Spring 2016 Name:

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. Percentage of directors who are independent (no formal business ties or relationships) of the top management.
      ii. Percentage of time that directors dissent with CEO on board votes.
      iii. Average age of directors.
      iv. Percentage of directors who are CEOs of other companies.
      v. Expertise in the business that your company is in.

   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 not traded and held entirely by CEO
      ii. Voting shares are traded, but concentrated in the hands of CEO
      iii. Voting shares are traded and held by activist investors.
      iv. Voting shares are traded and held by CEO and by government-controlled institutions.
      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%. Since only about 2% of Chipotle's restaurants were affected, this is clearly a market over reaction and is evidence that markets are not efficient.
      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. That we live in a mean-variance world.
      ii. There are no transactions costs.
      iii. All investors are diversified.
      iv. The marginal investors in companies are diversified.
      v. All of the above

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

Country	*Revenues (in millions of Koruna)*	*Sovereign CDS Spread*	*Standard Deviation in Govt Bond*	*Standard Deviation of Equity*
EU (North)	80	0.00%	5%	10%
EU (South)	120	2.00%	8%	12%
Czech Rep	100	1.00%	6%	12%

The German Euro bond rate is 0.75%, the Czech Republic has a 10-year bond, denominated in Koruna, trading at an interest rate of 2.5% and the Czech Republic has a local currency rating that matches its foreign currency rating.

a. Estimate the equity risk premium that you would use for Belin Inc. (You can assume that the equity risk premium for mature markets, i.e., markets with no default risk, is 6%.) (1.5 points)

b. Estimate the cost of equity for Belin Inc., in Czech Koruna, assuming that the beta for its equity is 1.20. (1.5 points)

3. You are trying to estimate the levered beta for Galaxy Enterprises, a company that operates in the retail and advertising businesses, and you have calculated the following for the company:

		Comparable firms	
Business	Revenues (in $ million)	EV/Sales Ratio	Unlevered Beta
Advertising	$600	1.50	1.2
Retail	$800	0.75	0.8

The company has $500 million in cash and marketable securities, and has 80 million shares, trading at $20/share. You can assume a tax rate of 40%.

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

b. Now assume that Galaxy plans to sell half of its retail business for fair value and then use 75% of its cumulated cash (cash balance+ cash from asset sale) to pay a special dividend, and 25% to retire debt. Estimate the levered beta after the transaction. (2 points)