# FROM CLASS ROOM TO CLASS ZOOM: TEACHING IN COVID TIMES!

Glimmers of light?

### Best laid plans...

- I have been a long-time advocate of using technology to deliver classes online, and my first attempts to do so date back to the 1990s, well before the appearance of Coursera, EdX and a host of other online platforms.
- When classes had to be moved online mid-semester in the spring of 2020, I was more prepared than most to deliver my classes online, having had some experience in the game.
- As this crisis has stretched from days to weeks, and from weeks to months, my office at home has become a home recording studio, but not quite shutting out the sounds of home.

# Missing classrooms and physical classes...

- That said, this semester was a reminder, in case I needed one, of how much of what I love about teaching comes from physically being a classroom.
- I love what Zoom, Cisco WebEx, Microsoft Team and Google Classes have created as platforms, to allow me to teach my classes online, but as I explain in this longago session I did on teaching as a craft, there is an element of magic that can show up only in a classroom, and even there only rarely.
- That magic is the reason that I would not trade in what I do for a living for any other profession in the world, no matter how lucrative the payoffs.

### My courses

- In 1985, in my very first year of teaching at the University of California at Berkeley, I taught five different classes from corporate finance to investments to central banking, knowing just enough of each to stay one step ahead of my students.
- In the years since, my primary teaching at the Stern School of Business has been focused on two courses, corporate finance to the first year MBAs, and valuation to the second year MBAs, with occasional forays into undergraduate teaching.
- Along the way, I also developed the material to teach a third course on investment philosophies that I have never delivered in a classroom at NYU but have taught in shorter programs elsewhere.
- There are a few very basic financial building blocks and economic concepts that I draw on repeatedly that I have now packaged into a foundations of finance class.

### 1. Foundations of Finance

#### Foundations of Finance: The Warm-up Sessions

#### Micro Foundations

Sessions 3-6

Sessions 1-2

#### **Financial Balance Sheet**

- Assets in Place & Growth Assets
- Financing Choices

#### **Corporate Life Cycle**

- The Aging of companies
- Consequences

Cash Flows

- Equity vs Firm Cash Flows
- The Timing of Cash Flows

#### Risk

- Risk & Risk aversion
- Measures of risk
- Diversification & Effects

#### Time Value of Money

- Intuition behind present value
- Mechanics of present value

#### Sessions 7-9

#### Valuing Contractual CF (bonds)

- Cash flows on bonds
   Default risk and Value
- Valuing Residual CF (equity)
- Cash flows to equity
- The Dividend Discount Model

#### **Valuing Contingent CF (options)**

- What is an option?
- Option Pricing Basics

Session 10

#### Inflation

- Measures of Inflation
- Determinants
- Real versus nominal

#### Macro Foundations

Session 11

#### Interest Rates

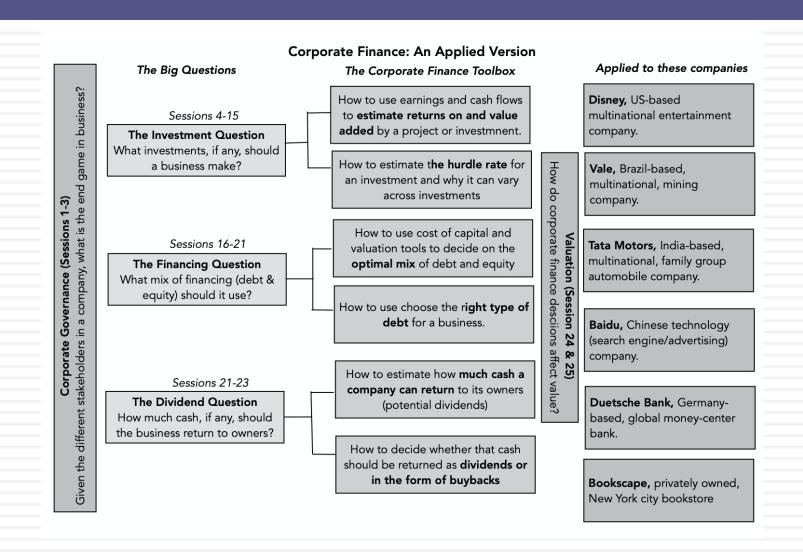
- History of interest rates
- Determinants
- The Role of Central Banks

Session 12

#### **Exchange Rates**

- Determinants
- Forecasting exchange rates
- Currency Consistency

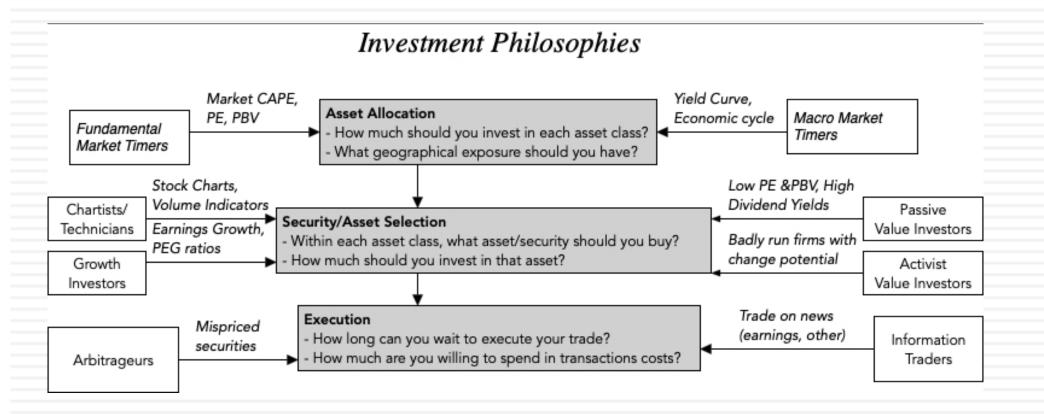
### 2. Corporate Finance



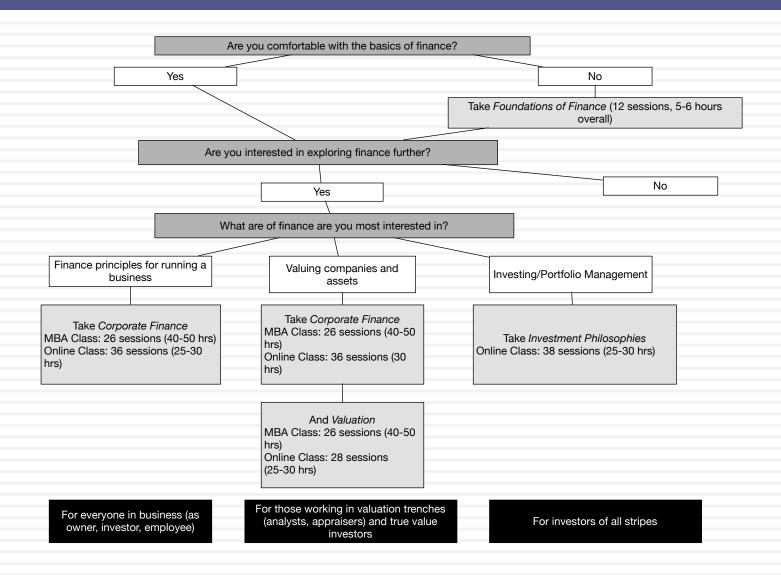
### 3. Valuation

#### Ways of thinking about/estimating value Intrinsic Value Relative Value/ Pricing Contingent Value The value of an asset is the The value of an asset is what The value of an asset may be present value of the expected others are willing to pay for it (or contingent on what happens to cashflows something like it) other assets Investors - Small vs Large Value Enhacement - Short term vs Long term Perspectives on value - Management - Individual vs Instittional Activist Investors Insider vs Outsider Every asset has a value. We just have to find it. Analysts - Buy Side vs Sell Side Acquisitions - Synergy Accountants Control Regulators/ Government Across the life cycle And private In sickness and in Valuing publicly traded - Young firms businesses health firms - IPOs - For owners - Survival Risk - Small vs Large - Mature firms - And investors - Distress Risk - Developed vs Emergina - Declining firms (private equity, - Nationalization Risk - Manufacturing vs venture capital, IPO) Technology Ways of Applying Value

# 4. Investment Philosophies



### A Class Guide



# 1. Regular Classes

- For the corporate finance and valuation classes, the classes that I teach at Stern are available in <u>unvarnished</u>, <u>but</u> <u>complete</u>, <u>form</u> (classroom recordings of lectures, slides, exams and even class emails).
- This is the closest you will get to a full-time class experience in terms of content, but it can be overwhelming in terms of demands on your time, and content. If have patience and tolerance, you can make your way through these classes.
- □ You can find the entry pages to the classes below:
  - Entry page for MBA Corporate Finance: http://www.stern.nyu.edu/~adamodar/New\_Home\_Page/corpfin.html
  - Entry page for MBA Valuation:
    <a href="http://people.stern.nyu.edu/adamodar/New\_Home\_Page/equity.html">http://people.stern.nyu.edu/adamodar/New\_Home\_Page/equity.html</a>

### NYU Server & YouTube Video

- □ With each class, you can stream the class from the NYU server, at least for the latest semesters. The spring 2020 class was distorted by the crisis, and if you prefer a more conventional class, I have the 2019 versions listed as well:
  - MBA Corporate Finance, Spring 2020: http://people.stern.nyu.edu/adamodar/New Home Page/webcastcfspr20.htm
  - MBA Corporate Finance, Spring 2019: http://people.stern.nyu.edu/adamodar/New Home Page/webcastcfspr19.htm
  - MBA Valuation, Spring 2020: http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcasteqspr20.htm
  - MBA Valuation, Spring 2019: http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcasteqspr20.htm
- As you will see on these pages, each recorded lecture comes with the slides that I used for that lecture and a post-class test and solution. Since the NYU server gets wiped clean every two or three years, I have YouTube playlists of the same classes at the links below:
  - MBA Corporate Finance, Spring 2020: https://www.youtube.com/playlist?list=PLUkh9m2BorqlBx7\_A0hq8mDJHBudZ25Lh
  - MBA Corporate Finance, Spring 2019: <a href="https://www.youtube.com/playlist?list=PLUkh9m2Borqne-uz\_yTAr4FbdZu6qKn0q">https://www.youtube.com/playlist?list=PLUkh9m2Borqne-uz\_yTAr4FbdZu6qKn0q</a>
  - MBA Valuation, Spring 2020: <a href="https://www.youtube.com/playlist?list=PLUkh9m2BorqlvUMO3nMwXOG-VlqxmAh3t">https://www.youtube.com/playlist?list=PLUkh9m2BorqlvUMO3nMwXOG-VlqxmAh3t</a>
  - MBA Valuation, Spring 2019: https://www.youtube.com/playlist?list=PLUkh9m2Borqkr0lxe9WjH7cDBi4ZnZPOx

### 2. Online Classes

- Online versions of all four classes, where I have tried to compress what I would say in an 80-minute session into a 12-15 minute session. The webcast pages for all four classes are available below:
  - Foundations of Finance Online:
    <a href="http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastfoundationsonline.htm">http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastfoundationsonline.htm</a>
  - Corporate Finance Online:
    <a href="http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastcfonline.htm">http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastcfonline.htm</a>
  - Valuation Online:
    http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastvalonline.htm
  - Investment Philosophies Online:
    <a href="http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastinvphil.htm">http://people.stern.nyu.edu/adamodar/New\_Home\_Page/webcastinvphil.htm</a>
- ☐ The videos are also available as YouTube playlists for each class.
  - Foundations of Finance Online: <a href="https://www.youtube.com/playlist?list=PLUkh9m2BorqndWimijiJ-VCAXjJUrzJQU">https://www.youtube.com/playlist?list=PLUkh9m2BorqndWimijiJ-VCAXjJUrzJQU</a>
  - Corporate Finance Online: <a href="https://www.youtube.com/playlist?list=PLUkh9m2BorqnDenjSLZ2DHIXrdxoN4Bn">https://www.youtube.com/playlist?list=PLUkh9m2BorqnDenjSLZ2DHIXrdxoN4Bn</a>
  - <u>Valuation Online</u>: <a href="https://www.youtube.com/playlist?list=PLUkh9m2BorqnKWu0g5ZUps\_CbQ-JGtbI9">https://www.youtube.com/playlist?list=PLUkh9m2BorqnKWu0g5ZUps\_CbQ-JGtbI9</a>
  - Investment Philosophies Online: https://www.youtube.com/playlist?list=PLUkh9m2BorqlDJlnBXUaJaMRNE7UDckn6

### 3. NYU Certificate Classes

- The regular and online classes that I list above are free, but there are two catches.
  - The first is that they come with no certification, since I have neither the inclination nor the resources to keep track of who is taking the class, how well they are doing and providing the certification.
  - The second is that online classes require self-discipline, since there is no mechanism for me to prod or nag you to keep up with the class. For many of you, these are not deal breakers, and I know of many who have persevered to finish these classes. If you believe that you need both the structure of a real class and certification, there is a third option of taking the classes through the certificate program.

# Not just stocks...

- □ The links to the certificate versions of the classes are below:
  - NYU Certificate in Corporate Finance: https://execed.stern.nyu.edu/products/corporate-finance-with-aswath-damodaran
  - NYU Certificate in Advanced Valuation: https://execed.stern.nyu.edu/products/advanced-valuation-with-aswath-damodaran
  - NYU Certificate in Investment Philosophies: https://execed.stern.nyu.edu/products/investment-philosophies-with-aswath-damodaran
- These classes have more polished versions of the videos that I recorded for my online class, come with exams and projects, and I do live Zoom sessions every two weeks, with each class, for the clearing up of doubts and questions.
- Since these are offered through NYU, they come with a price tag, that some of you may find too high. Since the content on these courses is identical to the free online versions, you will have to decide whether these add ons are worth the price that NYU charges for them.

# The University Model

- If a university were treated as a business, and we were asked to objectively assess its performance, we would give it failing grades on multiple counts. The university governance system stinks, investments are driven by ego and me-tooism, the funding is dysfunctional, and universities seem to revel in mistreating their primary customers, the students, who deliver the tuition revenues.
- This mistreatment is not a new phenomenon and the university model has endured for centuries, foiling and co-opting potential challengers over this period. As recently as a decade ago, there were some who proclaimed that MOOCs would upend universities, but that assault, like others before, failed and EdX and Coursera now operate as extensions of universities, rather than competitors.
- I <u>argued a few years ago</u> that technology-driven disruptors of education were failing because of a fundamental misunderstanding of what a university degree package offers students, viewing a university education as a collection of courses. At the same time, I offered a cautionary note to my university colleagues that change was already here, undermining the moats that universities have erected against competitors. If you are interested in that presentation, you can click here.

# COVID as game changer...

- As classes moved online, there were many where students hardly noticed the difference, as classes taught without energy, enthusiasm and engagement in a physical classroom sound the same online, and are easier to mute.
- Of the many things that students misses after classes moved online, the classes themselves were low down the list, well below friends, college sports and parties.
- The fact that most universities were unable or unwilling to cut tuition, even as classes move online, drew attention to the magnitude of the tuition and how little of it is directly connected to student education.
- It has forced students and parents, who had been have been conditioned to believe that the only way to get an education is to spend four years at a university, out of their pre-conceptions and to experiment with alternative routes.

### What next?

- My good friend, Scott Galloway, has been vocal in arguing that COVID is the tipping point that is going to upend the university model. He sees a world, where the strongest and most prestigious schools will survive and perhaps even thrive, while many small colleges and tuition-dependent universities will be decimated.
- I have more hope than Scott does for the model. I think that COVID provides an opportunity for universities to remake themselves into institutions where real learning is delivered in classrooms, good teaching is valued, and the focus returns to educating students.
- This change will come with pain, felt disproportionately by the tenured faculty and administrators, who have benefited the most from the existing model, with the question of tenure itself being debated.

# In closing..

- It has always been true that learning is not restricted to classrooms, and that your education may begin in a classroom, but it finds its grounding when you practice it in the real world, warts and all.
- There is almost nothing I teach in my classes that is timeless or profound, and I have learned that there is so much more that I do not know, than I do.
- I don't believe that I have either the knowledge or the intellect to answer every question that I am asked, but my job in teaching is to expose the process by which I try to get an answer, misguided and incorrect though it may be.
- I would rather be transparently wrong than opaquely right, and I hope that if you take one or more of my classes, you will not only learn from my mistakes, but also develop your own processes for answering the big questions in finance.