Quiz 1: Valuation

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

1. Malbec Inc. is a publicly traded US winery, with all of its vineyards in the United States and no debt outstanding. It has a US$ cost of equity of 8% and in considering investing in a vineyard in Chile (also entirely with equity).
    - The US 10-year T.Bond rate is 2% and US 10-year TIPS (inflation-protected T.Bonds) is 0.5%.
    - The country risk premium for Chile is 1.2% and the expected inflation rate in Chile is 4%.

    If the return on equity, in Chilean pesos, on the Chilean vineyard investment is 10%, estimate the cost of equity that you would use in assessing this return. (2 points)

2. Merkel Enterprises is a German company that has significant Polish operations and you are given the breakdown on revenues in the two countries, in conjunction with other data on the two countries:

	Revenues in country (in millions of Euros)	Govt Bond Rate (in Euros)	Govt Bond rate (local currency)
Germany	€ 600.00	-0.50%	-0.50%
Poland	€ 400.00	1.50%	5.00%

- Assuming that the <u>local currency default spread for Poland is equal to its default spread in Euros</u>, estimate the risk free rate in Polish Zlotys. (1 point)

- If the ERP for the Germany (and other mature markets) is 5% and <u>equities are 1.25 times more risky than government bonds in emerging markets</u>, estimate the equity risk premium for Merkel Inc. (2 points)

3. You are trying to estimate the beta for Galleon Media, a movie company, after its acquisition of TeleTech Software, a software company, and have the following information about the two companies, prior to the merger.

	Market Cap (in millions)	Debt (millions)	Beta
Galleon Media (Acquirer)	\$1,500.00	\$0.00	0.8
TeleTech Soltware (Target)	\$1,000.00	\$0.00	1.2

If Galleon borrowed half of the money it needed to buy TeleTech, estimate the levered beta for Galleon after the merger. (The marginal tax rate is 30%) (3 points)

4. You have been given the following information, from the income statement, on Carmen Auto, a small auto parts company.

	Most Recent Year (in millions)
EBIT	$175
- Interest Expenses	$25
Earnings before taxes	$150
Taxes	$30
Net Income	$120

If you also know that Carmen Auto had a free cash flow to the firm of $105 million in the most recent year, estimate how much the company reinvested back during the year (in dollars). (2 points)