## Seminář Problematika výnosu

- 1. A Canada-based investor buys shares of Toronto-Dominion Bank (TD.TO) for C\$72.08 on 15 October 2007 with the intent of holding them for a year. The dividend rate was C\$2.11 per year. The investor actually sells the shares on 5 November 2007 for C\$69.52. The investor notes the following additional facts:
- No dividends were paid between 15 October and 5 November.
- The required return on TD.TO equity was 8.7 percent on an annual basis and 0.161 percent on a weekly basis.
- A. State the lengths of the expected and actual holding-periods.
- B. Given that TD.TO was fairly priced, calculate the price appreciation return (capital gains yield) anticipated by the investor given his initial expectations and initial expected holding period.
- C. Calculate the investor's realized return.
- D. Calculate the realized alpha.
- 2. The estimated betas for AOL Time Warner, J.P. Morgan Chase & Company, and The Boeing Company are 2.50, 1.50, and 0.80, respectively. The risk-free rate of return is 4.35 percent and the equity risk premium is 8.04 percent. Calculate the required rates of return for these three stocks using the CAPM.
- 3. The estimated factor sensitivities of TerraNova Energy to Fama–French factors and the risk premia associated with those factors are given in the table below:

	Factor Sensitivity	Risk Premium (%)
Market factor	1.20	4.5
Size factor	-0.50	2.7
Value factor	-0.15	4.3

- A. Based on the Fama-French model, calculate the required return for TerraNova Energy using these estimates. Assume that the Treasury bill rate is 4.7 percent.
- B. Describe the expected style characteristics of TerraNova based on its factor sensitivities.
- 4. Newmont Mining (NEM) has an estimated beta of -0.2. The risk-free rate of return is 4.5 percent, and the equity risk premium is estimated to be 7.5 percent. Using the CAPM, calculate the required rate of return for investors in NEM.
- 5. An analyst wants to account for financial distress and market-capitalization as well as market risk in his cost of equity estimate for a particular traded company. Which of the following models is most appropriate for achieving that objective?
- A. The capital asset pricing model (CAPM).
- B. The Fama-French model.
- C. A macroeconomic factor model.

6. The following facts describe Larsen & Toubro Ltd's component costs of capital and capital structure. Based on the information given, calculate Larsen & Toubro's WACC.

Component Costs of Capital (%)

Cost of equity based on the CAPM: 15.6

Pretax cost of debt: 8.28

Tax rate: 30

Target weight in capital structure: Equity 80, Debt 20