

Quiz 3: Valuation

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

1. Riley Inc. currently trades at an EV/Invested Capital ratio of 1.25, and is in stable growth, growing 3% a year in perpetuity, with a 9% cost of capital. If a cost-cutting plan is expected to increase the return on capital by 1.50%, **estimate the EV/Invested Capital ratio after the improvement.** (2 points)

2. Stumptown Inc. is a young, growth company and you have the following estimates (in \$ millions):

	<i>Most Recent Year</i>	<i>In year 5</i>
Revenues	\$600.00	\$1,500.00
EBITDA	-\$100.00	\$150.00
Debt	\$50.00	\$150.00
# Shares	150	250
PV of FCFF (next 5 years)	- \$100 million (minus \$100 million)	

If you expect the firm to trade at 8 times EBITDA in year 5 and the cost of capital for the firm is 10%, **estimate the value of equity per share today**. (You can assume that the firm will be worth nothing in failure.) (2 points)

3. Calistoga Inc. is a company in two businesses – food and hotels, and you have collected the following information about the businesses (\$ values in millions):

	<i>Debt</i>	<i>EBITDA</i>	<i>Exp FCFF next year</i>	<i>Cost of capital</i>	<i>Growth rate</i>
Food	\$150	\$200	\$80	8%	3%
Hotels	\$100	\$150	\$60	10%	2%
Corporate		-\$50	-\$15	8%	3%

The company has 100 million shares outstanding, trading at \$16/share, \$150 million in cash and \$450 million in debt. If you can acquire the firm at the current market price and break it up and sell the individual businesses for their intrinsic value, **estimate how much you will make in a break-up.** (3 points)

4. You are trying to assess how diversified the typical private equity (PE) investor is, and have collected information on PE and public transactions:

	<i>PE transaction</i>	<i>Public transaction</i>
Expected FCFE next year (\$ millions)	\$60	\$75
Growth rate (in perpetuity)	2%	3%
Equity Value (\$ millions)	\$750	\$1,500

Based on this information, and assuming that the riskfree rate is 4% and the equity risk premium is 5%, **estimate the correlation of a typical PE investor's holdings with the market.** (3 points)