Corporate Finance, Spring, 2014
Final Exam
Saturday, May 10th, 2014

Writing time: 5 hours
Use of calculators is allowed

Points per each question as indicated. Maximum score is 85 points. 50% of the available points are required for a passing grade. In your answers to the essay questions, **avoid going beyond one page.** Make sure your answers are legible - **if I cannot read it, I cannot grade it.** A collection of financial formulas is provided on the last page for your convenience. Students in Hanken's Corporate Governance program can elect not to answer question 6.

1. For each question in this section, choose the one most correct option. Use your answer sheet to provide your answers to this section, and make sure that your choices are clear. **Unclearly marked choices do not score points.** (each of the 5 sub-questions below is worth 2 points)

1.1. Which of the following is the most effective means of reducing agency costs between management and shareholders of the corporation?

a) The manager owns 100% of the firm.
b) The manager's actions are observed by auditors.
c) The manager has to use a punch card to record his/her working time.
d) The manager receives part of his/her compensation in form of shares of the corporation.

1.2. If the tax-benefits of debt were the only factor explaining the firm's capital structure,

a) firms would not have any debt.
b) the optimal capital structure would be based on a trade-off.
c) firms would maximize their value at 100% leverage.
d) capital structure would be irrelevant.

1.3. If the empirical problems with the CAPM are due to additional risk factors,

a) Using historical returns without market risk adjustment would be a better proxy for expected returns.
b) The model could be improved by adding proxies for those risk factors.
c) The CAPM would still give an unbiased estimate of expected returns.
d) The CAPM cannot be improved.

1.4. An opportunity to discontinue a project before its original expected life span is a(n)

a) Expansion option
b) Timing option
c) Compound option
d) Abandonment option

1.5. When accounts payable increase,

a) The company's working capital investment increases.
b) The company is less effective in managing its working capital.
c) The accounts receivable also increase.
d) The company needs less working capital.

2. Explain how a corporate debt claim can be viewed as an option. What kind of option is it? What is the underlying asset? How can this view be linked to corporate overinvestment and underinvestment under financial distress (15 points)?

3. Discuss the factors that the manager should take into account when establishing corporate dividend policy, given that the firm's goal is to maximize shareholder wealth (15 points).

4. Explain what internal capital markets are, and how their existence can motivate especially international M&A. (15 points)

5. During his guest lecture, Professor Karpoff discussed corporate fraud detection by regulation/regulators, personal ethics, and market forces. Explain the channels through which reputation loss can affect the market value of the firm (15 points).

6 Given the corporate use of debt, and the resulting debt tax shield, the corporate assets can be divided into two components, which were discussed in class. What are these components, and what are the implications of their relative riskiness?
Note: This question is not mandatory for students in Hanken's Corporate Governance program. (15 points)

$$FV_n = PV(1+i)^n = PV(FVIF_{i,n})$$

$$FV_n = PV\left(1+\frac{i}{m}\right)^{mn}$$

$$PV = FV_n\left[\frac{1}{(1+i)^n}\right] = FV_n(PVIF_{i,n})$$

$$FV_n = PMT\left[\frac{(1+i)^n - 1}{i}\right] = PMT\,(FVIFA_{i,n})$$

$$PV = PMT\left[\frac{1-[1/(1+i)^n]}{i}\right] = PMT\,(PVIFA_{i,n})$$

$$PV = \frac{PP}{i}$$

$$k_j = k_{rf} + \beta_j(k_m - k_{rf})$$

$$P_b = \sum_{t=1}^{n}\frac{Coup_t}{(1+k_d)^t} + \frac{Mat}{(1+k_d)^n}$$

$$YTM = \frac{Coup + \frac{Par - Market}{n}}{\frac{Par + 2(Market)}{3}}$$

$$P_p = \frac{Div}{k_p}$$

$$V_{cs} = \frac{D_1}{k_{cs} - g}$$

$$g = ROE * r$$

$$WACC = w_d k_d(1-t) + w_{ps}k_{ps} + w_{cs}k_{cs}$$

$$r = \frac{(1+n)}{(1+i)} - 1$$