# Valuation: Newsletter – March 7, 2020

*Where we are in class…*

**Lecture Notes Packet 1 (pdf)**

Basics of DCF valuation
Estimation of Discount Rates
Estimation of Cash Flows
Estimation of Growth Rates
Estimation of Growth Patterns
Choosing the Right Model
Dealing with Cash
Dealing with Options
Examples of Valuation

As of last week: Page 183

As of next week: Page 240

*Where you should be in the project…*

**DCF Valuation portion of Project**

*Item*

1. Find a group & pick a firm
2. Obtain its financials
3. Find out the businesses that your firm operates in
4. Obtain a riskfree rate
5. Estimate a market risk premium
6. Estimate a bottom-up unlevered beta
7. Estimate the market value of equity and debt
8. Estimate a bottom-up levered beta
9. Estimate a pre-tax cost of debt (using actual or synthetic ratings)
10. Convert operating leases into debt
11. Estimate a tax rate
11. Estimate a cost of capital
12. Capitalize R&D expenses
13. Estimate an adjusted operating income
14. Estimate net capital expenditures
15. Estimate non-cash working capital
16. Estimate Free Cash Flow to Firm
17. Estimate Free Cash Flow to Equity
18. Estimate a historical growth rate in earnings
19. Obtain analyst forecasts of growth in earnings for your firm
20. Estimate growth in earnings from fundamentals
21. Choose a length for the high growth period
22. Choose a DCF model
23. Value the firm/stock

## *Data Notes…*

Now that you have the fundamental inputs for valuing your firm - the cash flows, the growth rate, the discount rate - you have to pick a valuation model. You can download a spreadsheet that will help in making this choice by going to

http://www.stern.nyu.edu/~adamodar/New_Home_Page/spreadsh.htm

I had also promised you links to a couple of forensic accounting books. Here they are:

1. http://www.amazon.com/Financial-Shenanigans-Accounting-Gimmicks-Reports/dp/0071703071/ref=pd_sim_b_8
2. http://www.amazon.com/Creative-Cash-Flow-Reporting-Sustainable/dp/0471469181/ref=pd_sim_b_2

There are denser books on the topics but those are for forensic accountants. These books work for the rest of us.

## *Miscellaneous FAQs*

*How do I decide on whether to use a stable growth, 2-stage or 3-stage model?*

The choice is ultimately a subjective one. While historical growth is one input, you should also look at the growth of the market your firm serves and your firm's market share.

*How do I know whether I should estimate FCFF or FCFE?*

You do not, until you have picked a DCF model that fits your firm. I would estimate both. Once you have picked a DCF model, you can decide which one is more appropriate.

*My company has negative earnings. Which stage model should I use?*

If your firm has negative earnings, you first have to decide how you are going to normalize earnings. If you can normalize earnings instantaneously, you can then pick a stable growth or 2-stage model. If you cannot, you will have to forecast revenue growth over a period and an expected operating margin at the end; you would use these then to project free cash flows to the firm.