

# Problem Markets: Financial Benchmarks & Credit Ratings



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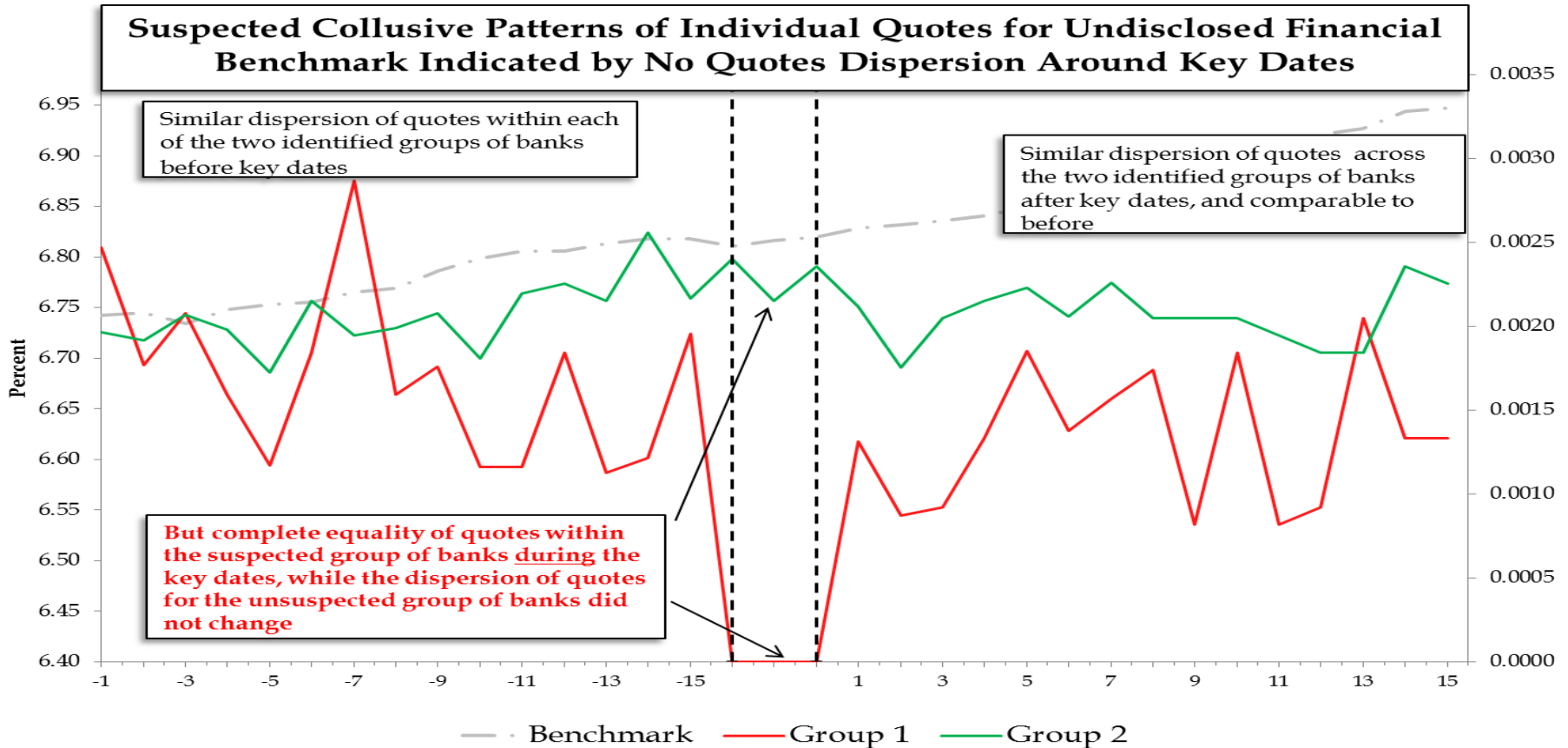
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- **Financial Benchmarks**
  - Detection & Reform
- **Credit Ratings Agencies**
  - Diagnosing the Problem to Find a Solution

# Empirical Evidence of Collusion



# Flawed Benchmark Structures Facilitate Abuse

## LIBOR & Other “IBORs”

- ❖ Small group of competitors setting the benchmark
- ❖ Inputs are quotes on expected costs or market rates, not actual prices
  - ❖ Quotes are uncommitted and unverified against actual transactions
- ❖ Public release of quotes
  - ❖ Enhances stability in collusion and likelihood of unilateral manipulative acts
- ❖ Direct financial interest in the value taken by the benchmark
  - ❖ Incentive to move benchmark; at least benefit from inside information
- ❖ Administration by submitters themselves through their trade associations
  - ❖ Direct conflict of interests, lack of oversight and screening

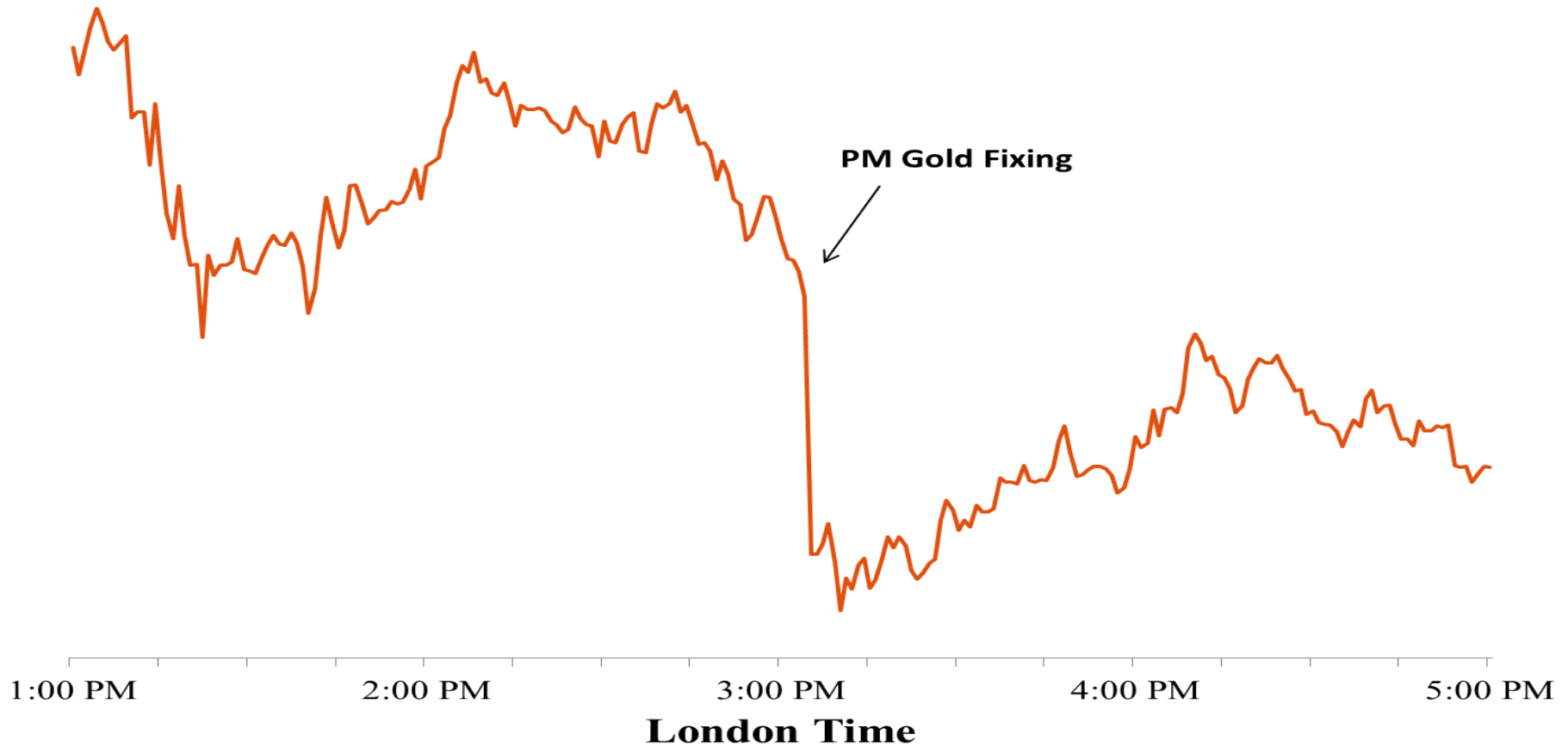
**MEANS, MOTIVE AND OPPORTUNITY!**

# Other Structures of Concern

- ❖ Small number of competitors with majority of the market
- ❖ Though actual prices are often the inputs, these may still be easy to manipulate, with or without collusion
  - ❖ Benchmark known to be set during a very small window of time (i.e., a couple of minutes before and/or after market close) in which only trades and quotes by relatively few large players typically occur (Foreign Exchange, some Commodities Futures Settlement Prices)
  - ❖ **Or** referenced trades in which buyer and seller can potentially coordinate to report a distorted price in exchange for an undisclosed discount or a favor in another market (some Platts indices)
  - ❖ **Or** Opacity and discretion of methodology, and direct conflict of interests (Markit and CDS indices)
  - ❖ **Or** benchmarks for liquid commodities set through private calls among a handful of competitors through an undisclosed auction (Gold and Silver London Spot Fixings)
- ❖ Apparent lack of independent monitoring and oversight

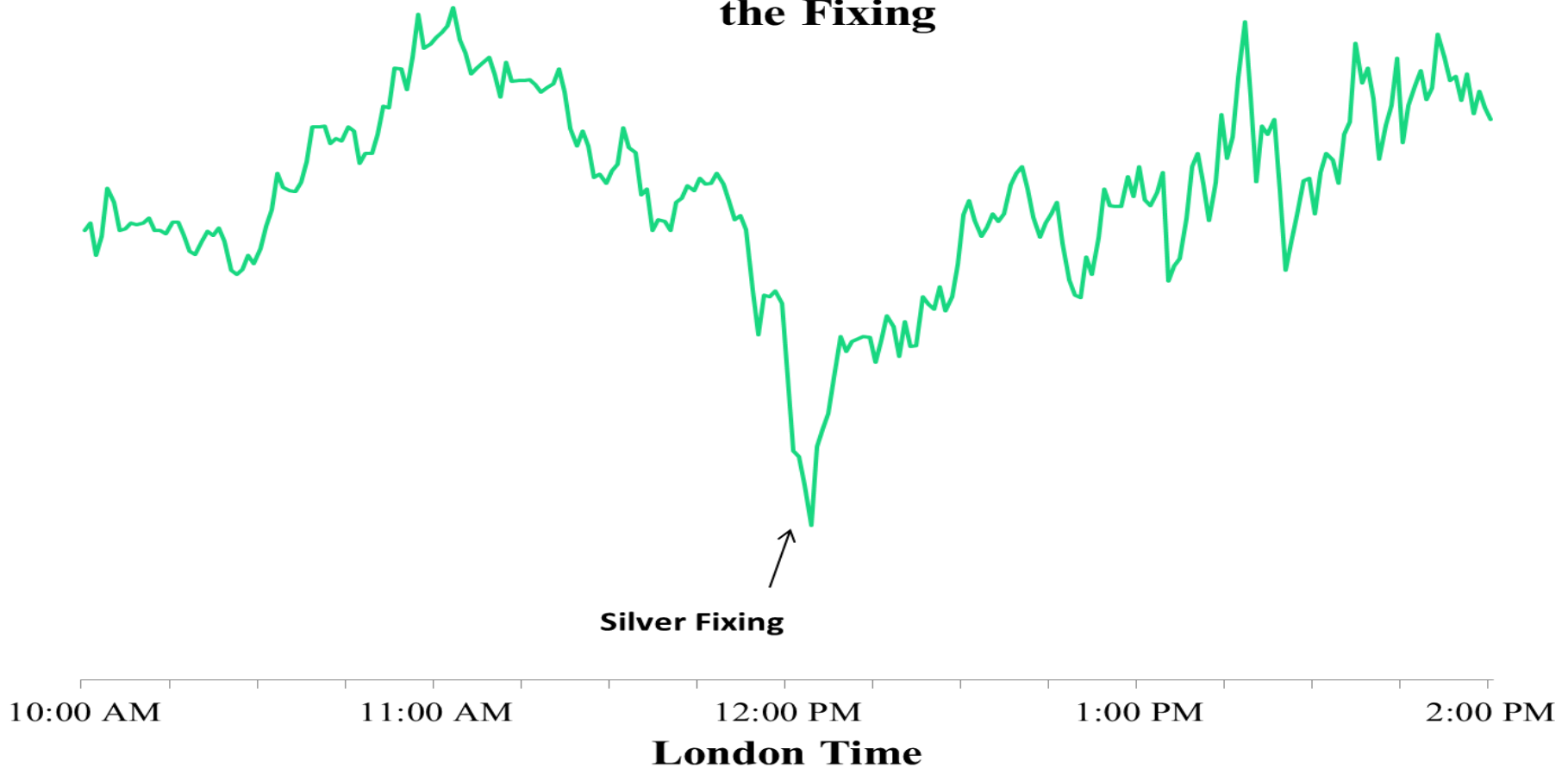
# Gold Spot Price on Day X

## Sharp Decline of Gold Spot Price Around the PM Fixing



# Silver Spot Price on Day Y

## Sharp Decline and Recovery of Silver Spot Price Around the Fixing





# Gold LBMA Fixing



Source: "The Gold Cartel," by Dimitri Speck; Chart: Bloomberg View

# Silver LBMA Fixing



Source: "The Gold Cartel," by Dimitri Speck; Chart: Bloomberg View

# Failure to Recognize Red Flags

## Relevant Factors of Information Exchanged Among Competitors Facilitating Collusion



- Intent
- Strategic importance of the information exchanged
- Age of data exchanged
- Private vs. public exchange
- Individual vs. aggregate information
- Current or future vs. past information
- Data on prices and volumes vs. data on demand and costs



- Frequency of the exchanges
- Structure, control and governance of the information exchanged
- Adoption of safeguards by the parties
- Exclusivity
- Financial interests in the collaboration
- Likelihood of competitive information
- Duration of the exchange

# Lessons from LIBOR, Euribor & Others

**[1]** Recognize flawed structures and the means, motive and opportunity to be abused

- Gold and Silver LBMA Fixings set through undisclosed conference calls among 5 and 3 competitor banks, respectively
  - Why? These are liquid enough markets to base these benchmarks on actual prices

**[2]** Design appropriate structures directly dealing with identified flaws by fixing **[1]**, and also minimizing unnecessary and costly regulation with potentially undesirable effects

**[3]** Screen markets regularly to enhance likelihood of detection and deterrence of illegal behavior

- Recall screens first flagged the possibility of illegal behavior in LIBOR in 2008, prior to investigations

# CRA's: Motivation

- ❖ Credit Rating Agencies (CRAs) were at the center of the recent financial crisis
  - ❖ Some critics go so far as to blame them for the crisis itself
- ❖ A number of proposals have been made to reign in the CRAs
  - ❖ But we must first understand what the problem was before we can find an appropriate solution
- ❖ I argue that the problem is “rating shopping”
  - ❖ Monopsony power in the structured finance (SF) market by a few large investment banks could potentially pressure CRAs to compromise their analytics, or at least adopt more liberal analytics where there is doubt
    - ❖ Some equate rating shopping with the “Issuer Pays” model, but they are distinct
    - ❖ “Issuer Pays” is probably necessary but is not sufficient for rating shopping

# CRA's: Motivation

- ❖ If rating shopping is the problem, then policies must solve *that* problem
  - ❖ Calls for “more competitors” could actually exacerbate rating shopping
    - ❖ Having more CRAs increases the likelihood that there exists *some* CRA which will rate your paper “AAA,” without a merit
    - ❖ New business model: open a CRA, rate everything that comes in AAA, at some point something will blow up, you will go out of business, wait, re-open under a different name
- ❖ Calls for “market share caps” would not address rating shopping either
  - ❖ All else equal, a rating system becomes more valuable the more of the universe it applies to, and restricting market share diminishes this value (increases internal inconsistency of measures of relative risk).
  - ❖ Credit analysis of issuer A often requires credit analysis of issuer B (banks and sovereigns, parents and subsidiaries). In order to do a proper analysis of issuer A, the CRA may need to do a proper analysis of issuer B. What if it is not allowed to rate B but has to rate A?

# CRA's: Motivation

- ❖ If we can guarantee that the CRAs will have *some* part of the market, then they will be unconstrained (or at least much less constrained) to adopt what they think are appropriate analytics
  - ❖ May promote competition on quality

# Identifying the Problem

- ❖ Perhaps we can agree on what is *not* the problem
  - ❖ Are ratings too expensive?
    - ❖ No, that's not the problem
      - ❖ The argument is not that the CRAs are colluding to raise the price of obtaining a rating. It is also not being argued that the credit markets would benefit from lower rating prices.
  - ❖ And yet, many call for “more competitors” in the CRA market
    - ❖ “More competitors” leading to “more competition” is usually the solution to artificially inflated prices
    - ❖ More competition will almost surely lower the price per unit of quality, but there is no reason to think that it will lead to absolutely higher quality



# Identifying the Problem

- ❖ Does “Issuer Pays” present a conflict of interest, and is that the problem?
  - ❖ Yes, it presents a conflict of interest
    - ❖ But many institutions face conflicts of interest, and work (successfully) to manage those conflicts
    - ❖ Economic consultants and expert witnesses are paid by one side of the case, not the other. That is a “conflict of interest.” They manage it. Reputation is important in a repeated game
  - ❖ No, it is not (by itself) the problem
    - ❖ Issuer pays in corporate and municipal markets too
    - ❖ Average ratings have fallen, and rating accuracy has improved, since Moody’s (for example) switched to issuer pays in 1974
    - ❖ Smaller share of Aaa corporates today than 40 years ago

# Identifying the Problem

- ❖ Are ratings too important?
  - ❖ The CRAs have publicly argued in favor of reducing the regulatory use of ratings
  
- ❖ But what is the alternative to some kind of CRA?
  - ❖ How can I, as an investor, solve the principal-agent problem of constraining my portfolio manager?
    - ❖ Today I can say “invest only in investment-grade” instruments, as defined by someone other than my portfolio manager
  - ❖ How can I compare the “riskiness” of one bank’s portfolio against another?
    - ❖ Today I can compare the ratings of one portfolio against another
  - ❖ In the end, will I not require *some* third party to provide objective risk assessments of all types of credits, all on a broadly comparable scale?

# Identifying the Problem

- ❖ Or, are the ratings of the major CRAs just not good enough?
  - ❖ This is an argument about the *quality* of the product, and any policy proposal must explain how it will lead to better quality

# Quality of Ratings

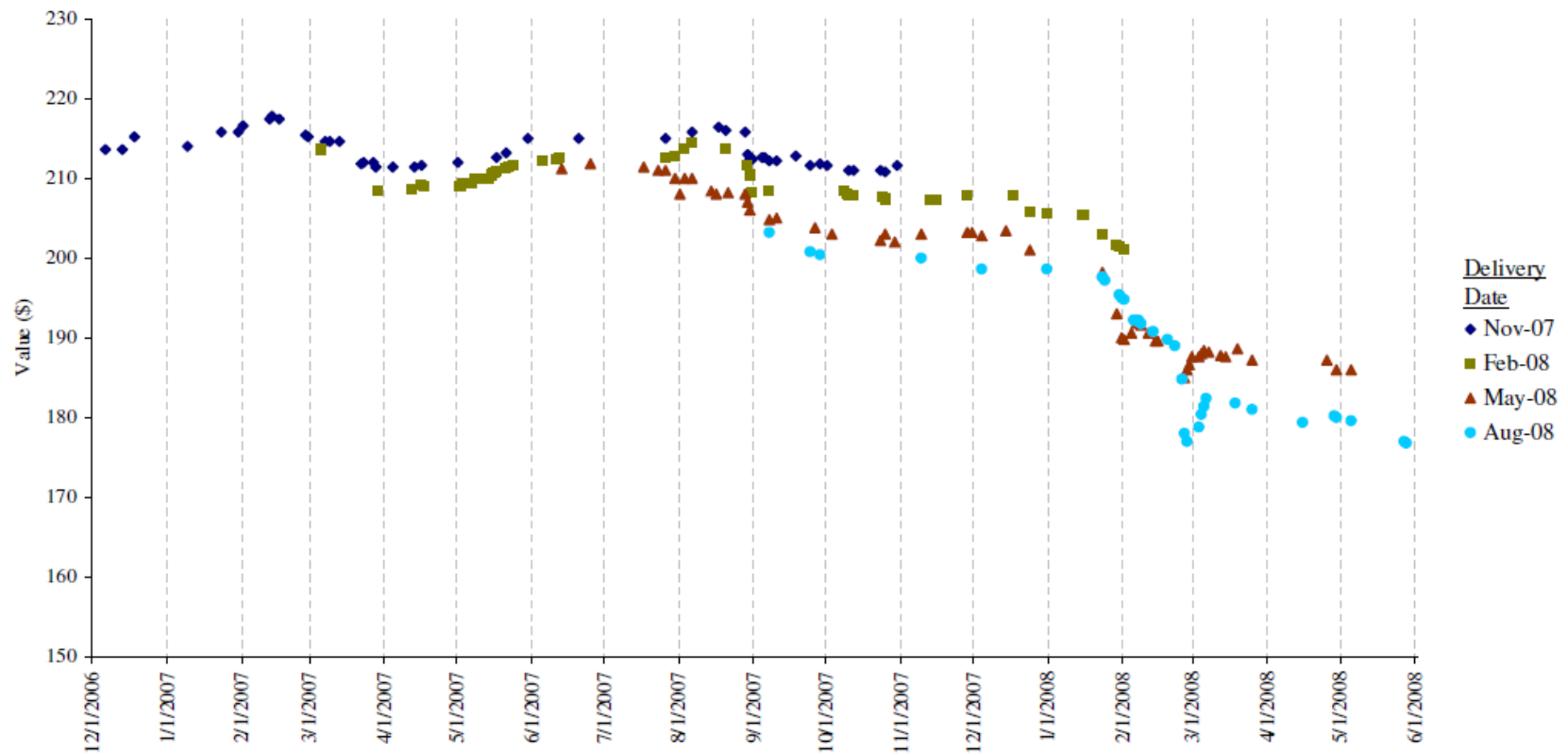
- ❖ It's easy to say after the fact that any individual rating was “wrong”
  - ❖ If the company defaults, and the rating wasn't C, then it was “too high”
  - ❖ If the company doesn't default and the rating wasn't AAA, then it was “too low”
  - ❖ It is unrealistic to expect perfect forecasting
  
- ❖ In the recent financial crisis, the problem with ratings was largely contained to Structured Finance (SF)
  - ❖ Corporate ratings performed within typical recessionary levels
  - ❖ Municipal ratings performed quite well, despite concerns for a time that they would be the “next subprime”

# Quality of Ratings

- ❖ And in SF, the problem was largely contained to US RMBS
  - ❖ The CRAs (along with everyone else?) underestimated the potential for catastrophic price declines in the US housing market

# Quality of Ratings

## Chicago Mercantile Exchange (CME) Case-Shiller Home Price Index Futures - Composite Index



# Quality of Ratings

- ❖ This impacted tens of thousands of primary RMBS ratings
- ❖ Impacted thousands of secondary SF CDO ratings (structures built on top of RMBS tranches)
- ❖ Impacted \$trillions of debt
- ❖ *But lots of mistakes, or one mistake?*

# Quality of Ratings

- ❖ Would anyone have believed a CRA which, in 2006, required credit enhancement sufficient to cover a 40% national house price decline?
- ❖ Would anyone have even heard that CRA's opinion?
- ❖ Unless all CRA's simultaneously agreed, issuers would have obtained a more favorable rating from any CRA that didn't share this opinion
- ❖ This very prescient hypothetical CRA would have effectively exited the RMBS market – *they would have never assigned any of these “correct” ratings!*
- ❖ *Example CMBS*



# Quality of Ratings

- ❖ Why would only SF ratings be “inflated?”
  - ❖ In the corporate or municipal market, if one issuer walks away from a CRA, it takes a handful of ratings with it
  - ❖ But in SF, one issuer can potentially take *thousands* of ratings with it
    - ❖ This is the very essence of monopsony power, and it is exclusively a SF phenomenon

# Quality of Ratings

- ❖ Isn't this because of issuer pays?
  - ❖ Probably we could not have rating shopping with investor pays
    - ❖ No single investor is large enough to have monopsony power
- ❖ Must have issuer pays combined with very few and very large issuers to have rating shopping

# Solving the Problem

- ❖ Monopsony power by few large investment banks which is unique to the SF market, can clearly put pressure on CRAs to compromise their analytics
  - ❖ At the very least, in those cases where a not-unreasonable-case can be made for a liberal rating interpretation, there would be pressure to adopt it
    - ❖ If you really think that 10% credit enhancement would warrant a AAA, and another CRA thinks that 9.9% is sufficient – how hard are you going to argue for that 0.1%?

# Solving the Problem

- ❖ Ask yourself these questions:
  - ❖ Are you willing to exit the entire market (because you will!) for 0.1%? You are *that* sure of yourself? Your models are just models, and all parameters are estimated with some error. Still sure?
  - ❖ How will you explain that 0.1% to your stockholders?
  - ❖ You will do this all for the *non-pecuniary* satisfaction of “being right?”
  - ❖ Keeping in mind that 9.9% enhancement is still a lot, is still very safe?
  - ❖ And it is unlikely that you will ever, ever be able to *prove* to anyone that you were right?
  
- ❖ *If you answer “yes,” good for you – but I ‘m not sure I would invest in your CRA!*

# Solving the Problem

- ❖ With rating shopping, it is hard to know whether or not CRAs hold different credit opinions
  - ❖ Only the most generous opinion will actually be heard
  - ❖ You may realize by omission that the absent CRA holds a more conservative opinion, but you won't know exactly what it is
- ❖ *Pressure for a unanimity of opinion, and at a more liberal, rather than more conservative, level*
- ❖ Only if a CRA will not risk losing an entire market by adopting a contrary, more conservative opinion will we see such diversity of analysis
  - ❖ Only if we solve the problem of rating shopping!

# Solving the Problem

- ❖ A proposal is to have a regulatory agency, perhaps the SEC, assign the first rater on any SF transaction
  - ❖ How would it choose?
    - ❖ Might choose randomly
- ❖ Who would pay for that rating?
  - ❖ If it's not a rating the issuer wants, then this is effectively a transaction cost to issuing the debt
  - ❖ Or, the SEC could pay on behalf of the “public interest”
- ❖ Would not restrict the issuer from obtaining (at its own expense) another rating opinion
- ❖ Market could observe differences of opinion, and there may be competition on the quality of the analysis

# Solving the Problem

- ❖ Other proposals seem to miss the essence of the problem
  - ❖ “More competitors” would exacerbate rating shopping
  - ❖ New CRA’s would be more willing to inflate ratings in an effort to increase market share
  
- ❖ Reducing the importance of ratings is not easy to do in practice, and may become less necessary if ratings were of better quality

# Concluding Remarks

- ❖ Financial benchmarks have become easy targets for abuse
  - ❖ Recognizing their weaknesses is key in order minimize the ability to manipulate these markets
  
- ❖ A reform of the credit ratings market may be needed, but a failure to appropriately diagnose the problems may lead to remedies that worsen rather than improve the problem
  
- ❖ In both financial benchmarks and credit ratings, authorities seemed to misdiagnose the weaknesses of the structures and especially their players' incentives, leading to undesirable outcomes



**Thank you very much!**

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Dr. Rosa M. Abrantes-Metz is a director in the antitrust, securities and financial regulation practices of Global Economics Group based in New York. Her experience includes work in consulting and banking, as well as in government. Her main areas of specialization are econometrics, monetary and financial economics, and applied industrial organization. Dr. Abrantes-Metz is an adjunct associate professor at Leonard N. Stern School of Business, New York University, where she has taught money and banking, financial institutions, and industrial economics, and currently teaches empirical business strategies. She has taught econometrics at the department of economics at the University of Chicago, and various other fields of economics at Universidade Católica Portuguesa, in Lisbon, Portugal. Dr. Abrantes-Metz's work has been featured in the press such as the Wall Street Journal, Financial Times, The Economist, CNNMoney, CNBC, Crain's, Forbes, Bloomberg, BusinessWeek, Washington Post, Reuters, Risk Magazine, Investor's Business Daily, SkyNews TV and BBC Radio.

After working as a staff economist at the Federal Trade Commission, Dr. Abrantes-Metz continued to serve as a consultant for special projects with the Commission's Bureau of Economics and she is also a consultant for the World Bank.

Dr. Abrantes-Metz is the author of several articles on econometric methods and screens, conspiracies and manipulations, gasoline, pharmaceuticals and health care, telecommunications, monetary policy, event studies, valuation, structured finance, credit default swaps, credit ratings and new statistical tests, representing some of the areas in which she has also worked as an economic consultant. Dr. Abrantes-Metz has published in various peer-reviewed journals and trade publications. She is a co-drafter of the chapter on the role of the economic expert in proving conspiracy cases under federal antitrust laws in a recent volume published by the American Bar Association. In addition she has contributed to other books on international arbitration with a focus on event studies, and is a co-author of the chapter on corporate governance and compliance forthcoming in the next Handbook on Antitrust Economics. She has developed numerous empirical screens for conspiracies and manipulations, and is a pioneer in the field, contributing to the further development and increased adoption of these methods. She has flagged potential anticompetitive behavior preceding large scale investigations, such on the alleged Libor conspiracy and manipulation, and has also used these methods to defend against allegations of such behavior. Her screens are used by competition authorities, defendants and plaintiffs worldwide.