

### Quiz 1: Valuation

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

1. MGK Inc, a US-based corporation is looking at acquiring Gemini Corp, an Indonesian company and you have been asked to do the valuation. You are given the following cash flow computation for Gemini Inc. for the most recent year, and are also told that the company is in stable growth, growing 6% a year in Rupiah terms in perpetuity.

Net Income	IDR 150
+ Depreciation	IDR 50
- Capital Expenditures	IDR 90
- Change in non-cash WC	IDR 20
+ Net Debt Issued	IDR 15
Cash flow	IDR 105

The costs of equity and capital for the individual companies and the combined company are provided below:

	MGK (\$)	Gemini (\$)	Gemini (IDR)	Combined (\$)
Cost of equity	10%	14%	18%	11%
Cost of capital	8%	12%	15%	9%

Gemini has 400 million IDR in debt outstanding (book & market) and no cash. What is the value that you would attach to Gemini, as a business? (3 points)

2. TastyBake Foods, a US-based processed food company that derives all of its revenues in the US. TastyBake is currently all equity-funded and has a cost of equity (and capital) of 7.5% (in US dollars); the US 10-year treasury bond rate is 3% and the ERP for the US (and mature markets) is 5%. TastyBake is considering expanding its food processing business into Brazil and is planning on using more debt (a debt to capital ratio of 20%). You have collected the following additional information about Brazil:
- The Brazilian government has \$R (Brazilian Reais) denominated bonds, yielding 11%, and US-dollar denominated bonds, yielding 5%. Brazil's local currency bond rating is identical to its foreign currency bond rating.
  - Brazilian equities are 1.25 times more volatile than the Brazilian government bond.
  - TastyBake expects to have a bond rating of BBB+ and be able to borrow money at 5.5% (pre-tax, in US dollar terms) for the expansion.

If the marginal tax rate is 40%, estimate the cost of capital in US dollar terms for just the Brazilian operations. (4 points)

3. You are a venture capitalist, valuing ConnectNow, a social media company. The company has reported the following numbers (with GAAP & its own adjusted values) for the most recent year and the prior three years.

	<i>Revenues</i>	<i>Operating Income</i>	<i>Taxable income (after interest expenses)</i>	<i>-Taxes Paid</i>	<i>After-tax Operating Income</i>	<i>+Customer Acquisition Costs</i>	<i>Adjusted Operating Income</i>
Most recent year	\$1,000	\$60	\$45	\$18	\$42	\$100	\$186
Year -1	\$800	\$25	\$15	\$6	\$19	\$90	\$135
Year -2	\$500	(\$25)	-\$30	\$0	(\$25)	\$60	\$65
Year -3	\$250	(\$50)	-\$50	\$0	(\$50)	\$30	\$10

The company's management is arguing that you should add back customer acquisition costs back to earnings each year, because the customers they acquire stay on with the company an average of 3 years and that they are the basis for the company's future growth. Assuming that you find the customer longevity argument credible, **make your best estimate of the after-tax operating income for the firm in just the most recent year.** (3 points)

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Name:

Effect of capitalizing advertising expenses at a brand name company.