

## Quiz 1: Corporate Finance

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

1. Corporate Governance/Risk Basics section.

*Each multiple-choice question is worth 1/2 point. Please pick only one answer for each question.*

- a. In some companies, governments retain corporate governance power through golden shares, even with small shareholdings. In these companies, which of the following would you **generally NOT expect to see**?
- The company borrows more than it should (optimal)
  - The company pays more in taxes than its peer group
  - The company expands aggressively into risky, high growth foreign markets
  - The company hires more employees, in its domestic market, than it needs
  - The company is less profitable than its peer group
- b. Companies with voting and non-voting shares have skewed corporate governance systems, with founders/insiders owning the bulk of the voting shares and controlling decision-making. As an **outside investor**, which of the following would be the most rational response?
- Buy the non-voting shares hoping that insiders will always make the right decisions
  - Sell short the non-voting shares, expecting insiders to always make bad decisions
  - Avoid taking a position in the company at any price
  - Buy, but only if the price < value, with probability of management failure built in
  - Buy voting shares in the company, because insiders always win
- c. The notion of market efficiency is at the heart of trusting stock prices in corporate finance. Which of the following is the best description of an efficient market?
- The market never makes mistakes
  - The market makes mistakes, but only in one direction
  - The market makes mistakes in both directions, but investors cannot detect in which direction
  - The market makes mistakes in both directions, and investors can spot the direction
  - The market attaches random values to individual stocks
- d. Sustainability is the buzzword of the moment, and there are some who buy into the notion of corporate sustainability, i.e., that the end game in business is for the business to live longer. Which of the following actions **do not follow** from this end game? (Think of actions that will put your living longer end game at risk.)
- Increase acquisitions of companies in higher growth businesses.
  - Borrow more money to get more tax benefits
  - Return less cash in dividends and/or buybacks
  - Reduce the power of activists to change the way the business is run
  - None of the above

2. You are assessing the cost of equity for Capetown Inc., a South African company with significant exposure to Nigeria, and have collected the following:

	South Africa	Nigeria
Revenues (in \$ millions)	\$750.00	\$250.00
Local Currency	Rand	Naira
Govt Bond in US \$	8.50%	10.50%
Govt Bond in local currency	11.00%	21.00%
Relative Volatility	1.25	1.40

The US 10-year treasury rate is 4.50% and the mature market equity risk premium is 4%. If the beta for Capetown Inc is 0.80, estimate its cost of equity in Rand. **(3 points)**

3. Nova Consulting is a consulting firm that derives its revenues from three client groups, and the table below summarizes information on each.

	Value of contracts (\$ million)	Unlevered beta
Financial Services	\$900	0.6
Oil	\$150	1.2
Government	\$450	Guaranteed payments

If Nova has \$500 million in debt outstanding, and is trades at a fair price (trades at a firm value equal to the sum of the value of its contracts), estimate the **levered beta for the company**. (The marginal tax rate for all companies in 25% and remember that firm value = equity value + debt value) (2 points)

4. Lenox Tech is a company that started in appliances, before branching into software, and currently hold a substantial cash balance. The table below summarizes the estimated value of each business unit and its cash balance:

	Estimated value of business (In \$ million)	Unlevered beta
Software	\$300	1.20
Appliances	\$1,200	0.60
Cash	\$500	0.00

The company currently has a debt-to-equity ratio of 100% and faces a marginal tax rate of 25%. If the company uses its entire cash balance to buy back stock, estimate the **levered beta after the transaction**. (3 points)