

Quiz 1: Valuation

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

1. Suarez Inc, is a Peru-based company with operations in Peru, Colombia and Brazil, The breakdown of revenues, by country, and information about government bond rates in both US dollars and local currency in each country are below:

	Colombia	Peru	Brazil
Revenues (in \$ millions)	\$400	\$600	\$500
Govt Bond Rate (US \$)	5.00%	5.50%	6.50%
Govt Bond Rate (Local)	6.50%	7.00%	10%

You can assume that equity markets are 1.25 times more volatile than the government bonds in each of these countries and that the local currency default spread is equal to the foreign currency default spread. If the US 10-year T.Bond rate is 3% and the ERP for mature markets like the US is 6%, estimate the equity risk premium that you would use to value Suarez Inc. (4 points)

2. Bing Inc. is a company that operates in two businesses, hotels and movies. You have estimated the values for each of the businesses, as well as the betas and debt to equity ratios of comparable firms in each business.

Business	Estimated Value (in \$ millions)	Comparable firms	
		Levered Beta	D/E Ratio
Movies	\$ 1,600.00	1.035	20%
Hotels	\$ 800.00	1.65	50%
Total	\$ 2,400.00		

Bing Inc has \$1200 million in debt outstanding and trades at its estimated value. If all firms face marginal tax rates of 25%, estimate the levered beta for Bing. (3 points)

3. Cafri Inc. is a consulting firm that has reported the following numbers for revenues and operating income for the last 12 months, and the three years prior (Year -3 is three years ago, year -2 is two years ago and year -1 is last year):

	Year -3	Year -2	Year -1	Last 12 months
Revenues	\$500.00	\$700.00	\$900.00	\$1,500.00
- Operating Expenses	\$300.00	\$450.00	\$600.00	\$900.00
= Operating Income	\$200.00	\$250.00	\$300.00	\$600.00

You estimate that 25% of the company's operating expenses every year are for recruiting and training and that these expenses should be capitalized, since their benefits are spread over an employee's tenure at the firm. If the typical employee stays 3 years at the firm, estimate the **corrected operating income for the last 12 months**.
(3 points)