The Credit Rating Agencies: How Did We Get Here? Where Should We Go?

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Overview

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- What do they do?
- How did they get to be so important?
- What about the "issuer pays" model? What went wrong in rating sub-prime mortgage securities?
- What about tardiness in changing ratings?
- What about accuracy/negligence issues?
- Are there alternatives to rating agencies?
- Who uses ratings?
- The way forward
- Conclusion

The dilemma/contradiction (1)

"...an insured state savings association...may not acquire or retain any corporate debt securities not of investment grade."

12 Code of Federal Regulations § 362.11

Note: "Investment grade" is a characterization by a credit rating agency that applies to a set of credit ratings; e.g., for Standard & Poor's, "investment grade" applies to any security that is rated BBB- or better

The dilemma/contradiction (2)

" ...any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision."

> The usual disclaimer that is printed at the bottom of Standard & Poor's credit ratings (there is similar language at the bottom of Moody's and Fitch ratings)

The dilemma/contradiction (3)

"... the world's shortest editorials..."

The characterization of bond ratings by Gregory Husisian, <u>Cornell</u> <u>Law Review</u>, January 1990

The dilemma/contradiction (4)

"Asked whether the payment of fees [by issuers] might create a conflict of interest, Brenton W. Harries, S&P vice president, said not."

> Richard E. Mooney, "Bond Rating Fees to Be Introduced; Standard & Poor's Is Ending Free Listing of Municipals," <u>New York Times</u>, January 24, 1968, p. 57

The dilemma/contradiction (5)

"There are two superpowers in the world today in my opinion. There's the United States, and there's Moody's Bond Rating Service. The United States can destroy you by dropping bombs, and Moody's can destroy you by downgrading your bonds. And believe me, it's not clear sometimes who's more powerful."

> Thomas L. Friedman, PBS "News Hour," February 13, 1996

What do they do?

- A central question of finance: What is the likelihood that I will be repaid?
- Lenders (including bond investors) want information about prospective borrowers, and also about existing borrowers
- Rating agencies are <u>one potential source</u> of information about borrowers (corporations, governments, securitizers of mortgages)

They offer judgments about default probabilities

• They are <u>not</u> the only potential source of information

How did they get to be so important? (1)

- In 1909 John Moody published the first publicly available ratings
- Subsequent entry into the rating business: Poor's (1916); Standard (1922); Fitch (1924)
- The business model was "investor pays"
- The use of ratings was voluntary

How did they get to be so important? (2)

- In 1936 U.S. regulators prohibited banks from investing in below-investment-grade bonds
 - As determined by "recognized rating manuals"
 - Safety judgments were outsourced to 3rd parties

– These ratings now had the force of law!

- Other U.S. financial regulators followed with similar mandates to heed these ratings
 - Insurance companies, pension funds, broker-dealers, money market mutual funds, GSEs

 Consequently, even unregulated bond market participants would want to pay attention to these ratings

• Other countries have similar mandates

How did they get to be so important? (3)

- In 1975 the SEC created the NRSRO category, which crystallized the regulatory outsourcing
 - Moody's, S&P, and Fitch automatically become NRSROs
- The SEC subsequently became an opaque barrier to entry
 - Only 4 new NRSROs designated in the next 25 years
 - Few people knew about the NRSRO system and its barriers
 - Mergers among the entrants and with Fitch
- As of December 2000, the only NRSROs were Moody's, S&P, and Fitch
 - Subsequent Congressional pressures: 9 NRSROs today

What about the "issuer pays" business model?

- The original business model was "investor pays"
- In the late 1960s and early 1970s the industry switched from "investor pays" to "issuer pays"
 - Fears of the photocopy machine
- The "issuer pays" business model has an obvious potential conflict
- The "issuer pays" business model was largely <u>not</u> a problem until the 2000s

Why didn't the "issuer pays" model blow up during 1970-1999?

- The rating agencies did care about their long-run reputations
- There were thousands of corporate and government issuers
 - The threat of an unhappy issuer to take its business elsewhere wasn't potent
- The issuers were relatively transparent, and the bonds were "plain vanilla"
 - Rating errors (accidental, or otherwise) would be easy to spot by other analysts, which reinforced the agencies' concerns about their reputation and strengthened their resistance to threats

What went wrong in rating sub-prime mortgage securities?

- Issuers of RMBS were much fewer, and the profit margins on RMBS were much bigger
 - An issuer's threat to take its (present and future) business elsewhere was potent
- The RMBS securities were more complex, more opaque
 - Rating errors (accidental, or otherwise) were harder to detect – at least in the short run
- The rating agencies, like everyone else, came to believe "housing prices can only go up"

– Reduced attention to risk in financial markets generally

Concerns of long-run reputation were overwhelmed

What about tardiness in changing ratings?

- The rating agencies have always been slow in adjusting ratings
- They were slow even during the "investor pays" era
 - They always lag the markets
 - Investors prefer stable ratings (but also want accuracy)
- Tardiness is not about the "issuer pays" model

Do the rating agencies meet a market test?

- Do they provide significant information about default probabilities to the financial markets?
 - Strong correlations between ratings and default probabilities
 - Maybe the ratings just follow market spreads?
 - When ratings change, markets move
 - Maybe the rating change just indicates a change in the regulatory status of the bond?
 - It's hard to find conclusive evidence

What about accuracy/negligence issues?

- Are ratings just opinions?
 - Should the rating agencies be covered by the First Amendment?
 - Are the rating agencies (sort of) like the Wall Street Journal?
- Will expanded liability (e.g., in Dodd-Frank) cause the rating agencies to be more careful?
- Will expanded liability cause the rating agencies to be more cautious?
 - "We think...that this financial instrument...is...a bond!"

Are there alternatives to the "Big 3" rating agencies?

- Smaller NRSROs
- Smaller creditworthiness advisory services
- Research analysts in bond mutual funds, hedge funds
- Fixed income analysts in securities firms

http://www.fiasi.org/

Fixed Income Analysts Society, Inc.

http://www.fiasi.org/fixed-incomehall-of-fame

"In 1995, the Fixed Income Analysts Society established a Hall of Fame to recognize the lifetime achievements of outstanding practitioners in the advancement of the analysis of fixed-income securities and portfolios. Inductees will have made major contributions to the advancement of fixedincome analysis and portfolio management. These contributions may be academic, business-related or FIASI-related. The Board of Directors determines the annual inductees.

Who uses ratings?

• The bond markets are primarily institutional markets

- This is generally not a retail market

- Modest exception: ¹/₃ of U.S. municipal bonds are held by households in the U.S.
- It was financial institutions, not retail customers, who suffered the losses on the mis-rated mortgage securities
- The "bond investor" is a professional bond manager for a financial institution
 - Banks, insurance companies, pension funds, securities firms, mutual funds, hedge funds, etc.

The way forward (1)

More regulation of credit rating agencies; "fix the agencies"

- Reduce the conflicts, increase transparency
- Change the business model?
- The potential pitfalls of this route
 - Do the regulated entities thereby attain special status?
 - Reduced flexibility, innovation, and entry in the bond information market
 - The large incumbents would likely become <u>more</u> important!
 - Will "more and better" regulation really work?

The way forward (2)

- Reduce regulatory reliance on ratings
 - Financial regulators should cease outsourcing safety judgments
 - Ratings would no longer have the force of law!
 - The goal of safe bond portfolios (for banks, insurance companies, etc.) should remain
- Professional bond managers should generally be allowed to choose their sources of information
 - Regulated financial institutions should directly bear the burden of justifying their bond investment decisions (and choice of information/advisor) to their regulators

• The bond information market would truly be opened to new entry, new ideas, etc.

Conclusion

• Increased regulation of the credit rating agencies is not the only possible way forward

- There are clear pitfalls
- Reduced regulatory reliance on ratings is a preferable route
 - New entry, new ideas, new methodologies, etc.
 - Let institutional bond managers decide on their sources of creditworthiness information
 - The regulatory goal of safe bonds in the portfolios of banks, insurance companies, pension funds, etc., should remain, and can be feasibly attained
- The efficiency of the debt markets is at stake

Credit Rating Agencies: Understanding the Problem to Find a Solution

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- 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

In this presentation I will argue that the problem is "rating shopping"

- Monopsony power in the structured finance (SF) market 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

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?

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 <u>on quality</u>

Perhaps we can agree on what is *not* the problem

- Are ratings too expensive?
 - \rightarrow 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

- Does "Issuer Pays" present a conflict of interest, and is that the problem?
 - \rightarrow 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.
 - \rightarrow 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 1970
 - \rightarrow Fewer Aaa corporates today than 40 years ago

Are ratings too important?

→ The CRAs have publicly argued in favor of reducing the regulatory use of ratings

 \rightarrow 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?
 - \rightarrow 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?

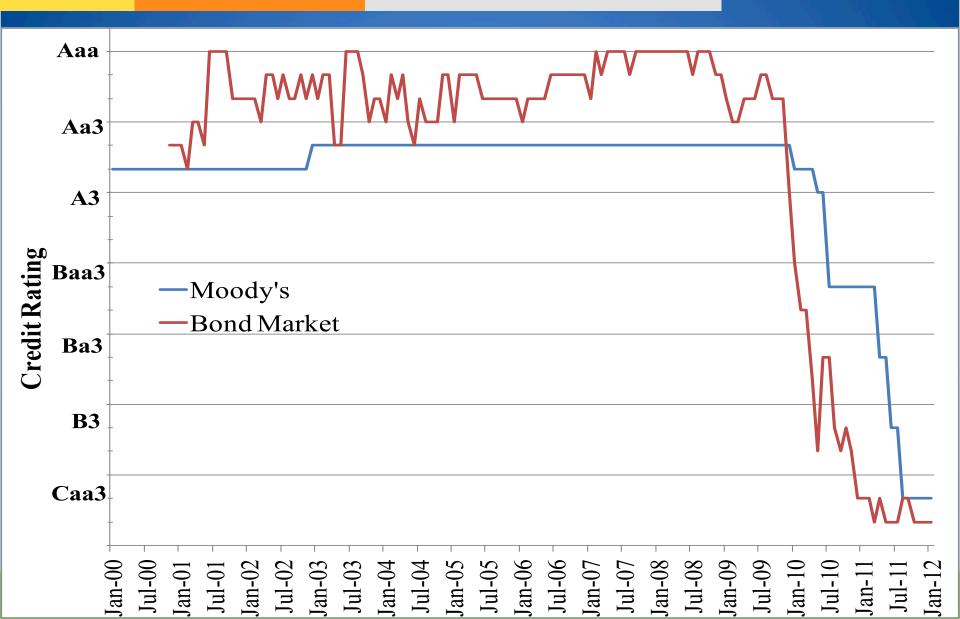
- Or, are the ratings of the major CRAs just not good enough?
 - → This is an argument about the *quality* of the product, and any policy proposal must explain how it will lead to better quality

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.

Two Opinions of Greece



Two Opinions of Enron



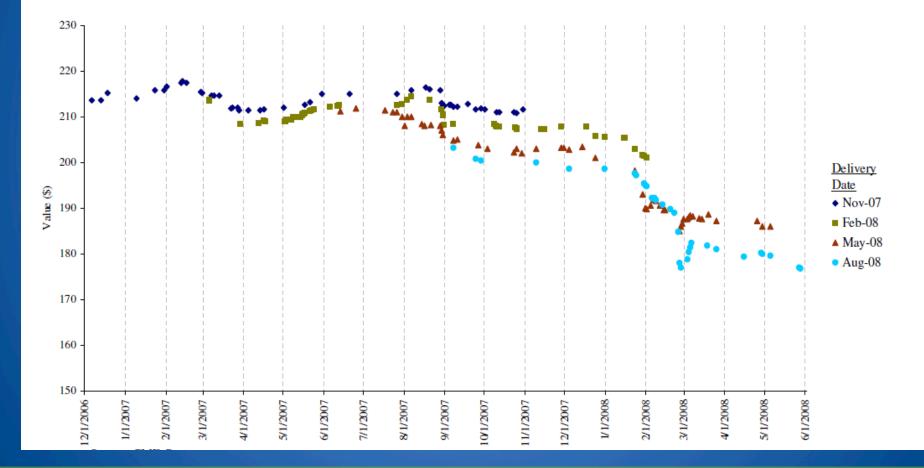
In the recent financial crisis, the problem with ratings was largely contained to SF

- Corporate ratings performed within typical recessionary levels
- Municipal ratings performed quite well, despite concerns for a time that they would be the "next subprime"

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

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



- 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?

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

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 <u>thousands</u> of ratings with it
 - → This is the very essence of monopsony power, and it is exclusively a SF phenomenon

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

Monopsony power, 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 notunreasonable-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%?

Ask yourself these questions:

- → Are you willing to exit the entire market (because you will!) for 0.1%? You are <u>that</u> sure of yourself? Your models are just models, and all parameters are estimated with some error. Still sure?
- \rightarrow How will you explain that 0.1% to your stockholders?
- → You will do this all for the <u>non-pecuniary</u> 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 wiould invest in your CRA!

With rating shopping, it is hard to know whether or not CRAs hold different credit opinions

- \rightarrow 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

 \rightarrow Only if we solve the problem of rating shopping!

One proposal is to have a regulatory agency, perhaps the SEC, assign the first rater on any SF transaction

- \rightarrow How would it choose?
 - → Might choose randomly
- \rightarrow 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 <u>competition on the quality of the analysis</u>

Other proposals seem to miss the essence of the problem

- \rightarrow "More competitors" would exacerbate rating shopping
- → Reducing the importance of ratings is not easy to do in practice, and may become less necessary if ratings were of better quality

Thank you!