

**Quiz 1: Valuation**

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

1. VietWorks, a Vietnamese steel company is considering acquiring Malay Steel, a Malaysian steel company. VietWorks has an 18% cost of equity and a 15% cost of capital, in Vietnamese Dong. Malay Steel has the same mix of debt and equity as Vietworks, and you have been provided the following information on the two countries:

	Vietnam	Malaysia
Country Risk Premium	5.00%	2.50%
Expected Inflation	6.00%	3.00%

If the cash flows for Malay Steel are after debt payments and in Malaysian Ringgit, **estimate the right rate to use discount those cashflow.** (2 points)

2. Schaden Inc., a German company with a mix of revenues in hotels and travel service, entirely from Germany, is acquiring Katalin Inc, a Hungarian company, also with a mix of revenues in hotels and travel service, entirely from Hungary. You have been given information on both businesses below:

	Schaden	Katalin	Unlevered beta	EV/Sales
Hotels	600	400	1.2	0.5
Travel Service	400	600	0.75	1.5

The information on the two countries is below:

Country	Germany	Hungary
Equity Risk Premium	5.00%	7.00%
Govt Bond Rate in Local Currency	2.00% (Euro)	4.50% (Forint)

**Estimate the cost of equity for the combined company, after the merger, in Euros**, assuming that both are entirely equity financed. (3 points)

3. You have been asked to compute the debt ratio for Wrexham, a publicly traded soccer club, with two classes of shares – 10 million class A shares, trading at \$20/share and 80 million class B shares, trading at \$10/share. The firm has just taken a \$500 million bank loan, at a 4% interest rate, and has guaranteed player contracts of \$80 million each year for the next six years. **Estimate the debt to capital ratio for the firm, if you consider contractual claims as debt.** (2 points)

4. You are trying to estimate the expected free cash flow from Flowmatics, a medical device manufacturer, and have been provided the following information (in millions)

	<i>Most Recent year</i>	<i>Information for next year</i>
Revenues	\$1,500.00	1. Revenues are expected to grow 50% next year
- COGS	\$900.00	2. EBITDA margin will be unchanged
EBITDA	\$600.00	3. Total non-cash WC is 10% of revenues now and will remain 10% of revenues next year
- DA	\$200.00	
EBIT	\$400.00	4. Depreciation will increase by 25% next year
- Interest Expenses	\$100.00	5. The company expects to spend \$400 million on capital expenditures & acquisitions.
Taxable Income	\$300.00	
- Taxes	\$60.00	
Net Income	\$240.00	

**Estimate the expected free cashflow to the firm next year.**

**( 3 points)**