Quiz 1: Valuation

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

- 1. You are reviewing the cost of equity computation that an analyst has made for Luo Tang, a Vientamese company. The analyst has estimated a cost of equity of 18% for the company in Vienamese Dong (VND). In making this estimate, the analyst used the following information:
 - The ten-year Vietnamese government bond rate, in VND, is 9%, and was used by the analyst as the riskfree rate. However Vietnam has a local currency rating of Baa3 and the default spread for Baa3 rated bonds is 3%.
 - The analyst used a total equity risk premium of 7.5% for Vietnam (obtained by adding 3% to the US risk premium of 4.5%) and a beta of 1.2 for the company.
- a. Assuming that you were trying to estimate the cost of equity in VND, what risk free rate would you use in your estimate? (1 point)

b. If you were told that the volatility in the Vietnamese equity index is twice the volatility in the Vietnamese government bond, what country risk premium would you attach to Vietnam (over and above the US premium)? (1 point)

c. If you are now told that only 30% of Luo Tang's revenues come from Vietnam and that the rest come from mature markets, estimate the <u>lambda</u> for Luo Tang. (You can assume that the average Vietnamese company gets 90% of its revenues from Vietnam). (1 point)

d. Using your estimates of the risk free rate, risk premium and lambda, estimate the cost of equity in VDG for Luo Tang. (You can assume that the analyst's estimates of beta and the US risk premium are correct). (1 point)

2. You are analyzing the earnings/cashflows of a consulting firm that reported \$ 5 million in net income this year on a book value of equity of \$ 15 million, yielding a return on equity of 33.33%. In computing these earnings, though, the firm <u>subtracted</u> out \$ 5 million in recruiting and training expenses spent during the course of the year on new consultants. Typically, consultants hired by the firm <u>stay with the firm</u> approximately 4 years, and the recruiting and training expenses for the last 4 years are as follows:

Year	Recruiting and Training Expense
-1 (Last year)	\$ 4 million
-2	\$ 3 million
-3	\$ 2 million
-4	\$ 1 million

If you capitalized recruiting and training expenses, estimate the correct return on equity for the firm. (3 points)

Name:

- 3. You have been asked to estimate the expected growth in earnings in MNL Bank, a regional bank that reported \$ 2 in earnings per share in the most recent year on a book value of equity, per share, of \$10. The firm paid out \$0.50 in dividends per share.
 - a. Assuming that the firm can maintain the return on equity and payout ratio from last year for the next 5 years, estimate the expected growth rate in earnings for the next 5 years. (1.5 points)

b. Now assume that the banking crisis will create the following changes: the firm will be required to <u>raise its equity capital by 50% immediately</u> by regulatory authorities, to set aside 20% of earnings each period to cover bad loans and to suspend dividend payments for the next 5 years. Estimate the new expected growth rate in earnings per share. (1.5 points)