

**Quiz 2: Valuation**

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

1. You are reviewing the expected cash flows for Corus Inc., that have been estimated by the analysts:

|                | 1         | 2         | 3         |
|----------------|-----------|-----------|-----------|
| Growth rate    | 8.00%     | 8.00%     | 8.00%     |
| EBIT (1-t)     | \$ 108.00 | \$ 116.64 | \$ 125.97 |
| - Reinvestment | \$ 43.20  | \$ 46.66  | \$ 50.39  |
| FCFF           | \$ 64.80  | \$ 69.98  | \$ 75.58  |

Assuming that the company's returns on capital are stable, and the reinvestment and growth are contemporaneous (happen in the same year), estimate the terminal value for the firm, assuming a growth rate of 3% forever after year 3. (You can assume a cost of capital of 10%). (2 points)

2. QuantAI is a closed-end fund, with **investments in publicly traded companies (of average risk) valued at \$240 million**. If the expected return on the average risk stock is **8%**, and QuantAI's asset-under-management are **expected to grow 2% a year**, while earning an **annual alpha (a return in excess of the expected return) of 1.0%**, estimate the **fair market capitalization** for QuantAI. ( 2 points)

3. You are trying to value equity in Kraven Inc., a publicly traded company with two cross holdings – a 75% holding in Gasper Inc. and a 10% holding in Lumix. You have the following information (with \$ values in millions):

|                  | Kraven (consolidated) | Gasper | Lumix      |
|------------------|-----------------------|--------|------------|
| FCFF (next year) | \$250                 | \$100  | \$45       |
| Cost of capital  | 10.00%                | 12.00% | 8.00%      |
| Growth rate      | 2.00%                 | 2.00%  | 2.00%      |
| Net Debt         | \$500                 | \$400  | \$0        |
| Shares           | 1500                  | 500    | Not traded |
| Percent owned    |                       | 75.00% | 10.00%     |

Estimate the value of equity in Kraven.

(3 points)

4. Based on an intrinsic valuation, an analyst has concluded that Garmax Inc. is fairly valued at its current stock price of \$7.50/share, using the **fully diluted approach** for options. Garmax has 10 million shares and 2 million options outstanding, and the strike price on the options is \$6. If the **value per option is \$3**, estimate the **correct value of equity per share**. (2 points)