvestment Rate	10%	20%

If the average retail firm is fairly priced, given its fundamentals, and Renzi Stores is expected to have revenues of \$500 million next year, estimate a fair pricing for Renzi's operating assets. You can assume that the average retail firm is mature, and that Renzi Stores has the same cost of capital as the average retail company. (3 points)

2. Cosmo Corporation is in two businesses, autos and financing, and you have collected information on both (all \$ values in millions):

	Cosmo Auto	Cosmo Capital
Revenues	\$ 2,000.00	\$ 500.00
EBITDA	\$ 200.00	NA
Net Income	\$ 120.00	\$ 80.00
Book Equity	\$ 800.00	\$ 500.00
Book Debt	\$ 200.00	\$ 1,000.00
Cash	\$ 200.00	\$ 0.00

Looking at the pricing of other firms in each of the businesses, you have run the following regressions:

For autos: $EV/EBITDA = 4.25 + 20.00 (EBITDA/Invested\ Capital) - 5.00 (Book\ Debt/Book\ Equity)$

For financial firms: $PBV = 0.6 + 5.00 (Return\ on\ Equity)$

(All percentages are entered as decimals, i.e., 15% would be 0.15)

Estimate the value of equity in Cosmo Corporation.

(3 points)

3. You are the sole owner of a hotel and have received an offer of \$100 million for your business from a private (undiversified) buyer, but you are interested in how much you would have been able to get as a fair value offer, if your buyer were a public company. You have collected the following information:

	Private Offer	Public Offer
FCFF (in \$ millions)	\$ 11.50	\$ 11.50
Cost of equity	14.00%	
After-tax cost of debt	5%	3%
Debt/(Debt + Equity)	0%	20%
Cost of capital	14.00%	
Expected growth rate	2.50%	2.50%
Tax Rate	25.00%	25.00%

If the riskfree rate is 2.5% and the equity risk premium is 5.75%, estimate the fair value for your company in a public offer. (The correlation of hotel firms with the market is 0.45 and the corporate tax rate is 25%) (4 points)