WELCOME TO
ADVANCED CORPORATE FINANCE

Prof. Mathias Kronlund

- Education:
  - Ph.D. in Finance, MBA; University of Chicago Booth School of Business
  - M.Sc. and B.A. in Industrial Engineering; Aalto University (Helsinki, Finland)
    - Exchange student at University of Michigan
- Research focus: Corporate Finance
  - E.g., Executive compensation, Rating agencies and bond markets, Repurchases and dividends, Corporate investment
- Work experience?
  - Reporter/journalist (during college)
  - Trainee/internships in:
    - Corporate finance (power plant construction company)
    - Trading (hedge fund)
    - Management consulting (McKinsey)
  - 6 years at GIES!

Who You Are...

1. Fill out a “personal info sheet”

2. Please bring *name cards* to every class!

Administrative information

- My office hours: Fridays, 9:50 am-10:50 am
- For really brief questions, talk to me before/after class
- Even better: ask content-related questions **during** class; You're probably not the only one with the same question!

What’s the point?

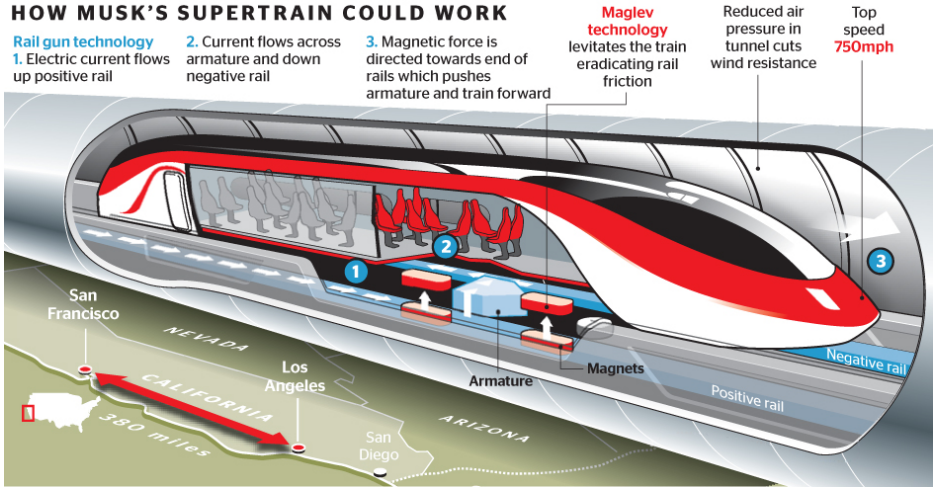
What use is (corporate) finance to the world?

What happens if/when finance isn’t done correctly?

“Investment dollars” are **scarce**!

- We need to decide what to invest in:
  - Which companies/projects/ideas to fund
  - How to value those companies/ideas
- The basic social function of finance: “Matching money with the right ideas”
- Lloyd Blankfein: “God’s work”
- Most of the world’s investments happens **through corporations**
- After investing, we need to make sure the companies continue to be good stewards of that invested capital
- All of this is corporate finance!

Example:
Should we fund this? How should we fund it?



Hyperloop
San Francisco-Los Angeles in 1 hour
Top speed 750mph
Cost: $7 billion?

Example:
What happens when finance doesn't work?

1 in every 5 houses in Ireland stands empty… some of them are really quite nice!

Why Should **You** Study Corporate Finance?

- It's a valuable skill in the workplace!
  - Employers tend to **pay** well for these skills!
  - Absolutely crucial skills in banking or investment, etc
  - But also in any **management** position! Or as an **entrepreneur** etc…
- For example, you may face questions such as:
  - Should your company develop a new product?
    - Or build a new factory? Or enter a new market?...
  - Should your company borrow money to pay for those investments? Or issue new shares? Or deplete some of the company's cash?
  - How much cash should your company invest *vs.* keep *vs.* pay back to investors?
  - Should you acquire or merge with another company?
  - How to best raise money for a new start-up?
    - And what's the business worth? (have you seen "Shark Tank"?)

Corporate finance as a balance sheet

A

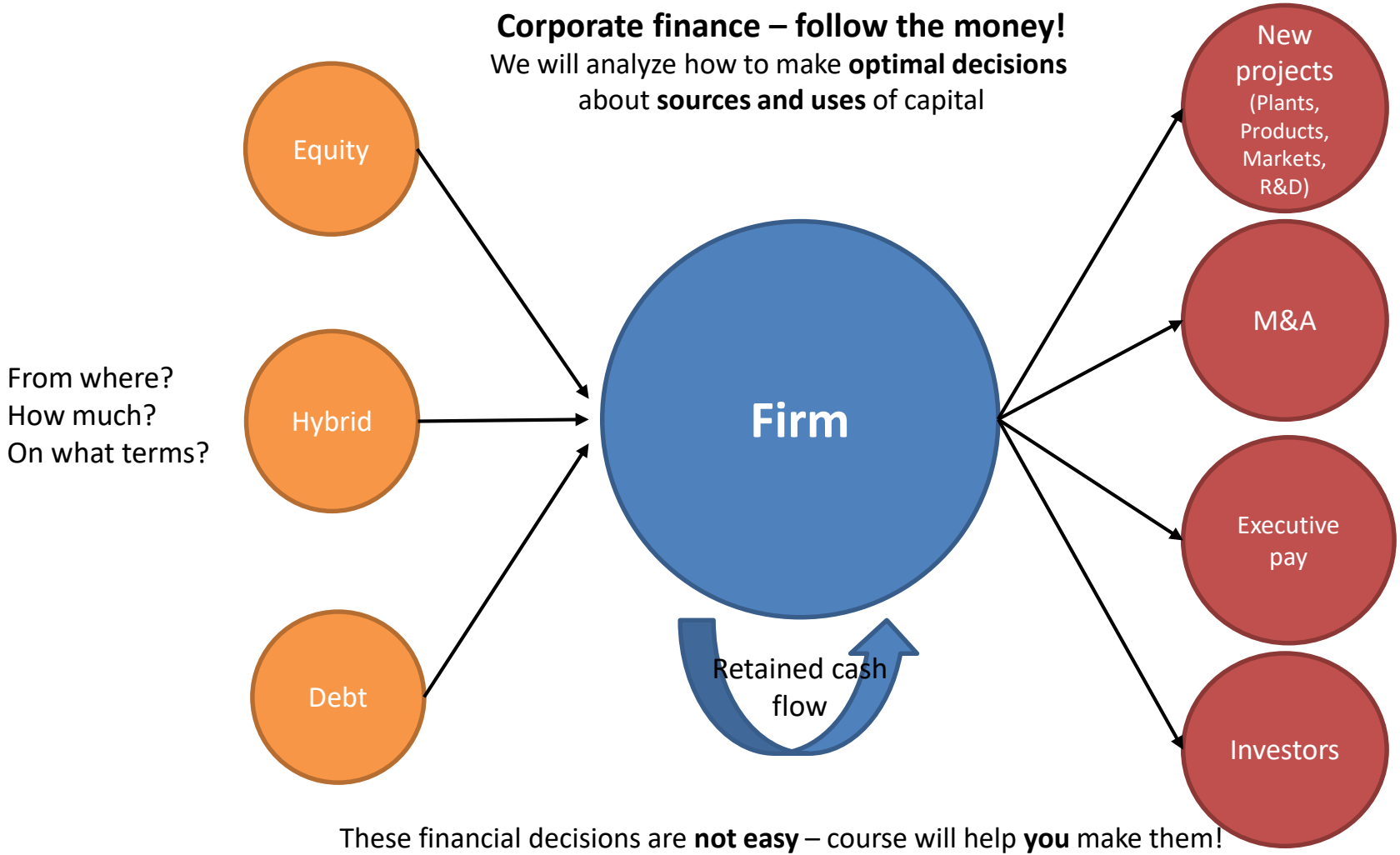
- What business should we be in?
- What investments should we make?
- What's the value of the company?
- Risk management
- M&A

L

- How do we finance the assets/business? E.g., debt vs. equity
- Does the way we finance a project matter for firm value?
- How pay our investors back?
- Corporate governance—making sure the firm doesn't squander investors' money

Corporate finance – follow the money!

We will analyze how to make **optimal decisions** about **sources and uses** of capital



These financial decisions are **not easy** – course will help **you** make them!

Main goal of the course

- **Learn** – a strong foundation in all areas of corporate finance
- **Apply** this knowledge
  - We will make heavy use of case studies and relate to recent events!
  - The formulas are mostly really easy – using them correctly is not!
- **Critical thinking**
  - Making good corporate finance decisions requires **good judgment**!
  - Understanding **general principles** is better than rote-learning formulas → helps us adapt to new situations
  - There's no such thing as a "textbook" problem in the real world!
  - Plus, the world is always changing! (e.g., new tax rates, foreign cash treatment, limits to tax deductibility of debt)

“Thinking Corporate Finance” is also useful when making decisions about **personal finances**

- For example, making better choices about:
  - How to best save for retirement?
  - What kind of mortgage should you get?
  - Should you get a car loan or lease?
  - Should you invest in your friend’s new start-up?
  - Should you use up your free drinks on your Espresso Royale loyalty card instead of paying for a coffee, or save the free drinks for later?
- These personal decisions are different than the corporate decisions we analyze in the course
  - But, **way to think** is highly applicable to almost every financial setting

Why heavy emphasis on “intuition” and “ideas”, instead of “plug-and-play” formulas?

Are computers taking over?

- Computers are taking over many (most?) finance jobs!
- It isn't be enough if you only can do what a computer can do!
- Example: I know how to take some inputs and plug those into a DCF model!
- Congrats! A computer can do that a lot faster, cheaper, and make fewer errors! (Why should we hire you?)

Examples

- Trading
- Credit analysis / banking
  - E.g. Rocket Mortgage (“the 8-minute mortgage without human interaction”), “SoFi”
- Robo-advisors vs. Human financial advisors
  - Why pay a human advisor 1% when a computer can (usually) do it better for less than 0.15%
- Security analysis
  - Writing analyst reports
    - Computers can already write these reports and news stories, much faster/more accurately than a human could
  - Analyzing relationships between security prices and macro variables/world events
    - E.g. software called “Kensho” and “AlphaSense” among others
  - Valuation
    - E.g., choosing among VC investment possibilities — software “CircleUp”

So where will the jobs be?

Jobs where you ***complement*** the computer:

Interpreting the computer's output or helping build/improve the computer's model

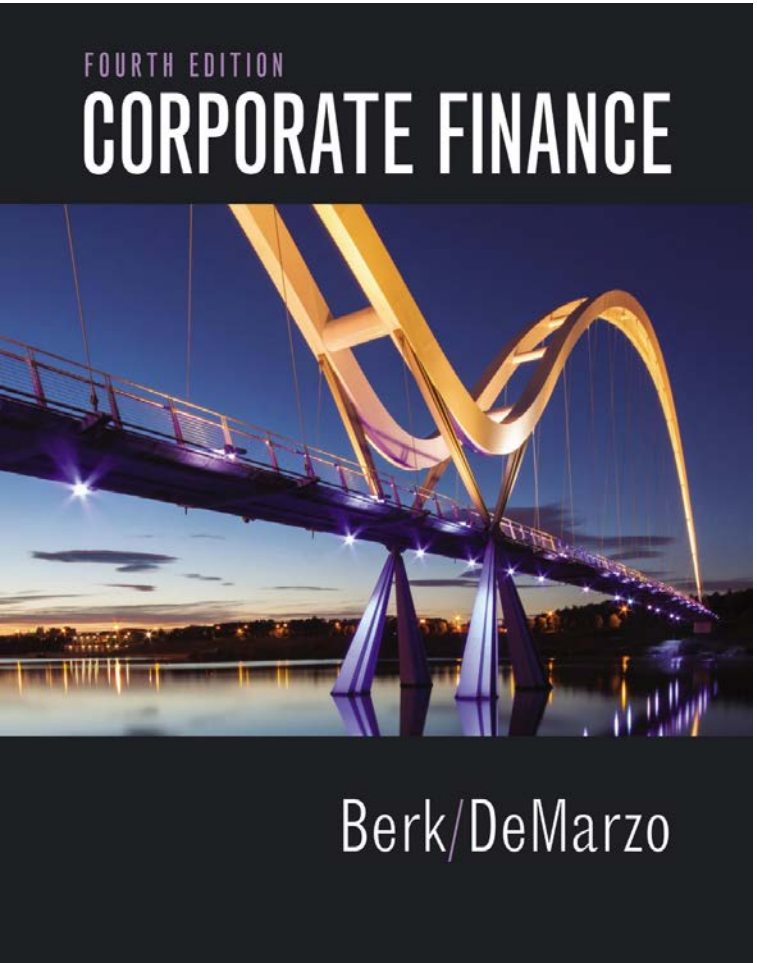
Requires *critical thinking/judgment, creativity, adapting to unanticipated situations*…

Example: Humans can't beat computers at chess anymore, but…

Takeaways?

- Don’t go into a field that is easily “automatized”
- It’s not easy to complement a computer well
  - You have to be *really good* at chess and understand exactly how the computer is “thinking” to be able to assist the computer effectively
  - You might want to learn at least a little bit of coding!
- What else?

COURSE LOGISTICS



Materials

- **Textbook:**
  Corporate Finance (Berk and DeMarzo), 4th ed.
  - *Not required*—we don't "use" the book
  - *Very useful* for review, more examples, etc
  - Lectures essentially follow same chapter structure
- **Cases (from Harvard Business Publishing):**
  - "Hansson Private Label: Evaluating an investment in expansion"
  - "American Greetings"
  - "Midland Energy Resources, Inc: Cost of Capital"
  - "Blaine Kitchenware Inc: Capital Structure"
  - "du Pont Corporation: Sale of Performance Coatings"
  - *If time allows:* "Mellon Financial and The Bank of New York"; "Rosetta Stone: Pricing the 2009 IPO"
- **On Compass:**
  - Problem sets
  - HBS case questions
  - Guest lecture cases
  - Announcements, Additional materials

News and Blogs?

- Strongly recommended!
- New York Times (especially “Dealbook” section)
- Wall Street Journal
- Bloomberg.com
- Economist
- Matt Levine’s “Money Stuff” blog on Bloomberg.com [really great!]

Course requirements and grading

- 4 individual problem sets (10%)
  - Grading on problem sets is *very generous!* (mainly for completion)
- Market Information Lab (MIL) exercise (5%)
- 5-6 group cases (25-30%)
  - *4* students per group
  - The cases are often a bit messy and ambiguous—just like real life is—they should make you slightly uncomfortable!
  - No "one right answer" (but many more *vs.* less good approaches!)
  - Try to solve the case individually, then meet with group. Don't allow one person do all the work!
- Group case presentation (5%)
- Guest lecturer case(s) (5%)
  - Same groups as above
- Midterm (15%)
- Final [cumulative] (30%)
- Participation (5%)
- Some assignments will be easy, others will be hard. The total weighted score will be *curved!*

“News Points”

- We’ll talk about current events and deals!
  - An opportunity for **you** to direct class discussion & decide what we talk about
  - Learn to better connect concepts to actual events
  - Examples: Spotify IPO, new tax law, crypto valuation, etc.
- Logistics:
  - Go to Compass Discussion page
  - Create a post:
    - Link to an article (NYTimes, WSJ, Economist, Bloomberg, etc)
    - Briefly describe the main topic and why you think it’s interesting
  - You may also comment on other people’s posts if you have thoughts about it
  - I’ll occasionally choose 1-2 articles and we’ll talk about it at beginning of class
- Contributing interesting articles counts for participation credit

Class participation and technology

- Participate!
  - If you have a question, ask!
  - Other people probably wonder about the same thing, so you're doing everyone a favor by asking (="positive externality")
- Bring a name card!
  - I need to learn your name!
- Recommended: Print lecture notes ahead of time, and bring them to class to make notes in the margins
- Technology policy: Be respectful!
  - Don't goof off online, it distracts you and your neighbors!
  - Strongly recommended: Take notes *by hand*, not computer
  - Research has shown hand-note taking is much better, especially for understanding the big picture. (Hint: this class *is* about the big picture!)

Any other books I recommend?

(not at all required, but helpful if you want to learn more about finance in general)

Stories about corporate finance/banking:

- Michael Lewis - Liar's Poker
- Burrough & Helyar - Barbarians at the Gate

Practitioner-oriented books:

- Rosenblum & Pearl - Investment Banking
- Koller et al - Valuation

Related to the financial crisis:

- Raghuram Rajan - Fault Lines
- Michael Lewis - The Big Short

On investments:

- Burton Malkiel - A Random Walk Down Wall Street
- Robert Shiller - Irrational Exuberance
- Roger Lowenstein - When Genius Failed