VALUATION: PROJECT

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Project Description

- This project is designed to apply the valuation techniques we learn in class on companies in the real world.
- It is a group project, with each person in the group picking one company to value.
- □ The project analysis is due in two parts:
 - The discounted cash flow valuations are due midway through the semester on March 29, at 5 pm. They will not be graded, but will be reviewed and returned with comments.
 - The entire project report is due by 5 pm on the last day of class (May 13).

Step 1: Pick the companies

- Pick a group of companies (one for each person in the group), making sure you have at least
 - 1. one company which has negative earnings in the most recent financial period (year-to-date, if available or most recent financial year (if not)).
 - 2. one company which has high-growth potential (Look for companies whose revenues are expected to grow > 25% over the near future; the could be losing money, in which case you could kill two birds with one stone.)
 - 3. one non-U.S. company, preferably in the local currency and the local listing.
 - 4. one service company (it can be a retail firm, financial service firm etc.)
- □ For high growth firms:
 - □ <u>http://www.stern.nyu.edu/~adamodar/New_Home_Page/eqass.htm</u>
 - For negative earnings firms: <u>http://www.stern.nyu.edu/~adamodar/New_Home_Page/eqass.htm</u>

Step 2: Intrinsic Valuation

- Develop your narrative for this company. (Give me your story of how you see your company evolving over time, given what you know about it, its market and the competition)
- Tie your narrative to key numbers that you will be using in your valuation.
- Value the stock in each company using a discounted cash flow model.
- Evaluate how sensitive your value estimates are to changes in your narrative.

Parts 1 & 2 are due midway through the semester on March 29

Step 3: Value relative to comparables

- Prepare a list of "comparable" companies, using criteria that you think are appropriate
- Choose a multiple that you will use in comparing firms across the group. (You might have to try a number of multiples out before making this choice)
- Evaluate your company against the comparable firms using the multiple that you have chosen for your valuation.
 - using simple techniques (do a qualitative analysis adjusting the average for comparable firms)
 - using a sector regression (a regression across firm in your sector). You can download the data on comparable firms by going to

Step 4: Value relative to the market

- Using the latest regression posted for the market on my web site, and the multiple you chose in step 3, evaluate whether your firm is under or over valued.
 - If you have a non-U.S. company which has an ADR listed on it, you can use the U.S. regression
 - While I will not require it, I will be very impressed if you run a regression of the multiple in your foreign market (use the 50 largest firms, if you want to reduce your work load) against the variables that determine that multiple.

Step 5: Using Option Pricing Models

- If your negative earnings firm has high financial leverage (debt to capital ratio that exceeds 50%, in market value terms), value it using the option pricing model.
- □ If it does not, do not use the option pricing model.

Step 6: Final Value Estimate and Recommendation

- Before you make your recommendation, check whether anything that has happened during the period of your analysis has changed your narrative and your valuation.
- Consider the values you have obtained from the discounted cash flow, relative and option valuation models.
 - How would you reconcile the different estimates of value?
 - Make a final recommendation on the stocks in your group.