

Quiz 1: Corporate Finance

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

1, You are a candidate to head the Securities Exchange Commission, with a mission of improving corporate governance and market efficiency. The following multiple-choice questions (with one choice allowed per question) will be used to assess your fit.

- a. If you have an effective and good corporate governance system, which of the following consequences would you expect?
 - i. Top managers will never be fired.
 - ii. Top managers at badly managed companies will be fired more frequently.
 - iii. Top managers at well-managed companies will be fired more frequently.
 - iv. All companies will be well managed.
 - v. Top managers will be fired more frequently at all firms.

- b. One long-standing issue in corporate governance is that many stockholders at publicly traded companies never return their filled-in proxies and that incumbent managers get these unreturned proxy votes. Which of the following actions would you take to remedy this problem (and improved corporate accountability)?
 - i. Count all unreturned proxies as votes for management.
 - ii. Count only returned proxies as votes and not count unreturned proxies
 - iii. Require all shareholders, by law, to return their proxies.
 - iv. Ban all proxy voting. Only shareholders present at meetings can cast votes.
 - v. Count all unreturned proxies as votes against management.

- c. There have been several problems associated with management compensation at publicly traded companies being uncorrelated with management performance. Which of the following proposals on compensation offers the most promise in dealing with this problem?
 - i. Ban all “equity” based compensation (options, restricted stock etc.)
 - ii. Require that at least 50% of compensation be in the form of equity options.
 - iii. Require that compensation be explicitly tied to current profits.
 - iv. Put a cap on management compensation at all companies; annual compensation for a manager cannot exceed \$ 5 million.
 - v. Require that all top management compensation contracts be put to shareholder vote (rather than be approved by the board of directors)

- d. Markets have been volatile in the last six months. Many commentators have argued that the market volatility is a clear indication of an inefficient market. Do you agree?
 - i. Yes. In an efficient market, stock prices should be stable.
 - ii. No. Even if markets are efficient, stock prices can be volatile.

2. You are comparing the regression output across two publicly traded companies. Both regressions were run using monthly data for 5 years, and against the S&P 500.

	Smith Foods	Jones Bakery
Intercept	0.20%	0.48%
R-Squared	25%	40%
Slope	1.50	0.80

a. Assume that both companies delivered the same risk-adjusted, market-adjusted performance against the CAPM (same Jensen's alpha) over the 5-year period. Estimate the average monthly risk free rate over the period. (1 point)

b. Now assume that you are told that Smith Foods has 100% of its operations in the United States. If the 3-month US T.Bill rate is 1.5%, the 10-year US T.Bond rate is 3% and the equity risk premium for mature markets (like the US) is 6%, estimate the US dollar cost of equity for Smith Foods. (Projects are long term) (1 point)

c. Jones Bakery gets 100% of its revenues from Brazil. If the Brazilian government has 10-year dollar denominated bonds with a 5.5% interest rate and 10-year Brazilian Real denominated bonds with an 11% interest rate, estimate the US dollar cost of equity for Jones Bakery. (You can assume that Brazilian equities are twice as volatile as Brazilian government bonds) (2 points)

3. KRod Enterprises is a publicly traded firm in two businesses: the restaurant business, with an estimated value of \$ 750 million, and the real estate business, with an estimated value of \$ 750 million as well. There are 60 million shares trading at \$ 15 a share and \$ 600 million in debt outstanding. The marginal tax rate is 40%.

a. You have estimated a regression beta of 1.035 over the last 5 years that you think gives you a good measure of the equity risk over the period. If the average debt to equity ratio over the 5-year period was 25%, estimate the unlevered beta for KRod Enterprises. (1 point)

b. You are told that the unlevered beta of firms just in the restaurant business is 1.05. If the weights on the two businesses have not changed over the last 5 years, estimate the unlevered beta for the real estate business. (1 point)

c. The firm plans to sell 50% of the real estate business (at the fair value provided on the last page) and use the proceeds from the sale to pay down debt. Estimate the new equity (levered) beta after this transaction. (2 points)