

FIN2010 Financial Management

Lecture 22: Ethics in Finance



Review—Capital Structure

- Capital structure in a perfect world:
 - MM I: capital structure does not affect firm value
 - MM II: $R_E = R_U + \frac{D}{E}(R_U - R_D)$
- Capital structure in an imperfect world – the effect of tax:
 - Debt offers a tax advantage
 - Interest tax shield in a year = interest payment * tax rate
 - $V_L = V_U + \text{PV}(\text{interest tax shield})$
 - After-tax WACC $r_{wacc} = \frac{E}{E+D}r_E + \frac{D}{E+D}R_D - \frac{D}{E+D}R_D\tau_c$
 - The optimal point for tax saving is when interest payment = EBIT
- Firms don't seem to fully take advantage of the tax saving benefit of debt. Why? There are other pros and cons for using debt vs. equity.



Agenda

- What is Ethics?
- Ethics Problems in Finance
 - Deception: Self vs. Client's Interest
 - Gaming the System: Self vs. Public Interest
 - Favoritism: Client A vs. Client B
 - Regulatory Arbitrage: Client's vs Public Interest
- Why is Ethics Important?
 - The Great Financial Crisis (2008)



What is Ethics?

- Ethics is mainly concerned about:
What is right and what is wrong?
- Why is ethics important for a society?
 - Law cannot cover all aspects of life
 - It is costly to resolve disputes through legal actions
- What should be our ethics standard?
 - Golden rule (a universal rule across many cultures):
Do to others what you want them to do to you
 - Do not lie/harm
 - Fairness
 - (In China) aggregate welfare > individual welfare



Ethics Standard in Finance

- Fiduciary duty: act in the best interest of the client
 - Fiduciary: a person or organization making decision on behalf of others
 - Example: money manager – investor, investment bank – corporation
- Integrity: be honest, unbiased, impartial
 - The financial industry determines resource allocation in the society. Any action may have far-reaching consequences.
 - Example: due diligence on a firm before IPO, auditing, investment report, loan issuance
 - Doesn't mean you always have to be right. But you should not knowingly misrepresent your information.

For a more detailed guideline, see [CFA code of ethics](#)



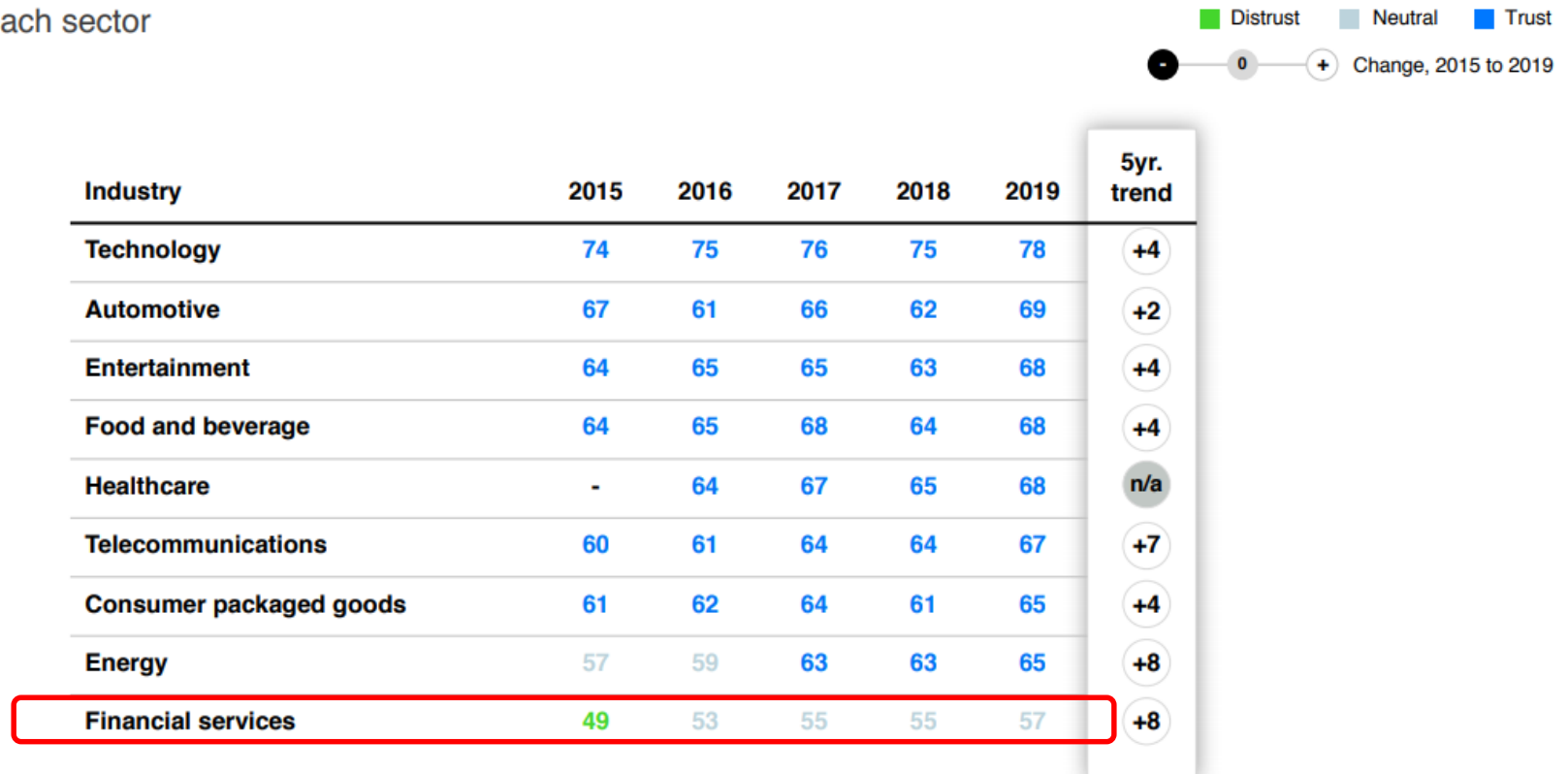
Agenda

- Big Picture Question
- Clear Unacceptable
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Financial Industry is Perceived Unethical

Percent trust in each sector



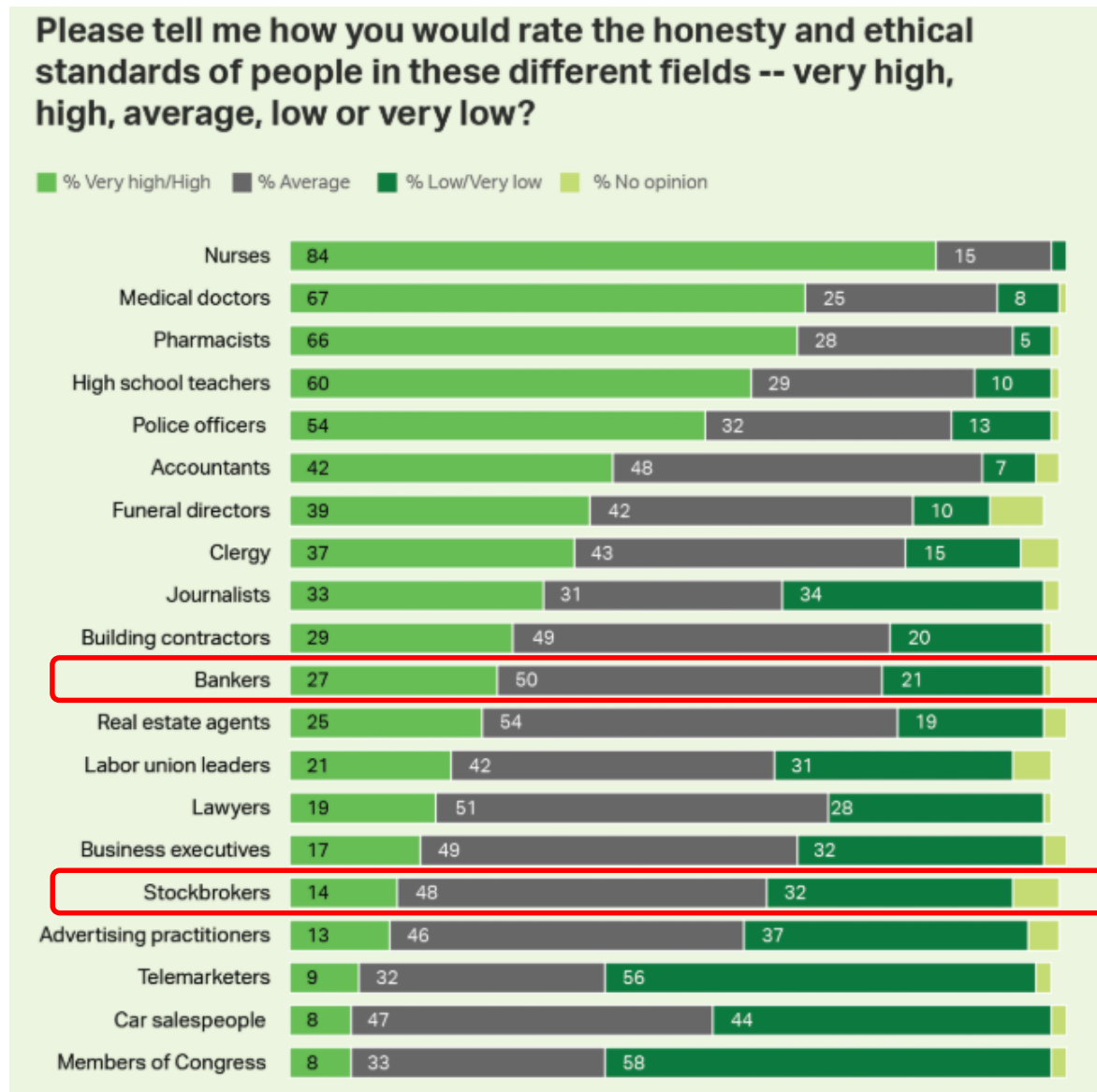
2019 Edelman Trust Barometer. TRU_IND. Please indicate how much you trust businesses in each of the following industries to do what is right. Again, please use the same nine-point scale where one means that you "do not trust them at all" and nine means that you "trust them a great deal". 9-point scale; top 4 box, trust. Industries shown to half of the sample. General population, 23-market average.



[Source: Edelman Trust Barometer](#)



Financial Industry is Perceived Unethical



Source:
[Gallup Honesty Survey](#)



Why is Ethics a Concern in Finance?



1. Conflict of interests: if one side gains, then the other side typically loses
2. Asymmetric information: customers are often less sophisticated
3. Innovative nature of the business: the industry is developing fast and regulations typically lag behind. What is worse, the industry is constantly trying to get around regulations.

Ethics questions make up 15% of the CFA level 1 exam!



Deception: Self vs. Client's Interest

Broker sell penny stocks to customer [\[video\]](#)

- Pump and dump
 - Buy the stocks in advance, push up the price
 - Market the stocks to customers, saying that the stock had huge potential
 - Sell the shares to the customers at pumped-up prices



Yuchen Sun and Tron

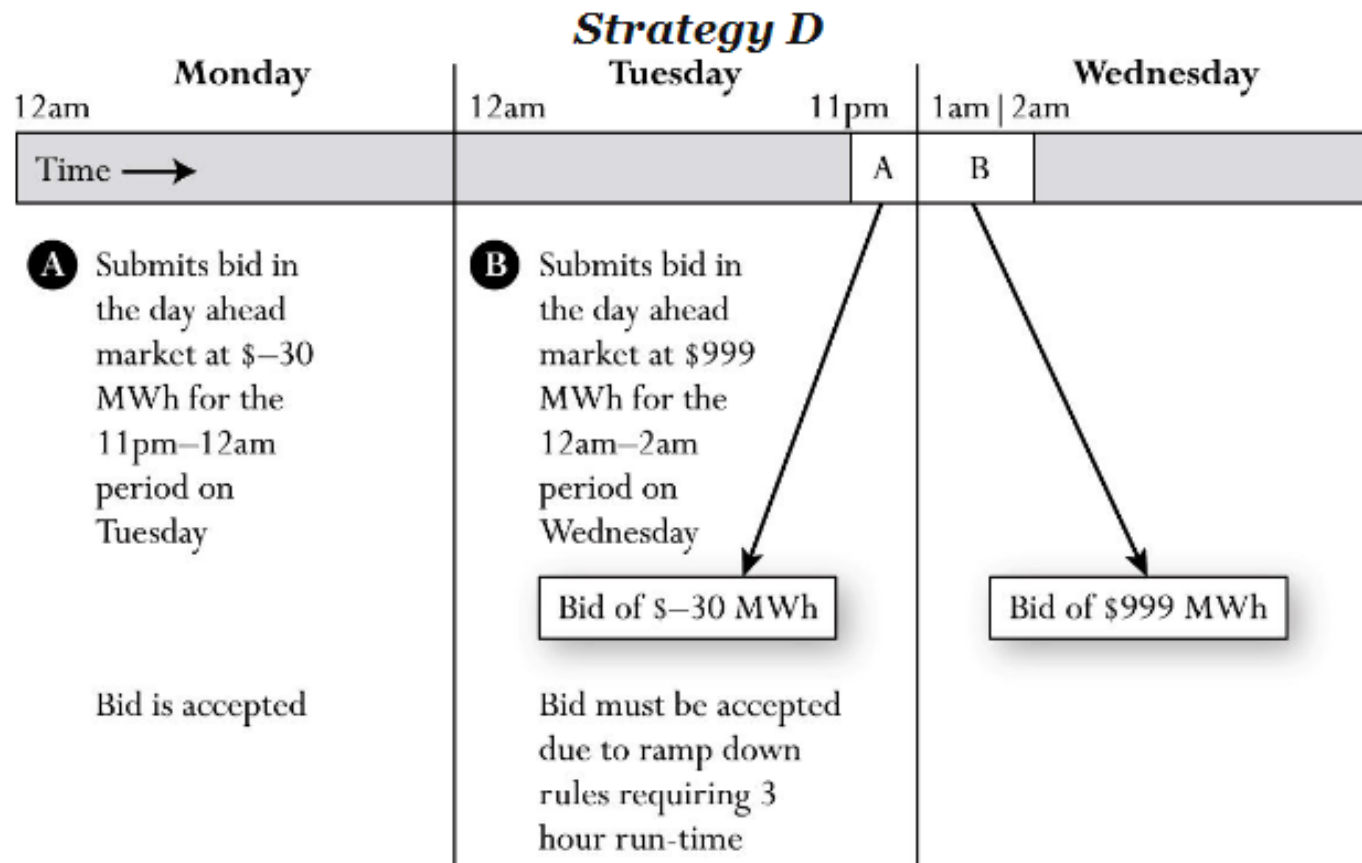


Gaming the System: Self vs. Public Interest

- JP Morgan bought several power plants in California in 2010 that were running on losses every month
- Starting from 09/2010, JPM devised 12 “clever” bidding schemes in the electricity auction market so that in the next quarter:
 - 14M revenue
 - 17.7M cost
 - \$24M compensatory payments from the government

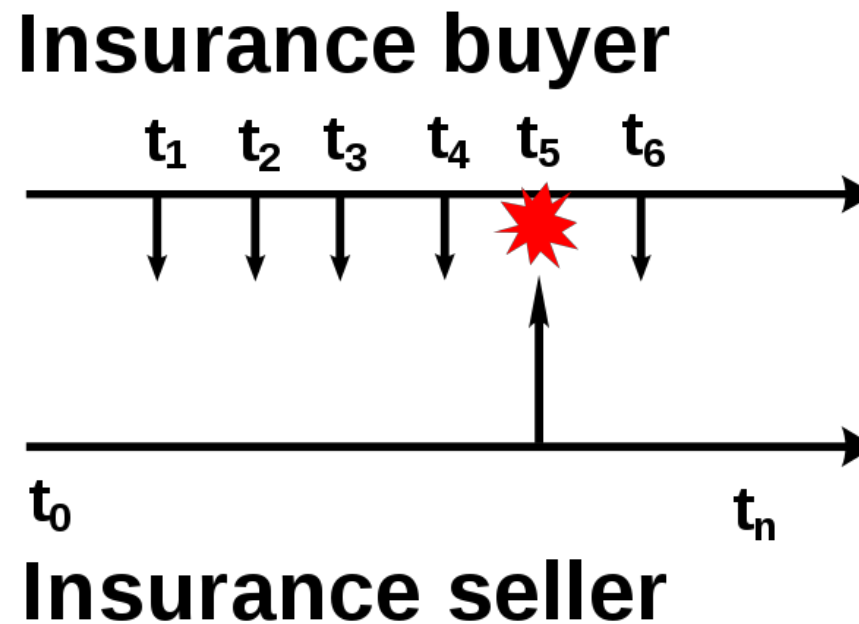


One Example of Bidding Strategy



Favoritism: Client A vs. Client B

- In 2007, John Paulson wanted to short subprime mortgage, and bought CDS on 90 designated mortgage assets from Goldman Sachs
 - Paulson & Co pays periodic payments (insurance premium) to GS
 - GS pays Paulson & Co when the mortgage-backed security defaults



Favoritism—The Abacus Deal (cont.)

- GS doesn't want to keep the exposure to housing risk
- GS use the CDS to create synthetic bonds (the Abacus bonds) and sell them to investors without revealing the intention of John Paulson
- Result:
 - Paulson made ~\$1B
 - GS made \$15M commission fee
 - Investors of the Abacus bonds lost +1\$B

Is GS unethical?

GS settled with the SEC for a \$550M fine in 2010

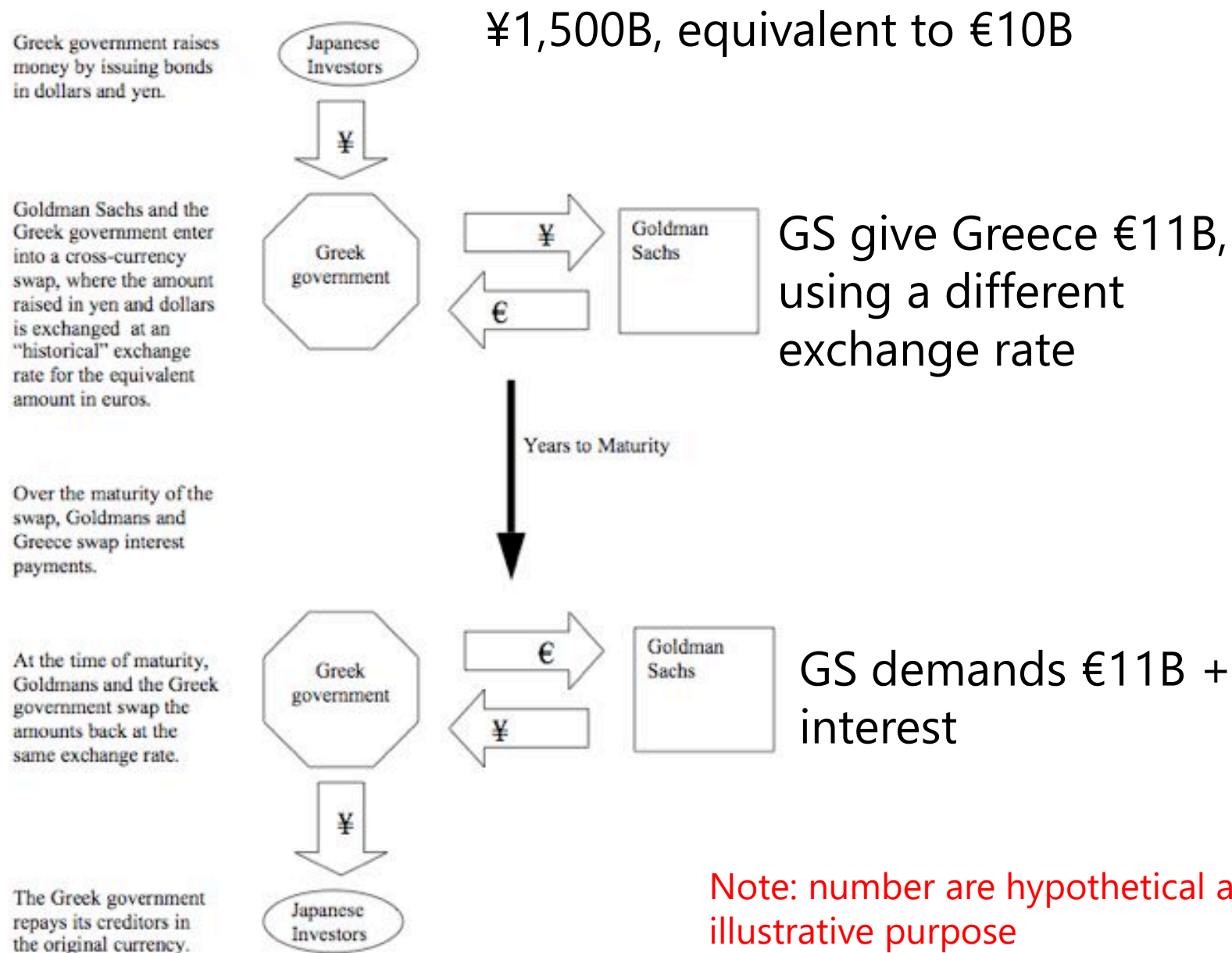


Regulatory Arbitrage: Client's vs Public Interest

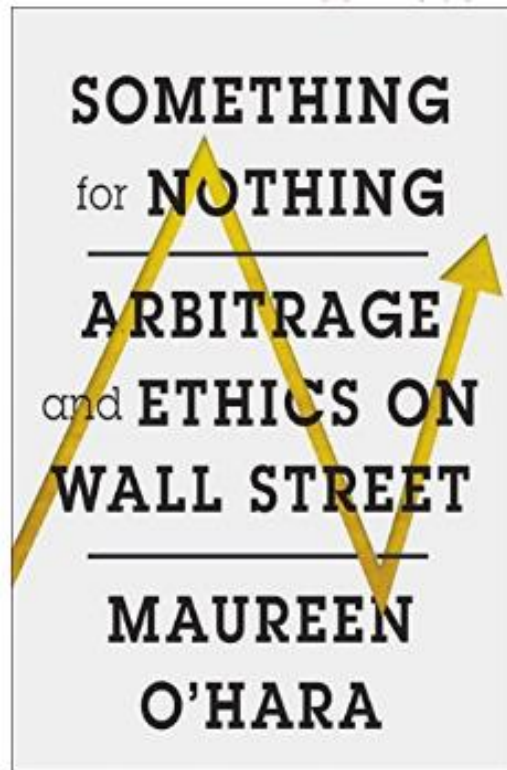
- Greek joined EU in 2000. In 2002, Greek government would fail to comply with EU standards (deficit/debt cannot be 3%/60% of GDP) and was facing punishment
 - Greek government structured a swap with Goldman Sachs
 - Swap is not required to be reported on the balance sheet
 - Effectively, Goldman Sachs made a loan to the Greek government
 - Greek government got money -> Asset increases
 - But the loan does not need to be recognized as debt -> Liability remains the same
- Greek reported deficit to GDP ratio of 1.2% in 2002, which should have been 3.7%
- By 2009, deficit to GDP ratio had risen to 12%



Possible Structure of Greek Swap



Credit



[Amazon link](#)



Other Issues to Discuss

- Is it unethical?
 - Muddy Water published fraud allegation against Luckin Coffee.
 - Alipay created new platforms to circumvent the traditional channels of mutual fund sales.
 - A mutual fund manager buys a stock on his own account first, and then buys more with the managed account to push up the price.
- What should you do?
 - You work at a bank. Your friend runs a small business and come to you to apply for a loan.
 - You work for the team that underwrites Luckin's IPO. You found fraud in the company's accounts, but your boss wants you issue a high recommended IPO price in order to earn higher commission fee.



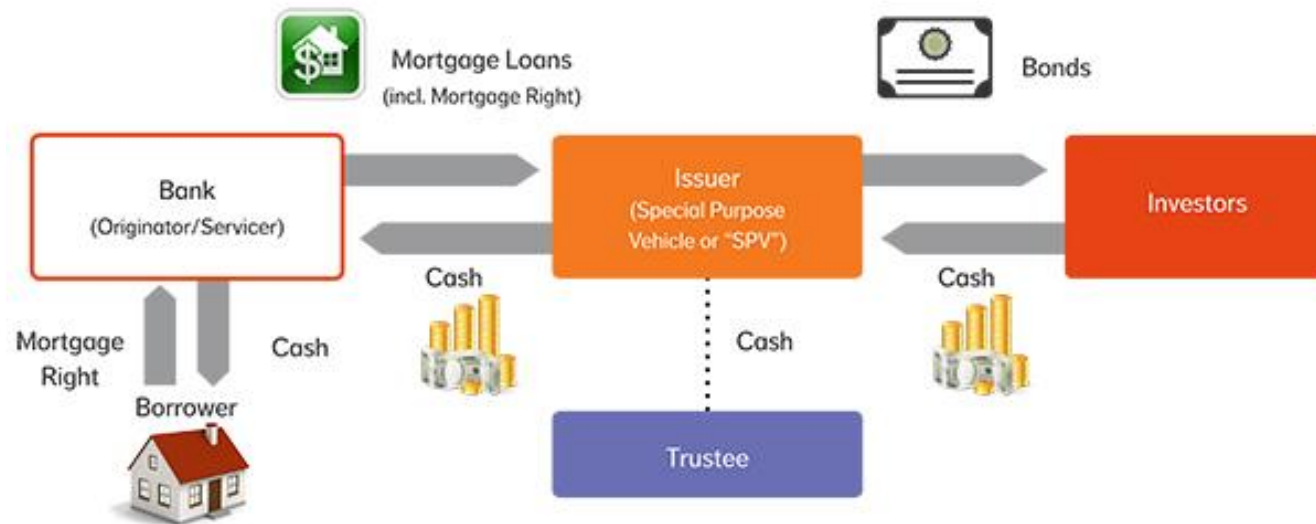
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Incentive Problem of Mortgage Brokers

- Mortgage issuers^[qq]: why should I care about credit worthiness if I can sell off the mortgage right away?

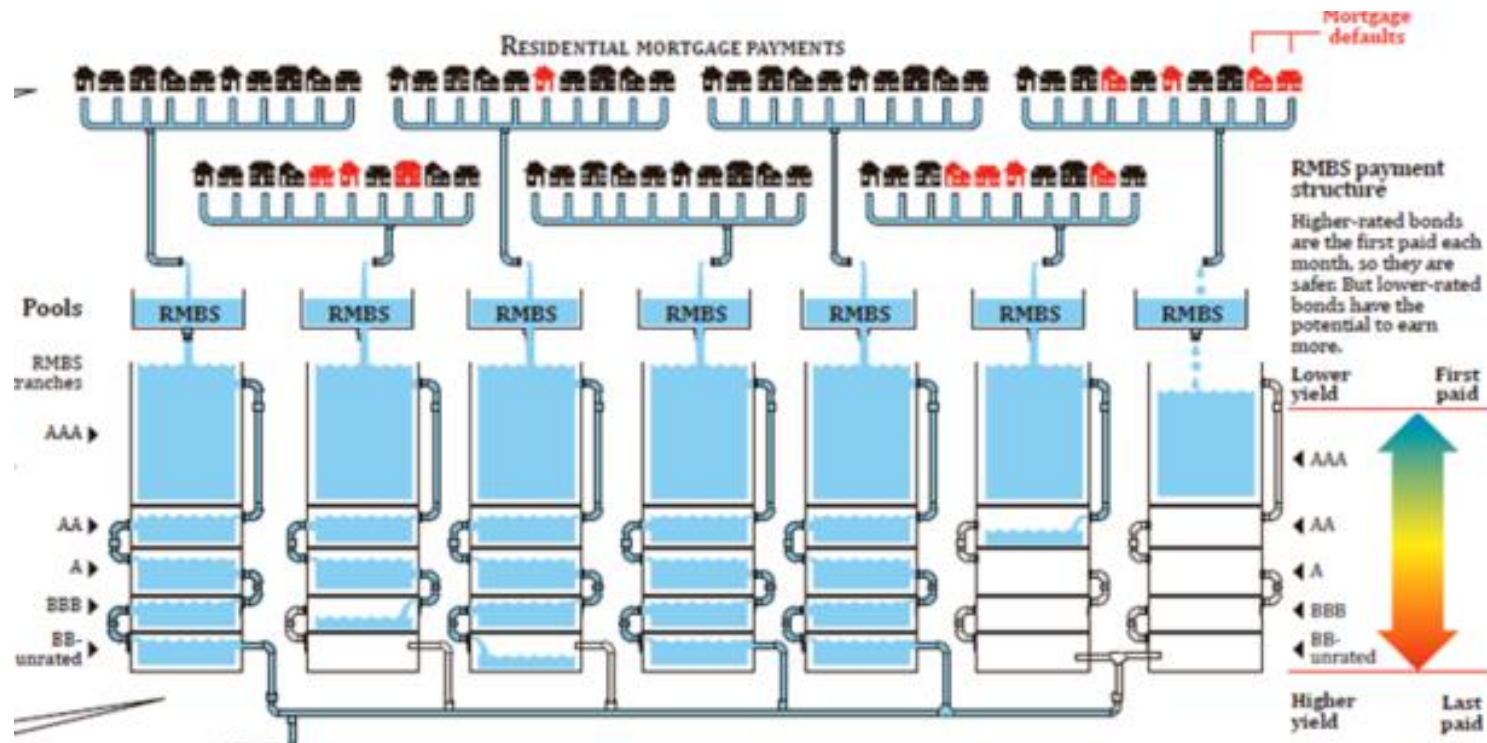


Mortgage-Backed Securities

- What are they?
 - Some financial agencies pool together thousands of mortgages, and pass through the monthly mortgage payments to investors
- Why do banks who issue mortgages want to sell their incomes?
 - They want to recapitalize and make more mortgages. That way they can earn more commission fees.
- Why do investors prefer pooled mortgages rather than single mortgage?
 - Easier transaction (better liquidity)
 - Diversification
- What else do investors wish for?
 - Higher ratings: some investors, like pension funds, can only hold assets with ratings above BBB.



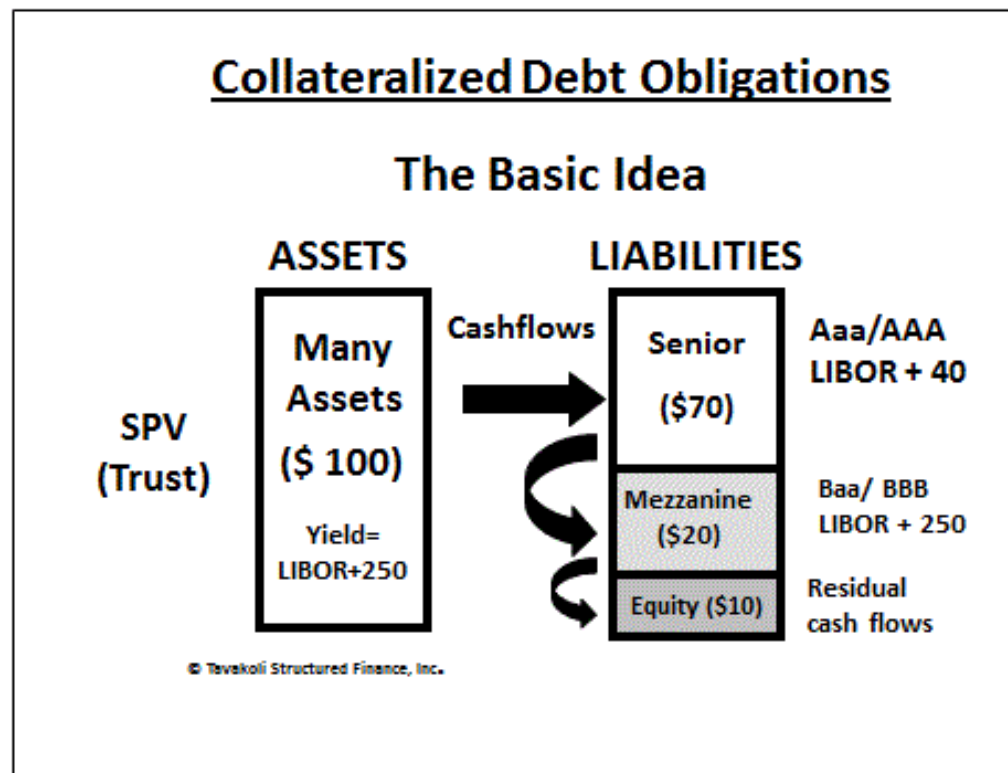
Collateralized Debt Obligation (CDO)



Banks divide mortgage-backed-securities into tranches, with lower tranches suffering default losses before higher tranches.

Incentive Problem of Rating Agencies

- [Rating agency](#)^[qq]: if we don't give them triple A, they will go to Moody's



Higher Tranches of CDOs should be Safe...

- For the AAA tranche to suffer a loss, 30% of the underlying mortgages need to default. Given a national-wide average default rate of 2.5%/year, that happens less than 1 in 10000 years.
 - Problem 1: the underlying mortgages were worse than expected.
 - Problem 2: the defaults are not independent. When one family defaults, the bank foreclose the home and conduct a “fire sale”, which lowers housing price. That cause more families to default because when remaining balance > house value, it is only rational to default.
- AIG and Lehman Brothers apparently thought these tranches were safe. AIG insured over \$465B worth of MBS while the equity value of AIG was only ~\$120B in 2008.
 - AIG were bailed out by the government. Lehman Brothers went bankrupt.



Causes of the Financial Crisis

Mortgage
issuers
issued bad
loans



Rating
agencies did
not do their
jobs



Banks insured
the bad loans,
ignoring the risks



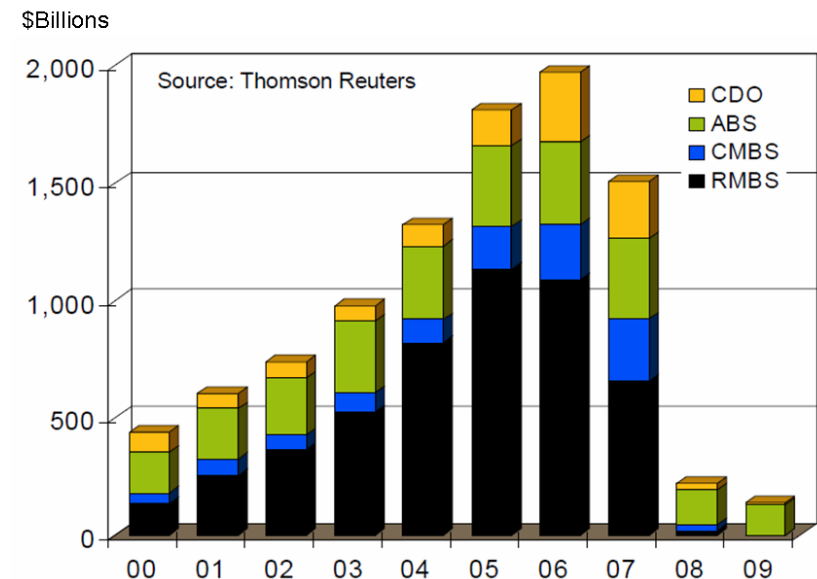
Lehman failed,
sending panic
globally



Financial
market
stopped
functioning

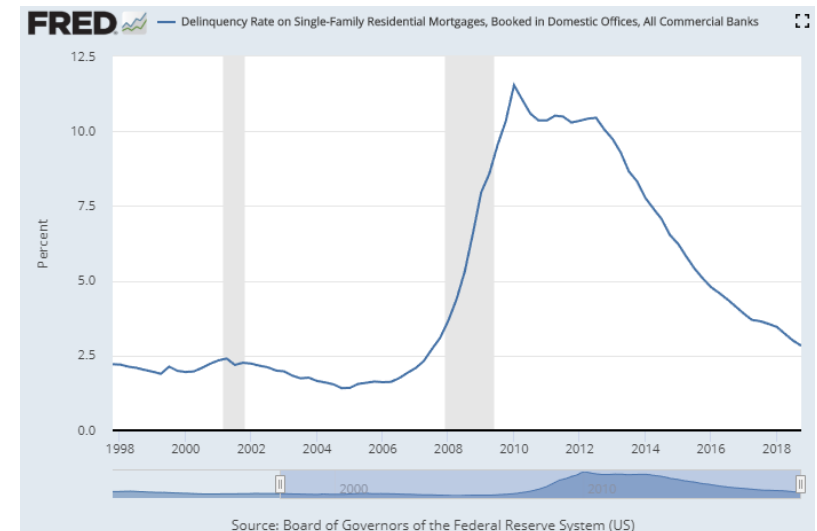
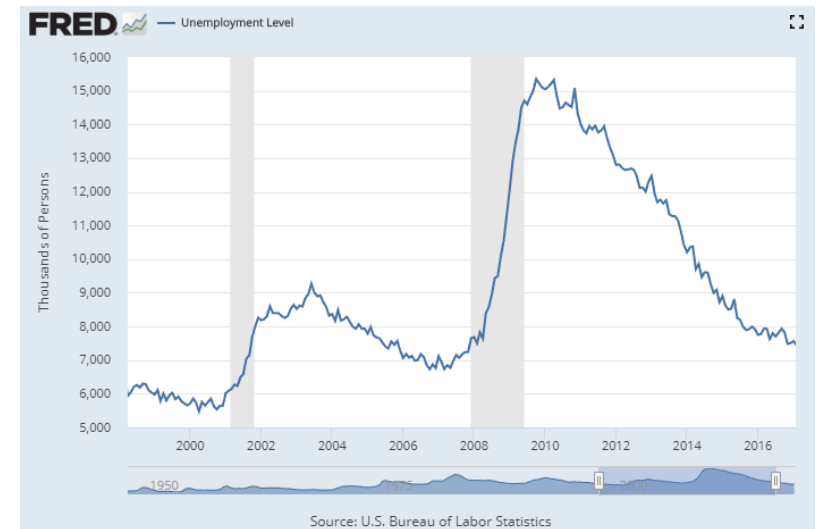


Securitization Market Activity



Consequences of the Financial Crisis

- **8 million workers** lost their jobs.
 - Unemployment level:
- **6 million homes** faced foreclosures
 - Mortgage delinquency rate:
- Equity lost 45% value. Housing market lost 30% value.



What can We Learn from the Crisis?

Żaden płatek śniegu nie czuje się odpowiedzialny za lawinę.

(No Snowflake in an avalanche ever feels responsible.)

(雪崩中没有一片雪花是无辜的。)

- Stanisław Jerzy Lec, Polish Poet, 1909-1966

- Laws have limited power, and no system is designed perfectly from the beginning. A society needs ethics to function well.
- All business school curricula require a course in ethics
 - It is likely that you will face temptations to act unethically for personal gains especially when you work in the financial industry.
 - Whenever you face ethical dilemmas in the future, I hope you remember what you learned today.
 - Financial industry determines the asset allocation in the economy. Your decisions can have far greater social impacts than you can imagine.



A Quote from J.K. Rowling

“... there will be a time when we must choose between what is easy and what is right.”

—Harry Potter and the Goblet of Fire

- I hope that you will choose what is right over what is easy.



Guest Lecture

- No class next week.
- Instead, you are required to attend this event.
 - You are welcomed to bring your friend.
- 11-29 (Sunday) 2-5 PM
- TB 202

- Please post the questions you want to ask on BB!

