Quiz 1: Corporate Finance

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

1. Corporate Governance/Risk Basics section.
   Each of the following multiple-choice questions is worth ½ point. Please pick only one answer for each question.
   a. Measuring the strength of corporate governance is now the rage. Assuming that you are trying to measure the effectiveness of a board of directors. Which of the following would you use as *your best measure of effectiveness*?
      i. Average age of directors.
      ii. Percentage of directors who are CEOs of other companies.
      iii. Expertise in the business that your company is in.
      iv. Percentage of directors who are independent (no formal business ties or relationships) of the top management.
      v. Percentage of time that directors dissent with CEO on board votes.

   b. You are well aware of the risks that you face when you buy shares in a company that has shares with different voting rights. Assume that you have no choice but to buy non-voting shares in a company that has both voting and non-voting shares. Which of the following would you view as least dangerous to you (from a corporate governance standpoint)?
      i. Voting shares are traded and held by CEO and by government-controlled institutions.
      ii. Voting shares are not traded and held entirely by CEO
      iii. Voting shares are traded, but concentrated in the hands of CEO
      iv. Voting shares are traded and held by activist investors.
      v. Voting shares are traded and widely dispersed across shareholders.

   c. A few months ago, Chipotle had E Coli outbreaks at a few of its restaurants and its stock price dropped almost 30%. Though only about 2% of Chipotle's restaurants were affected, the news has potentially large implications for how Chipotle does business and thus could be consistent with an efficient market.
      i. True
      ii. False

   d. A central message of risk and return models in finance is that you will get rewarded only for risk that cannot be diversified away. Which of the following assumptions do you require to get to this conclusion?
      i. The marginal investors in a company are diversified.
      ii. All investors are diversified.
      iii. We live in a mean-variance world.
      iv. There are no transactions costs.
      v. All of the above

Spring 2016   Name:

2. Nagy Inc. is a Hungarian company with substantial operations in the EU. You have been given the following information on their operations:

Country	Revenues (in millions of Forint)	Sovereign CDS Spread	Standard Deviation in Govt Bond	Standard Deviation of Equity
EU (North)	50	0.00%	5%	10%
EU (South)	150	2.00%	8%	12%
Hungary	100	1.50%	6%	12%

The German Euro bond rate is 0.75%, the Hungarian government has a 10-year bond, <u>denominated in Forint</u>, trading at an interest rate of 4.25% and Hungary has a <u>local currency rating that matches its foreign currency rating.</u>

a. Estimate the equity risk premium that you would use for Nagy Inc. (You can assume that the equity risk premium for mature markets, i.e., markets with no default risk, is 6%) (2 points)

b. Estimate the cost of equity for Nagy Inc., <u>in Hungarian Forint</u>, assuming that the beta for its equity is 1.20.   (2 points)

3. You are trying to estimate the levered beta for Jardin Inc, a company that operates in the building supplies and retail businesses, and you have calculated the following for the company:

Business	Revenues (in $ million)	Comparable firms	
		EV/Sales Ratio	Unlevered Beta
Building Supplies	$1000	1.50	1.2
Building Retail	$1250	0.80	0.8

The company has $500 million in cash and marketable securities, and has 100 million shares, trading at $20/share. You can assume a tax rate of 40%.

   a. Estimate the levered beta for the equity in Jardin, given its current structure.   (3 points)

b. Now assume that Jardin plans to sell <u>half of its retail business</u> for fair value and then use 60% of its cumulated cash (cash balance+ cash from asset sale) to pay a special dividend, and 40% to retire debt. Estimate the levered beta after the transaction.   (2 points)