# Valuation of Facebook

 This question requires you, among other things, to calculate the stock price for Facebook, and provide the needed analysis as asked in what follows. You will need to use “Sources of Financial Data” to obtain the necessary financial info/statements for *Facebook, Inc.*, identify its peer companies and obtain pricing and financial information for them.

1. Develop a DCF model using Excel to estimate the fair value of the firm’s common shares on May 21, 2012 – for historical numbers use the data from SEC filings including S-1 form with all amendments and 424B4 form (Prospectus), and other sources of financial data. Don’t forget to include the terminal value (value after the forecast period) in your estimate.
2. For each of the value drivers (i.e., revenues growth and profit margin over the forecast period, tax rate, WACC etc.), identify your sources and assumptions, and show all you calculations. This is especially important for the WACC that you will use to calculate the NPV, due to the sensitivity of your results to this critical parameter.
3. Perform a sensitivity analysis for WACC, growth rate and profit margin.
4. Using comparable ratios of peer companies, estimate the company’s stock price on May 21, 2012. List the major assumptions and sources of information that you used in your calculations. Were your assumptions reasonable enough? Explain.
5. Facebook, Inc. went public on May 18, 2012. How do your DCF and relative valuations compare with the company’s IPO price? Its first-day closing? If your valuations differ from observed prices, can you briefly forward any possible explanations?
6. In 2007 it was rumored that Microsoft offered to buy Facebook. Eventually, it did acquire a very small stake in the company. What is your estimate of a fair value of Facebook to Microsoft at that time? What were Microsoft strategic considerations of this deal?
7. In May 2009, Mail.ru Group Limited invested $200 million in the company by buying 44,037,540 shares of Series E convertible preferred stock. If Mail.ru Group could sell these shares at the IPO, what would be its annualized return? Can it sell these shares? Explain

Make sure to justify your responses by using the available data/info and carrying out any needed and relevant calculations.

Here is the part of this list:

* [Yahoo Finance](http://finance.yahoo.com);
* [Google Finance](http://www.google.com/finance);
* [Reuters](http://www.reuters.com/);
* [Edgar](http://sec.gov/edgar.shtml) (SEC source of 10-K, S-1 form, Prospectus and other required financial reports);
* [Hoovers](http://www.hoovers.com/free/) (general company information);
* [Bloomberg](http://bloomberg.com/markets/rates/index.html) (a good source of interest rate data);
* [Wall Street Journal](http://online.wsj.com/home-page) (free site of the famous newspaper);

[NYSE Euronext](http://www.nyse.com/) (New York Stock Exchange website);