



VALUATION: SPRING 2021

Aswath Damodaran

General Information

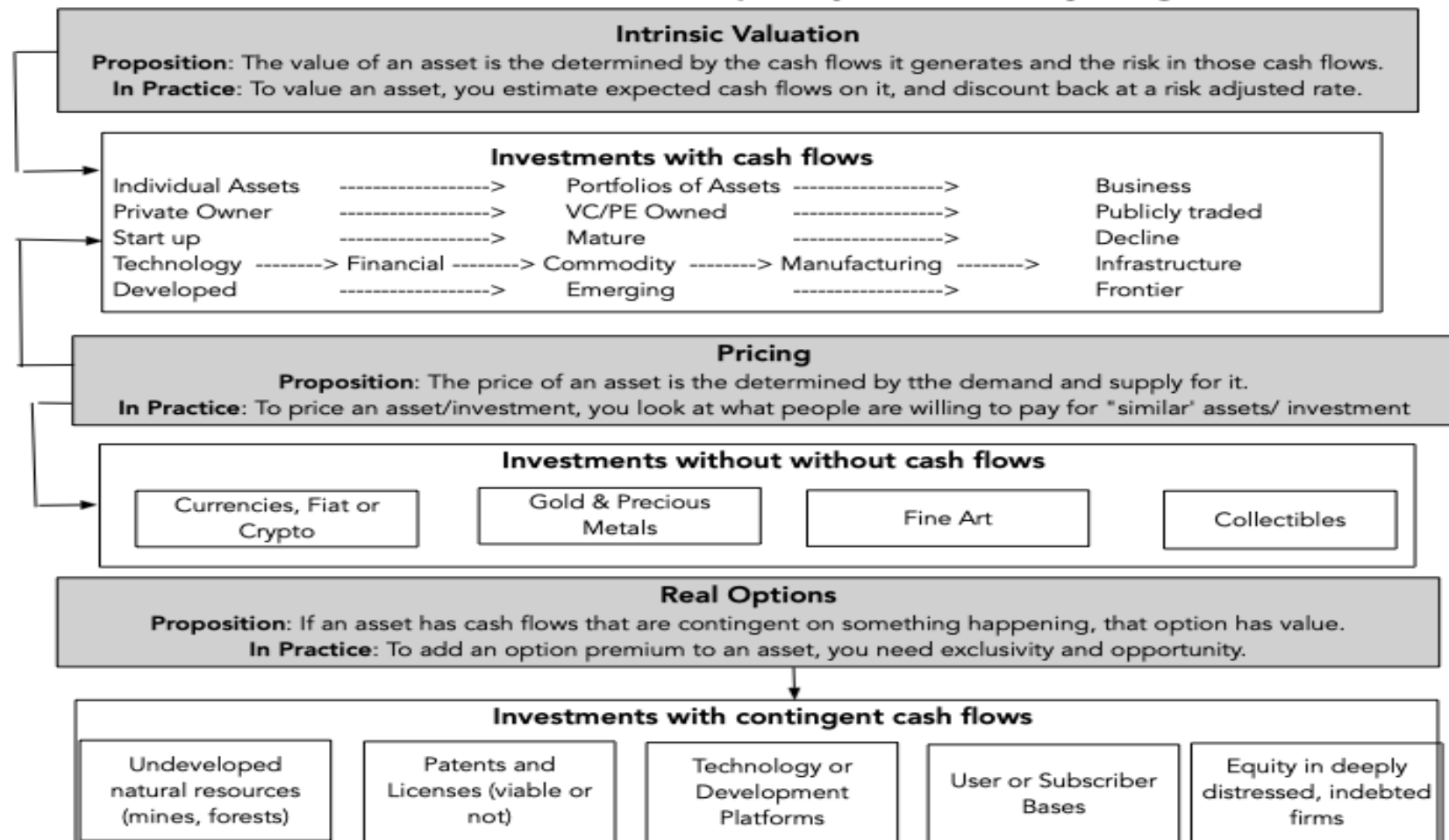
- Office: In cyberspace.
- E-mail: adamodar@stern.nyu.edu
- Home Page: <http://www.damodaran.com>
- Office Hours
 - ▣ Monday: 11 am – 12 pm, EST
 - ▣ Wednesday: 11 am – 12 pm, EST
 - ▣ All office hours will be online, with breakout rooms for privacy
 - ▣ The “fair game” principle applies
- The teaching assistants/fellows for this class are:
 1. Lorenzo Fertita (ljf349@stern.nyu.edu)
 2. Javier Cervantes (javier.cervantes@stern.nyu.edu)

Theme 1: Characterizing Valuation as a discipline

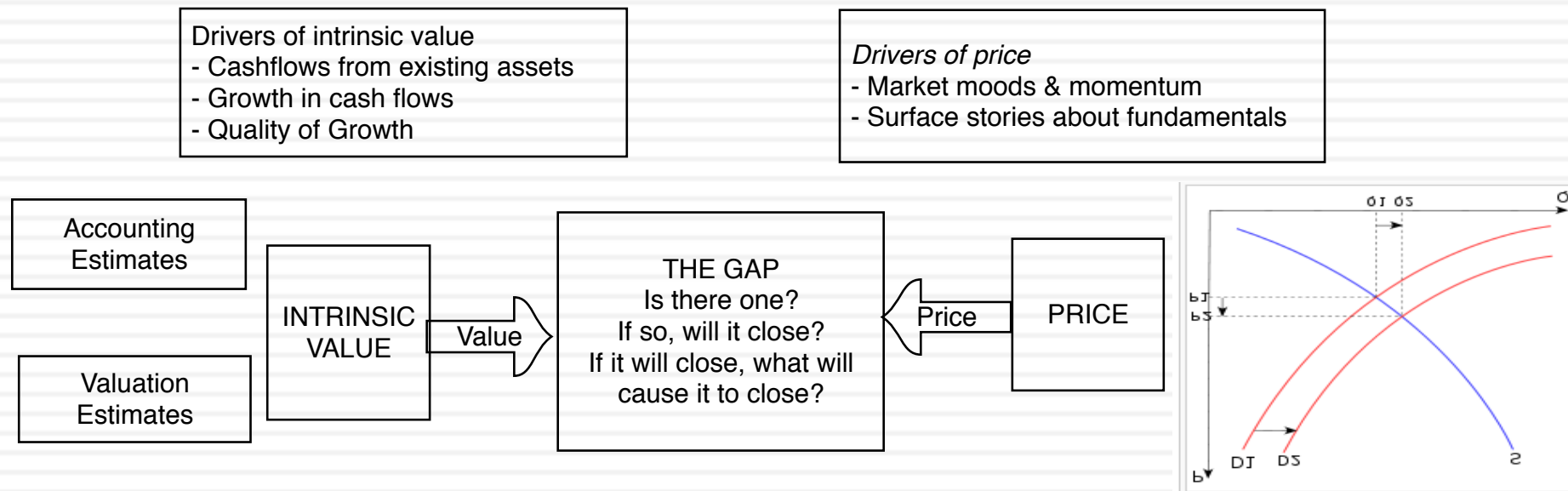
- In a science, if you get the inputs right, you should get the output right. The laws of physics and mathematics are universal and there are no exceptions. **Valuation is not a science.**
- In an art, there are elements that can be taught but there is also a magic that you either have or you do not. The essence of an art is that you are either born a great artist or you are not. **Valuation is not an art.**
- A craft is a skill that you learn by doing. The more you do it, the better you get at it. **Valuation is a craft.**

Theme 2: Valuation is simple & universal

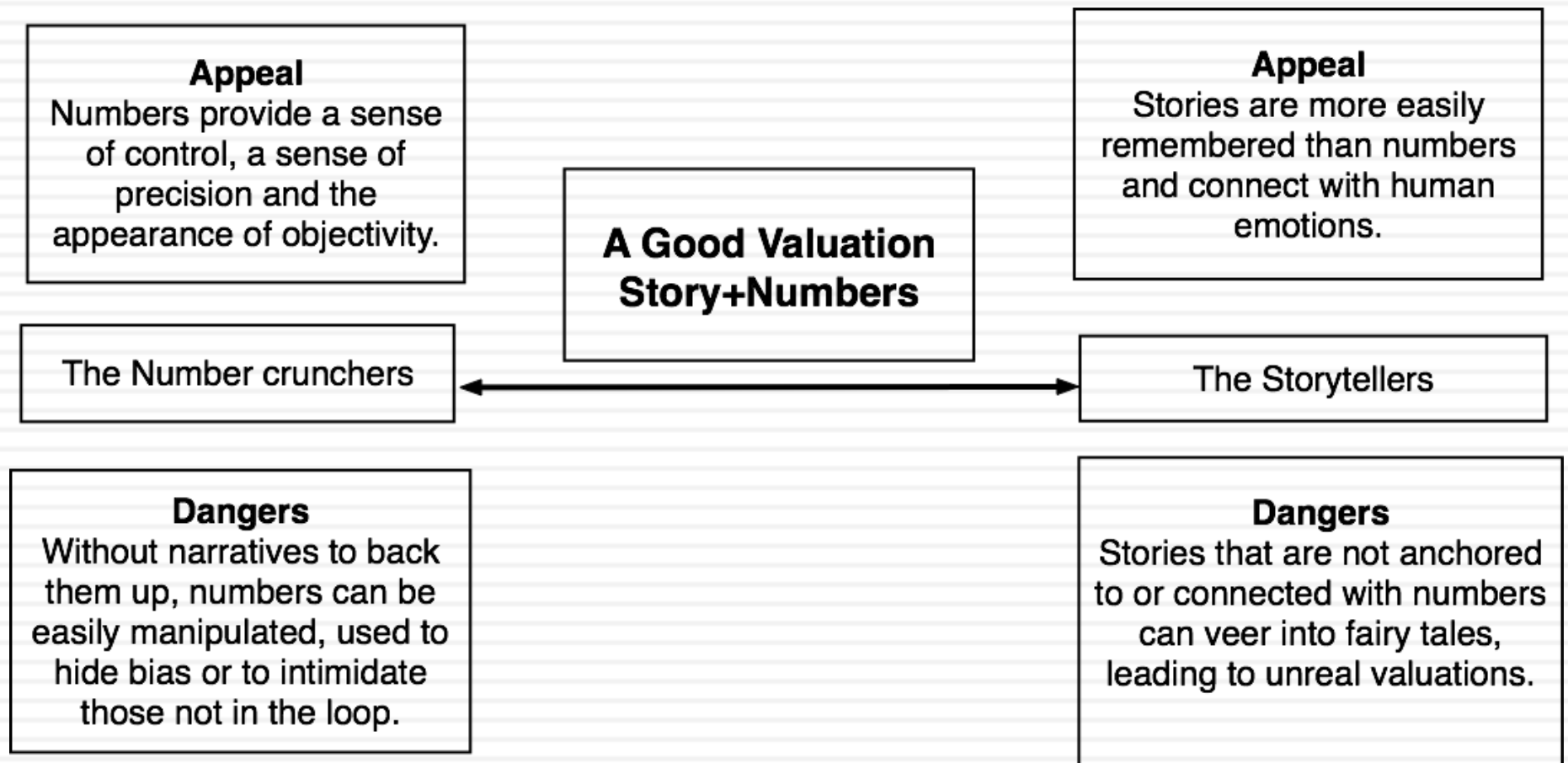
Valuation: How to value or price just about anything!



Theme 3: Valuing an asset is not the same as pricing that asset



Theme 4: Good valuation = Story + Numbers



Theme 5: If you value something, you should be willing to act on it..

- What valuation theory? There is very little theory in valuation and I am not sure what an academic valuation would look like and am not sure that I want to find out.
- Pragmatism, not purity: The end game is to estimate a value for an asset. I plan to get there, even if it means taking short cuts and making assumptions that would make purists blanch.
- Do you believe? To act on your valuations, you have to have faith in
 - ▣ In your own valuation judgments.
 - ▣ In markets: that prices will move towards your value estimates. That faith will have to be earned.

Course Outline

Sessions 1 -2

The Big Picture

Sessions 3-11

Intrinsic Value: Inputs and Process

- Risk Free Rates, Risk Premiums and Discount Rates
- Earnings and Cash Flows
- Growth and its value
- Terminal Value

Sessions 12-15

Intrinsic Value: Add ons and Loose Ends

- Narrative and Numbers
- Valuation Examples
- The Dark Side of Valuation
- Value and Price

Sessions 16-19

Relative Valuation (Pricing)

- The Pricing Process
- Standardized Prices (Multiples)
- "Comparables"
- Doing Pricing Right

Session 19

Asset-Based Valuation

- Liquidation Valuation
- Sum-of-the-parts Valuation

Session 20

Private Company Valuation

- Liquidation Valuation

Session 21-23

Real Option Valuation

- The Basis
- The Option to Delay (Patents, Reserves)
- The Option to Expand ("Strategic")
- The Option to Abandon (Flexibility)

Session 24

Acquisition Valuation

Session 25

Value Enhancement

Session 26

The Grand Finale

Pre-season prep!

Getting ready for the class

- Accounting: The raw material you need to value a company comes primarily from accounting statements. Understanding how to read a financial statement and where to find the information need is critical.
 - ▣ My primer: http://people.stern.nyu.edu/adamodar/New_Home_Page/AccPrimer/accstate.htm
 - ▣ My YouTube Accounting class: <https://www.youtube.com/playlist?list=PLUkh9m2BorqmKaLrNBjKtFDhpdFdi8f7C>
- Statistics: Statistics is designed to help us make sense of data that is large and contradictory. That is exactly the problem we face in valuation.
 - ▣ My primer: http://people.stern.nyu.edu/adamodar/New_Home_Page/StatFile/statistics.htm
- Finance: There are tools that we draw on in valuation extensively.
 - ▣ Risk and return models: <http://www.stern.nyu.edu/~adamodar/pdfiles/acf3E/ch3.pdf>
 - ▣ Present value: http://people.stern.nyu.edu/adamodar/New_Home_Page/PVPrimer/pvprimer.htm
 - ▣ Corporate finance: http://people.stern.nyu.edu/adamodar/New_Home_Page/corpfin.html (just to wander down memory lane)
 - ▣ My YouTube Foundations of Finance class: <https://www.youtube.com/playlist?list=PLUkh9m2BorqndWimijiJ-VCAXjJUrzJQU>

Class structure



Classes Online

- Platform: We will use Zoom (meeting) as the platform for all classes. The classes will be live at the scheduled time. I will also record the classes to be accessible for those who miss the class or portions of it. I will also make the class available on
 - ▣ YouTube, as a playlist
 - ▣ as a downloadable video file (for a computer, a tablet or a smart phone)
 - ▣ as a downloadable audio file.
- Class Material: The only material you will need access to during the class is the lecture note packet (which will be available right about 2-3 weeks before class to download). Once available, you can find them at:
http://www.stern.nyu.edu/~adamodar/New_Home_Page/eqllect.htm
- Zoom rules: Please try to be at the class, and unless you have really good reasons you do not want to, please have your video and audio ready to go. I will mute audios to start the class, but you will have the power to unmute yourself.
- Class discussions: Please use the hand raise feature in Zoom to ask questions or raise discussion points, and be ready to be called upon during class.

Nice to have, but you can live without them...

- **Books:** I have a few books on valuation and they tend to say much the same things, albeit in different formats. You don't need any of them but if you can get one, it won't hurt.
 - ▣ Investment Valuation (3rd edition): is the book that is most suited for a classroom text book. It follows the standard script of valuation, looking at different valuation models with twists. It also follows text book format (with problems at the end of each chapter)
 - ▣ Damodaran on Valuation (2nd edition): provides a quicker review of the basic valuation but the second half of the book is built around dealing with what I call the loose ends of valuation and is really meant for practitioners who deal with the loose ends on a constant basis.
 - ▣ The Dark Side of Valuation (2nd edition): covers companies that are difficult to value – young companies, money losing companies, financial service companies, emerging market companies.
 - ▣ The Little Book of Valuation (1st Edition): If you truly, truly hate to read and are budget constrained, think of this as the Cliff notes version of my longer books.
 - ▣ Narrative and Numbers (1st Edition): This is for story tellers who want to develop some discipline and number crunchers who want to be imaginative.
- **Apps:** I also have a valuation app (co-developed with Anant Sundaram at Dartmouth) for the iPad and iPhones called uValue. Check it out!
 - iPad version*: <https://apps.apple.com/us/app/uvalue/id440046276>
 - iPhone version*: <https://apps.apple.com/us/app/uvalue-mobile/id492586911>

Stay connected!

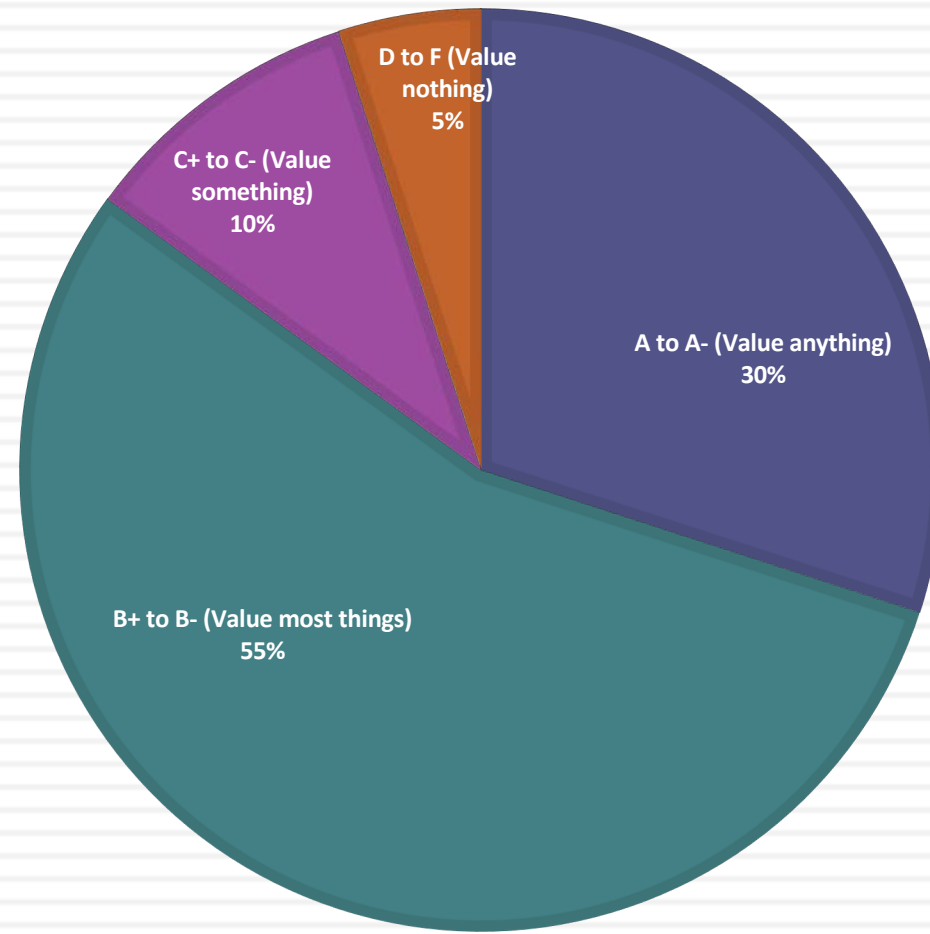
Information Central

- Website for the class: Everything associated with this class (and I mean everything) will be available on the website for the class:
 - http://www.stern.nyu.edu/~adamodar/New_Home_Page/equity.html
I will try to also keep the material on NYU Classes, but I don't like closed systems. Enough said!
- YouTube Channel: There is a final option, if your broadband connection is not that great and you are watching on a Tablet/smartphone. There is a YouTube playlist for this class, where all class sessions will be loaded.
https://www.youtube.com/playlist?list=PLUkh9m2Borqkl7FoAhhWY4piiZPFJs5_e
When you get a chance, check it out.

More... Yes, there is more...

- Google calendar: There is a Google calendar for the site that you can access by going to:
https://calendar.google.com/calendar/embed?src=c_5gikb48pjinvhue4et4lo4iqqms%40group.calendar.google.com&ctz=America%2FNew_York
- My blog: My not-so-brilliant and not-very-insightful thoughts on valuation, corporate finance and portfolio management will be posted on my blog, Musings on Markets.
<http://aswathdamodaran.blogspot.com/>
- Twitter feed: Just in case you don't get enough of me in class, online and from my blog, please help me approach Lady Gaga status by joining my Twitter follower list (@AswathDamodaran).
- Other readings: The other readings for each topic are available on my web site, and can be downloaded at
 - http://www.stern.nyu.edu/~adamodar/New_Home_Page/eqread.htm

Grading Distribution...



Grading Basis

- Group Work: Students should work in groups of four (minimum) to seven (maximum). Each group will be required to work on a group project
 - ▣ Valuation Project Due in two parts 40%
 - Part 1: DCF Valuation due by April 2 at 5 pm (Just for feedback)
 - Part 2: Entire project due
 - Numbers in Google Shared Spreadsheet on May 9, 5 pm: 5%
 - Final Project report on May 10, 5 pm: 35%
- Individual Work:
 - ▣ *The quizzes and the final exam will be taken online, on the scheduled dates, and will be accessible for about 9 hours on each of these days, to allow people in different time zones to take them at a decent time (See Quiz Rules)*
 - ▣ Quizzes: There will be three online quizzes worth 10% apiece.
 - Quiz 1: DCF Estimation Issues: Session 9 (March 3)
 - Quiz 2: More DCF: Session 15 (March 29)
 - Quiz 3: Relative & Private Company valuation: Session 22 (April 26)
 - ▣ Final Exam: This will also be an open-book and open-notes cumulative exam worth 30% in the finals week, TBA.

Online Exam Ground Rules

1. Quizzes will be on the designated days, and will be **an hour long**, but they will be **accessible for a period of about nine hours** on the scheduled days, to give you some flexibility on when to take the exam.
2. Exams are **open book, open notes and open laptops**.
3. Exams are **NOT group work**. You cannot consult with, talk to, communicate with or pass telepathic (or text) messages to anyone else in or out of the class. There are no cultural exceptions.
4. Each quiz is **worth 10%**.
5. If you miss a quiz for good reason, **the 10% weight on that quiz will be reallocated across your remaining exams** (quizzes and final). You cannot weight prior quizzes more.
6. If you take all three quizzes, **the score on your worst quiz will be pushed up to the average score across all of your other exams** (the other two quizzes and the final exam) (Note: It will not be thrown out). If you miss a quiz, you will not have this option, even if you miss the quiz for good reason.
7. The quizzes will **be multiple choice**. That is not optimal, and I apologize in advance, but open ended quizzes online, for a class of this size, is too daunting for me. If you have a beef with the grading (and I do make mistakes), please come to me.

Rules of Engagement

- Rules of group work:
 - ▣ Pick your own groups. (If you have trouble getting picked, I will help)
 - ▣ All group work will be self policed, except in extreme circumstances.
 - ▣ There will be one grade per group, no matter how the work load is distributed among the group members
- Rules on individual work
 - ▣ All exams and quizzes are strictly individual work.
 - ▣ There will be no make-up quizzes. If you miss a quiz for a good reason, the grade will be redistributed over the remaining part of the course. If you take all three quizzes, the score on your worst quiz will be raised to the average score across all of your other exams (two quizzes and the final).
 - ▣ I will be the grader, and unlike the pope, I am fallible.
- Rules on Participation
 - ▣ All participation is welcome.