

Credit Quality and the New Dynamics of Credit Ratings

California Debt and Investment Advisory Commission
Municipal Debt Essentials

Kellogg Center West
Pomona, California
March 14, 2012

Speakers

- ◆ Angela M. Kukoda
Senior Vice President
First Southwest

- ◆ Nikolai J. Sklaroff
Director, Public Finance Investment Banker
Wells Fargo Securities

This Session

- Focused on ratings and what they mean in the marketplace from a practitioner perspective
- How do ratings impact you as a borrower?
- How do you manage the rating relationship?
- What changes are we seeing in the market?
- Interactive dialogue

Overview

Nikolai J. Sklaroff

The Rating Agencies

- Independent firms - so each is different
 - Different definitions of what a rating is
 - Different criteria; are opinions not formulas
- Moody's indicates there are \$80 trillion of rated bonds and other fixed-income securities and "dozens" of rating agencies around the world

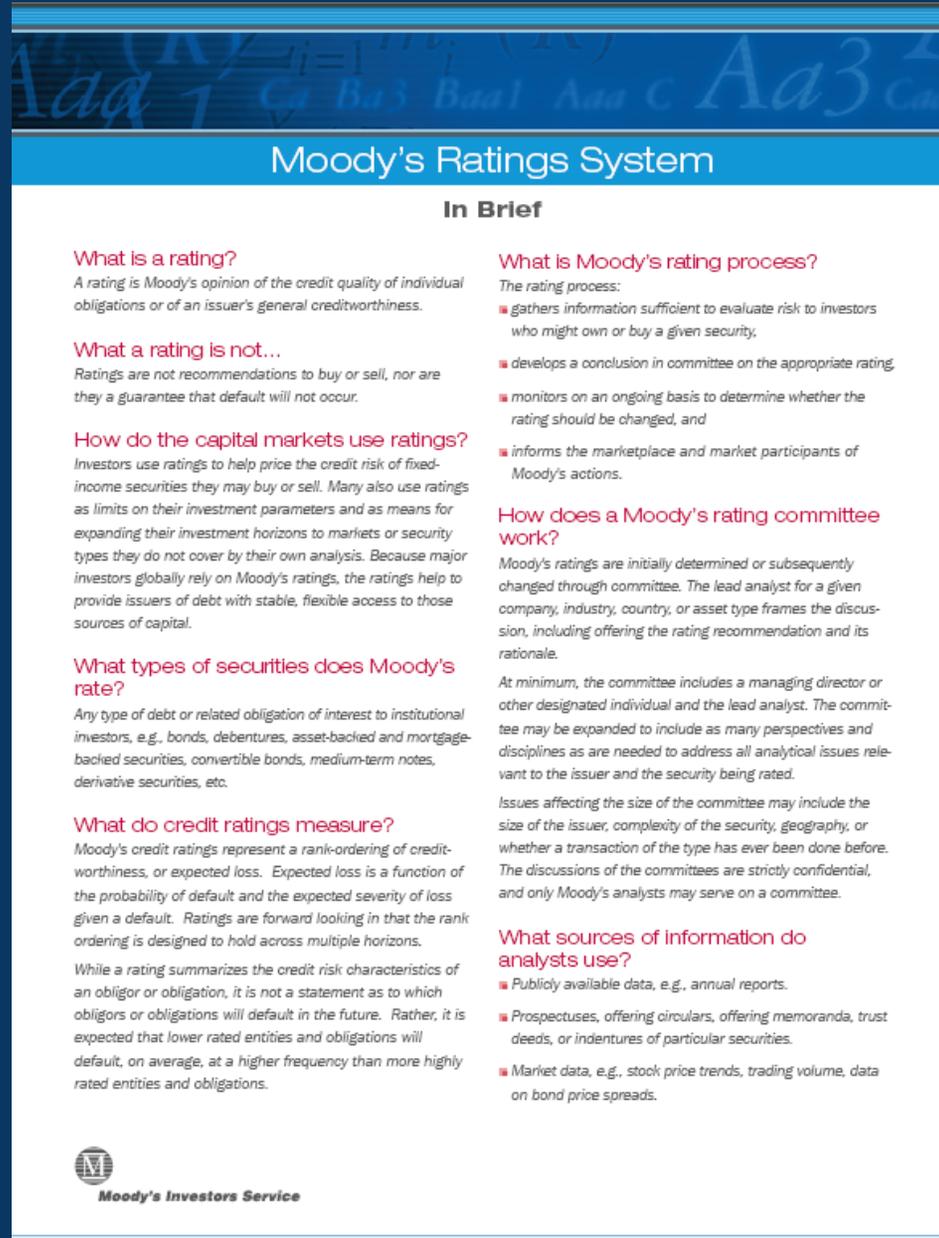
Regulatory Definitions

- Credit Rating Agency Reform Act in 2006
- Provided the SEC with authority to:
 - Impose registration, recordkeeping, and reporting rules on credit rating agencies registered as Nationally Recognized Statistical Rating Organizations (NRSRO).
 - Currently 11 credit rating agencies are registered with the Commission as NRSROs.
- Principally focused on three here in U.S. public finance: Moody's Investors Service, Standard & Poor's and Fitch Ratings

Who are all the NRSROs?

■ Nationally Recognized Statistical Rating Organizations - SEC Orders Granting NRSRO Registration

- Egan-Jones Rating Company (Release No. 34-59056)
- Realpoint LLC (Release No. 34-58000)
- LACE Financial Corp. (Release No. 34-57300)
- A.M. Best Company, Inc. (Release No. 34-56507)
- DBRS Ltd. (Release No. 34-56508)
- Egan-Jones Rating Company (Release No. 34-57031)
- Fitch, Inc. (Release No. 34-56509)
- Japan Credit Rating Agency, Ltd. (Release No. 34-56510)
- Moody's Investors Service, Inc. (Release No. 34-56511)
- Rating and Investment Information, Inc. (Release No. 34-56512)
- Standard & Poor's Ratings Services (Release No. 34-56513)



The infographic features a blue header with the title "Moody's Ratings System" and a sub-header "In Brief". The background of the header shows various credit ratings like Aaa, Baa3, Baal, Aaa, C, Aa3, and Caa. The main content is organized into two columns. The left column contains five sections: "What is a rating?", "What a rating is not...", "How do the capital markets use ratings?", "What types of securities does Moody's rate?", and "What do credit ratings measure?". The right column contains three sections: "What is Moody's rating process?", "How does a Moody's rating committee work?", and "What sources of information do analysts use?". Each section includes a brief definition or description, and the process section includes a bulleted list of steps. At the bottom left of the infographic is the Moody's Investors Service logo.

Moody's Ratings System

In Brief

What is a rating?
A rating is Moody's opinion of the credit quality of individual obligations or of an issuer's general creditworthiness.

What a rating is not...
Ratings are not recommendations to buy or sell, nor are they a guarantee that default will not occur.

How do the capital markets use ratings?
Investors use ratings to help price the credit risk of fixed-income securities they may buy or sell. Many also use ratings as limits on their investment parameters and as means for expanding their investment horizons to markets or security types they do not cover by their own analysis. Because major investors globally rely on Moody's ratings, the ratings help to provide issuers of debt with stable, flexible access to those sources of capital.

What types of securities does Moody's rate?
Any type of debt or related obligation of interest to institutional investors, e.g., bonds, debentures, asset-backed and mortgage-backed securities, convertible bonds, medium-term notes, derivative securities, etc.

What do credit ratings measure?
Moody's credit ratings represent a rank-ordering of creditworthiness, or expected loss. Expected loss is a function of the probability of default and the expected severity of loss given a default. Ratings are forward looking in that the rank ordering is designed to hold across multiple horizons. While a rating summarizes the credit risk characteristics of an obligor or obligation, it is not a statement as to which obligors or obligations will default in the future. Rather, it is expected that lower rated entities and obligations will default, on average, at a higher frequency than more highly rated entities and obligations.

What is Moody's rating process?
The rating process:

- gathers information sufficient to evaluate risk to investors who might own or buy a given security,
- develops a conclusion in committee on the appropriate rating,
- monitors on an ongoing basis to determine whether the rating should be changed, and
- informs the marketplace and market participants of Moody's actions.

How does a Moody's rating committee work?
Moody's ratings are initially determined or subsequently changed through committee. The lead analyst for a given company, industry, country, or asset type frames the discussion, including offering the rating recommendation and its rationale. At minimum, the committee includes a managing director or other designated individual and the lead analyst. The committee may be expanded to include as many perspectives and disciplines as are needed to address all analytical issues relevant to the issuer and the security being rated. Issues affecting the size of the committee may include the size of the issuer, complexity of the security, geography, or whether a transaction of the type has ever been done before. The discussions of the committees are strictly confidential, and only Moody's analysts may serve on a committee.

What sources of information do analysts use?

- Publicly available data, e.g., annual reports.
- Prospectuses, offering circulars, offering memoranda, trust deeds, or indentures of particular securities.
- Market data, e.g., stock price trends, trading volume, data on bond price spreads.



www.moody's.com

The screenshot shows the Standard & Poor's website interface. At the top, there is a navigation bar with the Standard & Poor's logo, the text "United States | Change", and links for "Register | Log In" and a search box. Below the navigation bar are four main menu items: "MY HOMEPAGE", "PRODUCTS & SERVICES" (which is highlighted), "RESEARCH & KNOWLEDGE", and "ABOUT S&P".

The main content area is titled "Ratings". On the left side, there is a sidebar menu with "Ratings Home" selected, followed by a list of links: "About Us", "About Credit Ratings", "News & Commentary", "Credit Ratings Actions", "Criteria, Policies, Definitions & Requests for Comment", "Find a Rating", "Form NRSRO", "Ratings Services Code of Conduct", "Default & Transition Studies", and "Ratings History Samples". Below this list are several category links: "Bond Insurance", "Corporates", "Financial Institutions", "Insurance", "Fund Ratings", "Public Finance", "Sovereigns", "Structured Finance", "School Evaluation Services", and "Tools, Software & Data".

The main content area is titled "About Credit Ratings". It contains a paragraph: "We created an **online interactive guide** to help explain what credit ratings are, and are not, who uses them, and how they may be useful to the capital markets. Credit ratings are one of several tools that investors can use when making decisions about purchasing bonds and other fixed income investments." Below this paragraph is a link: "> Launch Interactive Guide To Credit Ratings".

Below the main text is a section titled "Additional Information" with a list of links: "Understanding Standard & Poor's Rating Definitions", "Toward a Global Regulatory Framework for Credit Ratings", "Standard & Poor's Ratings Definitions", and "U.S. Corporate Default Outlook for 2009 Webcast". At the bottom of this section, there is a note: "Adobe Reader® required | download at Adobe.com".

At the very bottom of the page, there is a footer with links: "Regulatory Affairs | Terms of Use | Privacy Notice | Site Map | Contact Us | Help" and a copyright notice: "Copyright (c) 2009 by Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc. All rights reserved."

www.standardandpoors.com

Fitch Ratings
KNOW YOUR RISK

Sectors Market Focus Tools Surveillance Fitch Solutions Fitch Training

Code of Conduct
Ratings Definitions
Criteria
Default & Transition Studies
Regulatory Affairs & News
Ratings Desk

In the Spotlight

Get comprehensive coverage on the State of the Capital Markets

New Integrated Data Service offers customized data sets delivered as a single feed

Gain greater transparency with Fitch RMBS Loss Metrics

Assess and evaluate residential mortgage loans with ResiEMEA

Compare your CMBS deals to industry averages with U.S. CMBS VintageView

CDS Liquidity Scores: a measure of liquidity risk for the CDS market

Predictive Research Ratings
forward looking

Current Feature

Fitch Solutions: Major Global CDS Liquidity Shift

Though CDS liquidity is back to levels prior to the Lehman bankruptcy, two major structural shifts distinguish the current levels, according to Fitch Solutions in its latest Global Liquidity Scores Commentary. The percentage of names with liquidity scores below 7.5 (or most liquid names) has dropped significantly from 12.6% to only 5.1% as of Oct.30. The other crucial difference is that the semi-liquid section of the market has become much more liquid.

[VIEW REPORT »](#)

Featured Articles

- ▶ Fitch Places Berkshire Hathaway on Rating Watch Negative ...
- ▶ Fitch Webcast: High Recoveries Still Possible For Low Rated U.S. RMBS; 11/12 @ 10AM ET...
- ▶ Fitch: Operating Environment for Europe's Airlines to Remain Tough...
- ▶ **Most-Viewed Reports...**

Latest Headlines

[GLOBAL](#) [ASIA](#) [EUROPE](#) [U.S.](#) [RSS](#)

- 05 Nov 2009
▶ Fitch Downgrades 3 Tranches of FTPYME TDA Sabadell 1 & 2; Affirms Others...
- 05 Nov 2009
▶ Fitch Rates Lake Arrowhead CSD, California's \$24MM COPs 'AA-'; Outlook Stable...
- 05 Nov 2009
▶ Fitch Places Berkshire Hathaway on Rating Watch Negative ...
- 05 Nov 2009
▶ Fitch Rates Long Beach Airport, California's Sr Lien 'A-'; Outlook Stable...

▶ [View All Headlines...](#)

About Fitch Ratings

Fitch Ratings is a leading global rating agency committed to providing the world's credit markets with independent, timely and prospective credit opinions. Built on a foundation of organic growth and strategic acquisitions, Fitch Ratings has grown rapidly during the past decade gaining market presence throughout the world and across all fixed income markets.

www.fitchratings.com

More Competition for Rating Agencies?

- New sources of credit information:
 - *Financial Times*: “Kroll aims to bring investigative powers to credit rating industry” ⁽¹⁾
 - *Financial Times*: “Analyst [Oppenheimer’s Meredith Whitney] to rival Moody’s and S&P with own rating agency” ⁽²⁾
 - *Bond Buyer*: “National Public Finance Offers Credit Reports” ⁽³⁾

(1) Masters, Brooke. “Kroll aims to bring investigative powers to credit ratings industry.” 10/19/09. *Financial Times*.

(2) Van Duyn, Aline. “Analyst to rival Moody’s and S&P with own rating agency.” 11/19/10. *Financial Times*.

(3) Seymour, Dan. “National Public Finance Offers Credit Reports.” 10/27/09. *The Bond Buyer*.

Rating Relationships in a Challenging Environment

Angela M. Kukoda

Review: How are US Municipal Borrowings Secured?

- The two principal types of municipal debt are distinguishable by their security characteristics:
 - General Obligation ("G.O.") Bonds
 - Backed by the full faith and credit of a state, local government, or non-profit institution
 - All sources of revenue, unless specifically limited, will be used to pay debt service on the bonds
 - Revenue Bonds
 - Issued to finance specific revenue-generated projects or utility systems
 - Secured solely by the revenues from the financed project or system

Review: Revenue Bonds

- Traditionally, revenue bonds have been secured by a first lien on net revenues. This means that debt service is paid out of net revenues – the funds that remain after the normal operating costs have been paid
- A gross lien bond, on the other hand, is one where debt service is paid directly from the gross revenues before the payment of operating expenses
- First-lien bonds are also called senior-lien bonds. Bonds that enjoy the same lien are said to be on parity with each other
- Subordinate-lien bonds, which are also called junior-lien bonds or second- or third-lien bonds, may be issued under a closed-end resolution, meaning that any new bonds must have a subordinate position
- Another reason to issue junior-lien bonds is that, over time, the credit quality of senior-lien bonds may have risen. The issuer may determine that the senior-lien credit is so strong that a well-structured junior-lien bond will be rated relatively close to the senior bonds

Review: Revenue Bonds

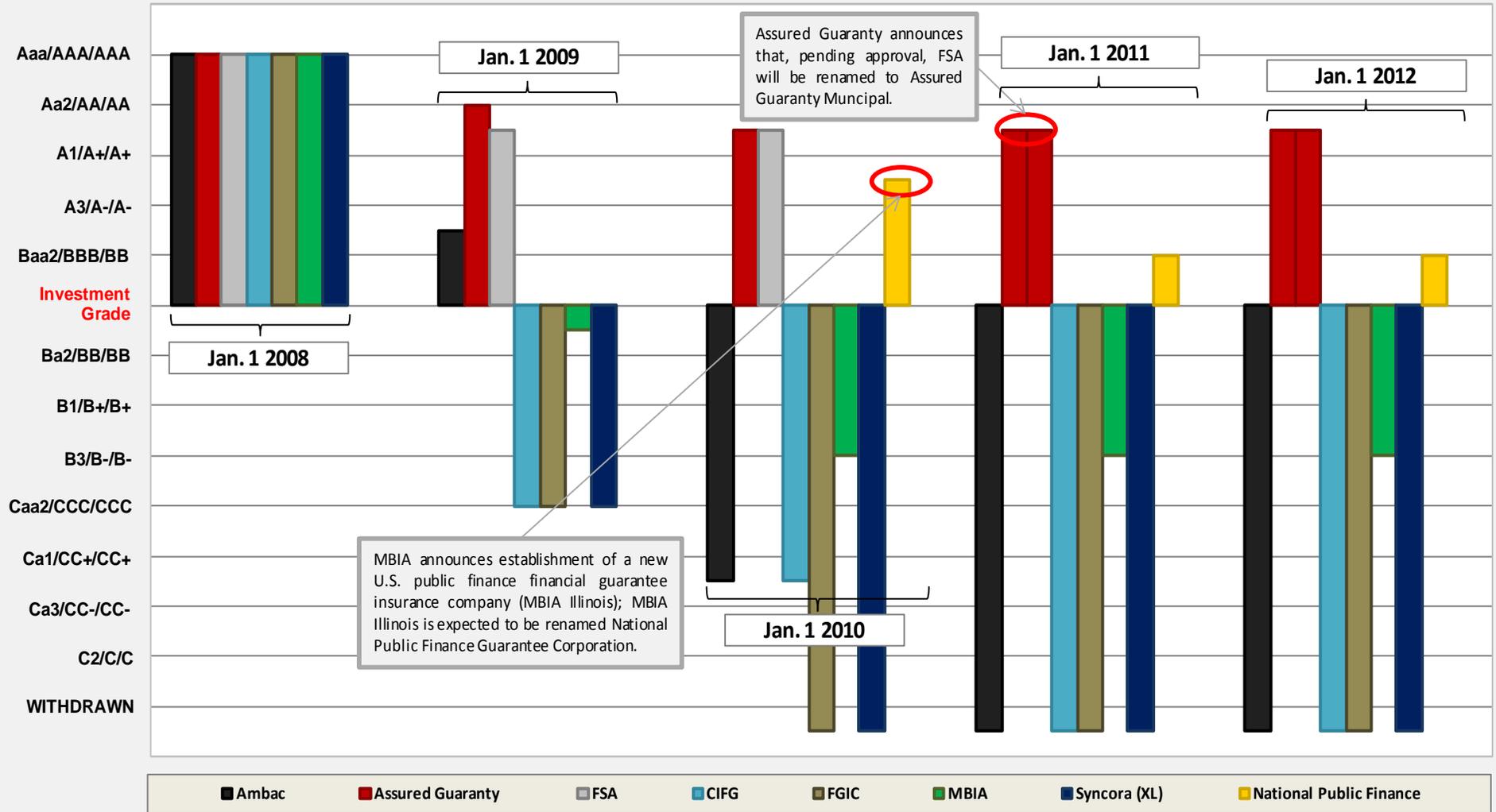
Examples of Revenue Debt Issued	Sources of Funds to Secure Revenue Debt
University and Hospital Facilities	Student tuition, room and board fees, endowments, patient revenue and state aid fees
Highways and Roads	Tolls, motor vehicle taxes and license fees, gasoline taxes
Affordable Housing	Rent payments, federal and state subsidies, equity interest in mortgages held by enterprise, non-housing rental revenues
Mass Transportation	Fare box, state sales taxes, facility or equipment lease rental payments, concession revenues
Airports	Landing fees, concession and/or rent revenues, passenger facilities charges
Municipal Projects	Municipal loan repayments, state aid intercepts, property tax increments, dedicated sales and other taxes
Water and Sewer Systems	Water and sewer rates and charges
Waste Disposal and/or Treatment Facilities	"Tipping" fees, sanitation collection charges, waste burning power sales revenues, recycled product sales revenues
Electric Utilities	Electric rates and charges, "take or pay" contract revenues

The Importance of Bond Ratings

- More important to investors since September 2008 financial meltdown
 - Lack of viable credit enhancement
 - No more active “Triple-A” insurers
 - Investor skittishness about municipals
 - Media speculation about possible spike in municipal defaults
- Rating agencies under increased pressure to conduct frequent rating reviews
 - All three major rating agencies—Moody’s Investors Service, Standard & Poor’s Corporation, and Fitch Ratings—moving toward annual surveillance cycles
- Maintaining a continuous dialog with the rating agencies is essential
 - *Rating changes can and often do occur in the interim of bond sales*
 - Even if there are no imminent plans to issue debt, rating actions taken today can have a significant impact on future borrowing costs

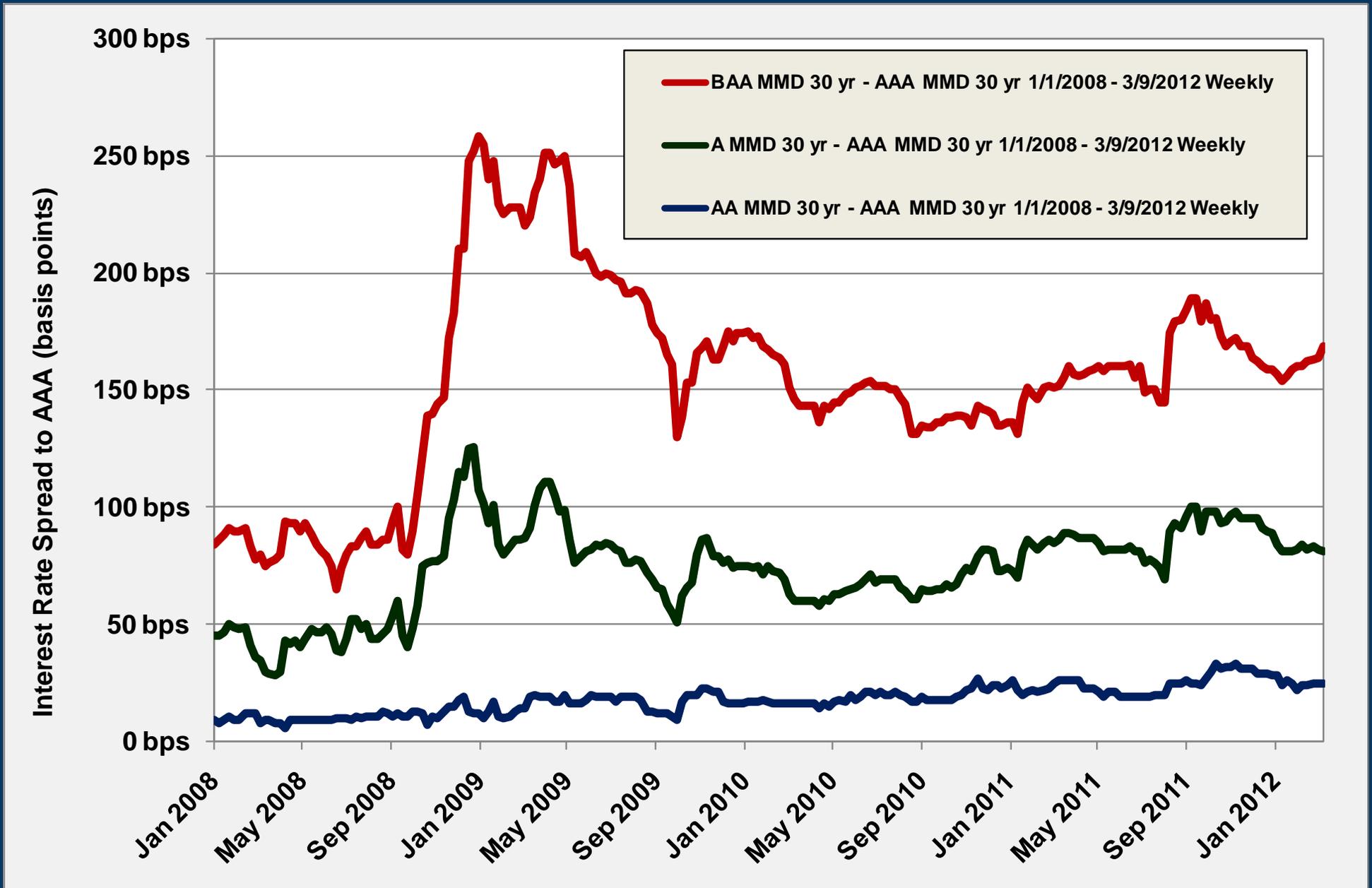
Bond Insurer Ratings In a Free Fall

History of Monoline Bond Insurer Credit Ratings



Source: Moody's Investor Service, Standard & Poor's Corporation, Fitch Ratings
 Data reflective of lowest rating among the rating agencies at each point in time

Historical Credit Spreads as of March 9, 2012



Credit Spreads Are Much Wider

- Concurrent with the September 2008 financial crisis, credit spreads exploded
- The MMD tracks credit spreads for G.O. issues
 - Credit spreads are slightly wider for essential service water and sewer bonds
 - Even wider for certificates of participation and lease revenue bonds
 - Wider still for airport and other transportation bonds
- Split ratings bond ratings are problematic for issuers
 - Split occurs when rating agencies rate an issuer's bonds in different categories
 - In a "buyer's market," such as today's, bonds tend to price closer to the lower rating
- Even within rating categories, there are credit differentials
 - For example, an "A+" rated bond would price at a lower yield than an "A" rated bond

Outlooks Are Important Too

RE: \$165,090,000
CITY OF SAN ANTONIO, TEXAS
(A political subdivision of the State of Texas located primarily in Bexar County)
WATER SYSTEM REVENUE REFUNDING BONDS,
SERIES 2011A

WE HAVE A RECEIVED THE WRITTEN AWARD. TRADE TIME SET FOR 2:00PM EDT.

MOODY'S: Aa1 (Stable) S&P: AA (Stable) FITCH: AA+ (Stable)

DATED:08/15/2011 FIRST COUPON:05/15/2012 INTEREST ACCRUES:10/06/2011

DUE: 05/15

MATURITY	AMOUNT	COUPON	PRICE	ADD'L TAKEDOWN (Pts)
05/15/2012	665M	2.00%	SEALED BID	
05/15/2013	5,400M	3.00%	0.38	1/4
			(Approx. \$ Price 104.196)	
05/15/2014	1,385M	2.00%	0.52	

■ Outlooks have also become more important to investors

- Municipal bonds are not viewed as commodities, especially with limited viable credit enhancement
- Any additional information available to help distinguish between investment choices is valuable

■ *Outlooks are now posted on pricing wires*

- A “positive” outlook can truly have a positive effect on pricing and a “negative” outlook, a negative effect

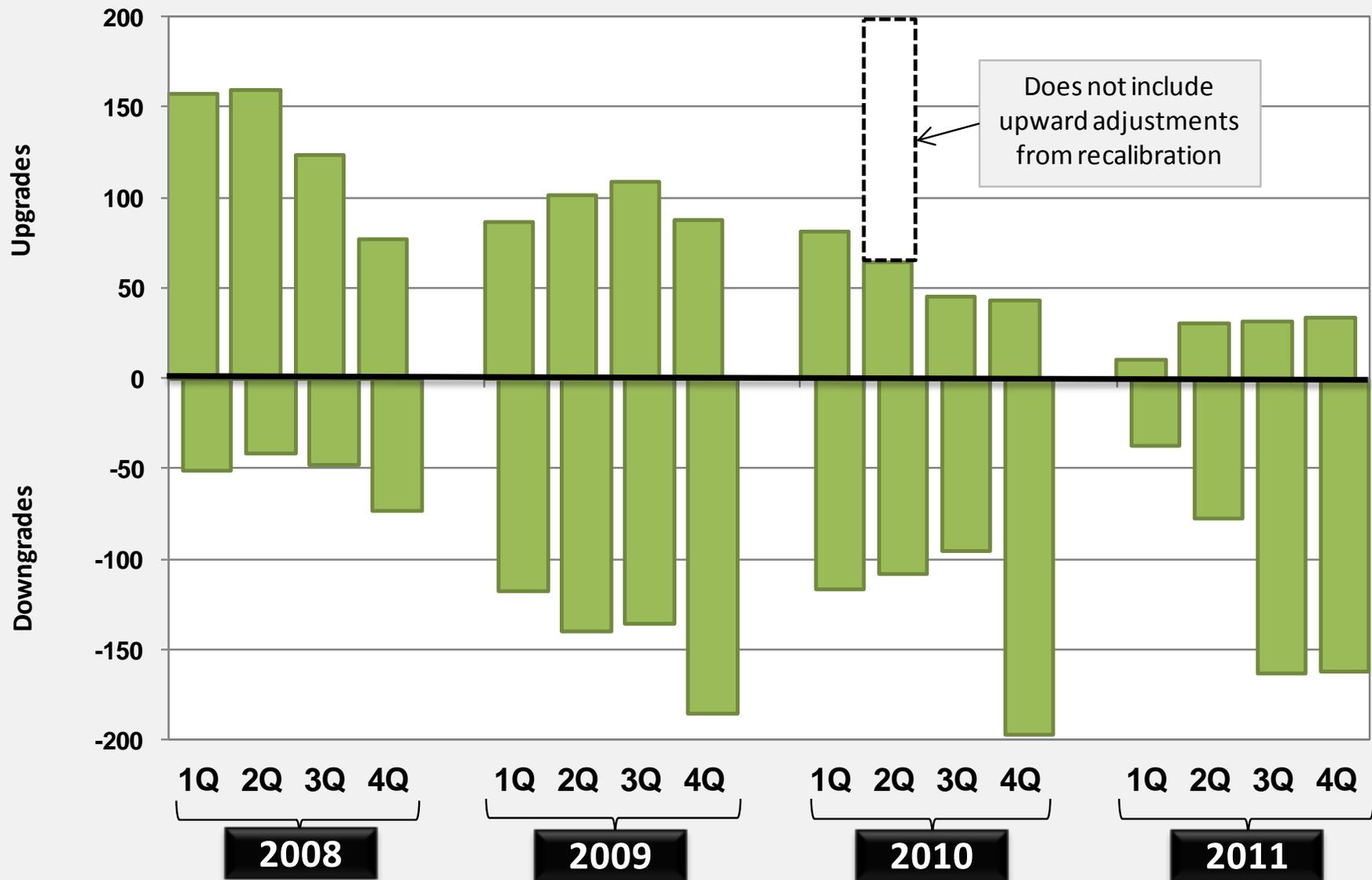
What Does It Mean In Dollars and Cents?

- Assuming a \$20 million bond issue repaid over 30 years, a municipality could expect the following additional cost associated with a negative change in outlook or downgrade of one notch

Debt Type	Rating (Outlook)	TIC	Change in TIC Between Categories	Avg. Annual D/S	Change in Avg. Annual D/S Between Categories	Total D/S	Change in Total D/S Between Categories
GO	A+ (Stable)	3.74%		\$1,119,776		\$33,593,281	
COPs	A (Stable)	4.09%	0.35%	\$1,169,431	\$49,655	\$35,082,917	\$1,489,636
COPs	A (Negative)	4.14%	0.05%	\$1,177,016	\$7,586	\$35,310,483	\$227,566
COPs	A- (Stable)	4.25%	0.11%	\$1,191,256	\$14,239	\$35,737,668	\$427,185

Rating Trends Through the Recession: Moody's

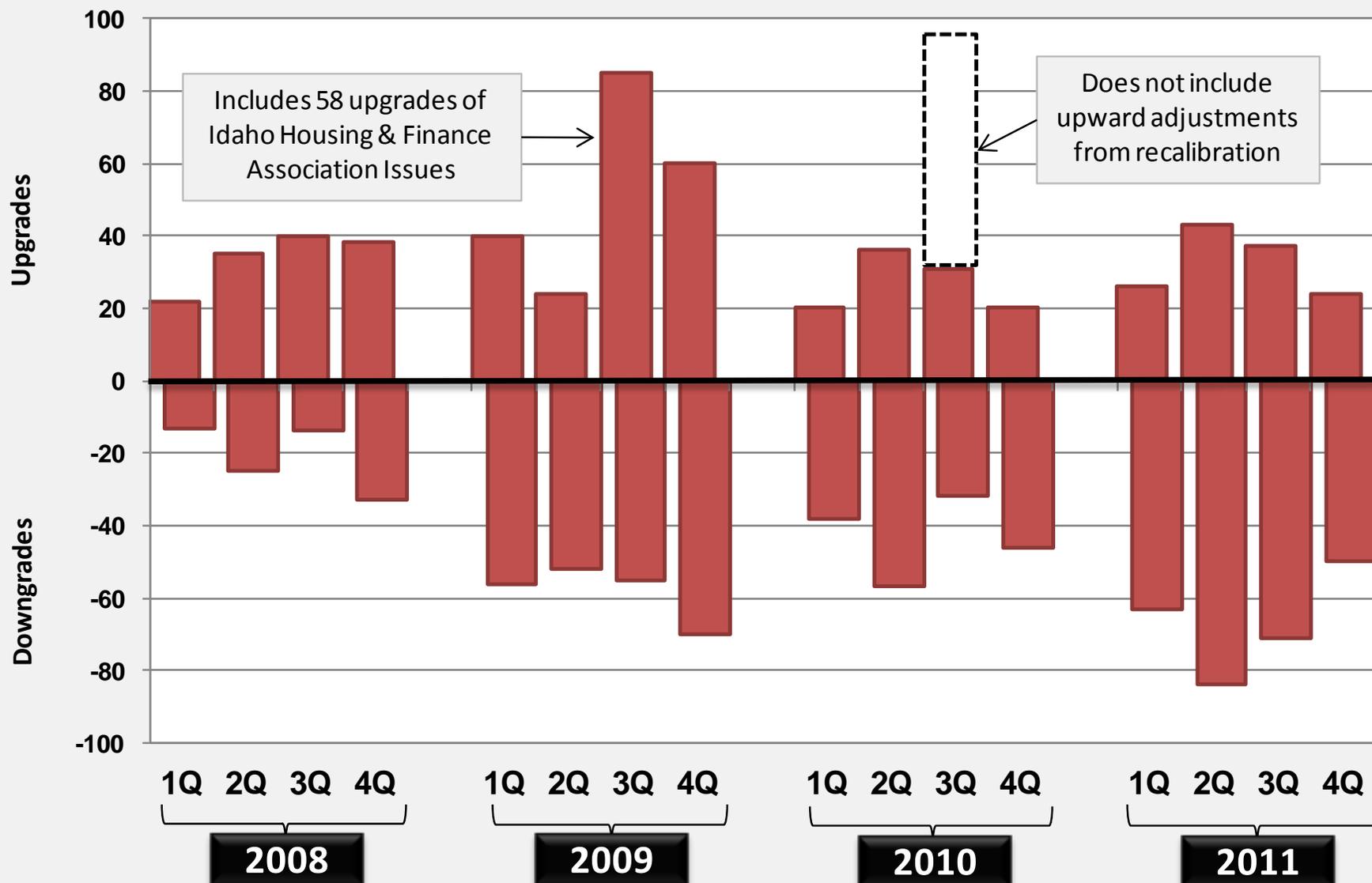
U.S. Public Finance Rating Changes by Number



Source: Moody's Investor Service

Rating Trends Through the Recession: Fitch

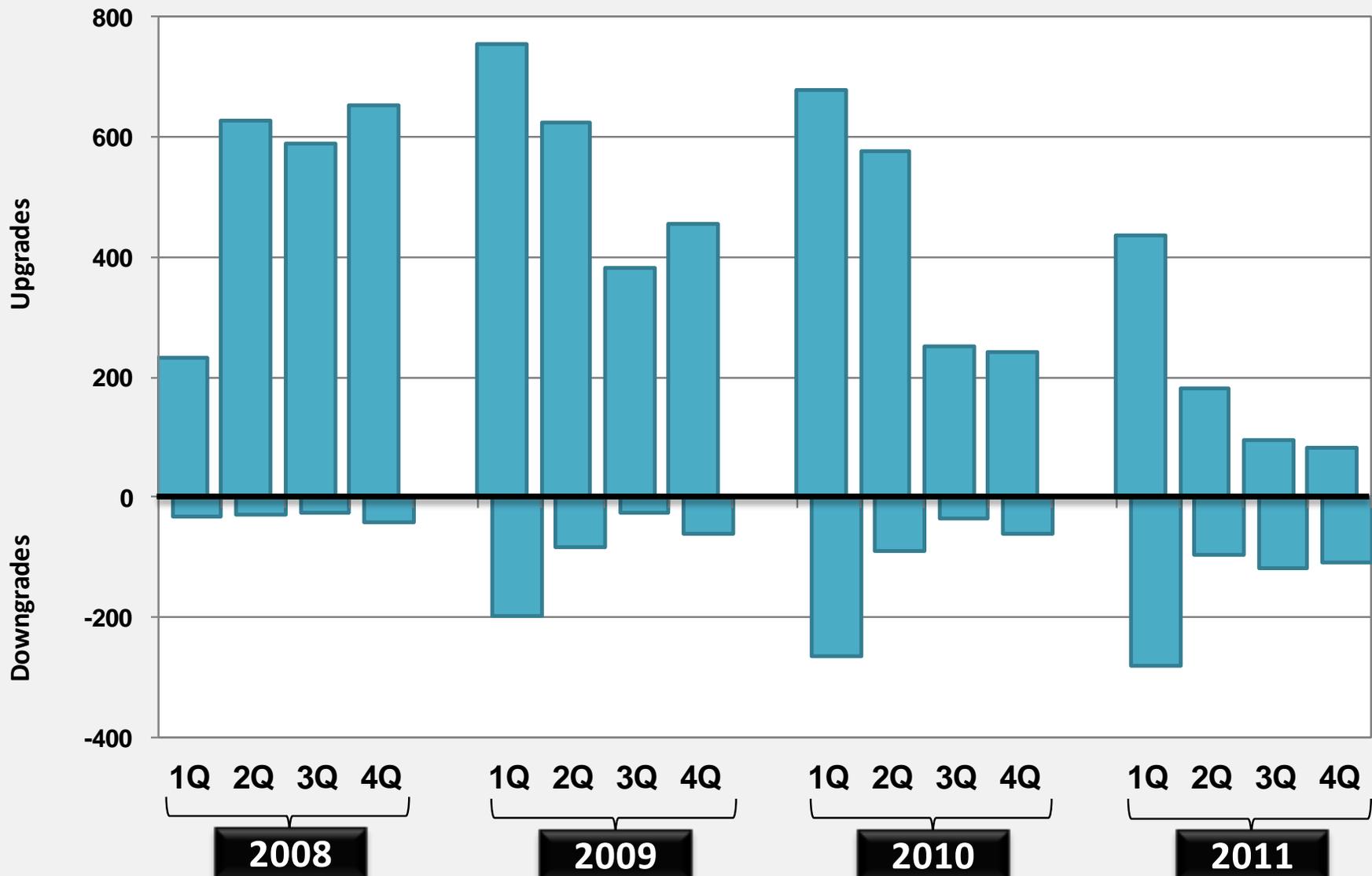
U.S. Public Finance Rating Changes by Number



Source: Fitch Ratings
 Note: Estimated data for 4Q 2011.

Rating Trends Through the Recession: S&P

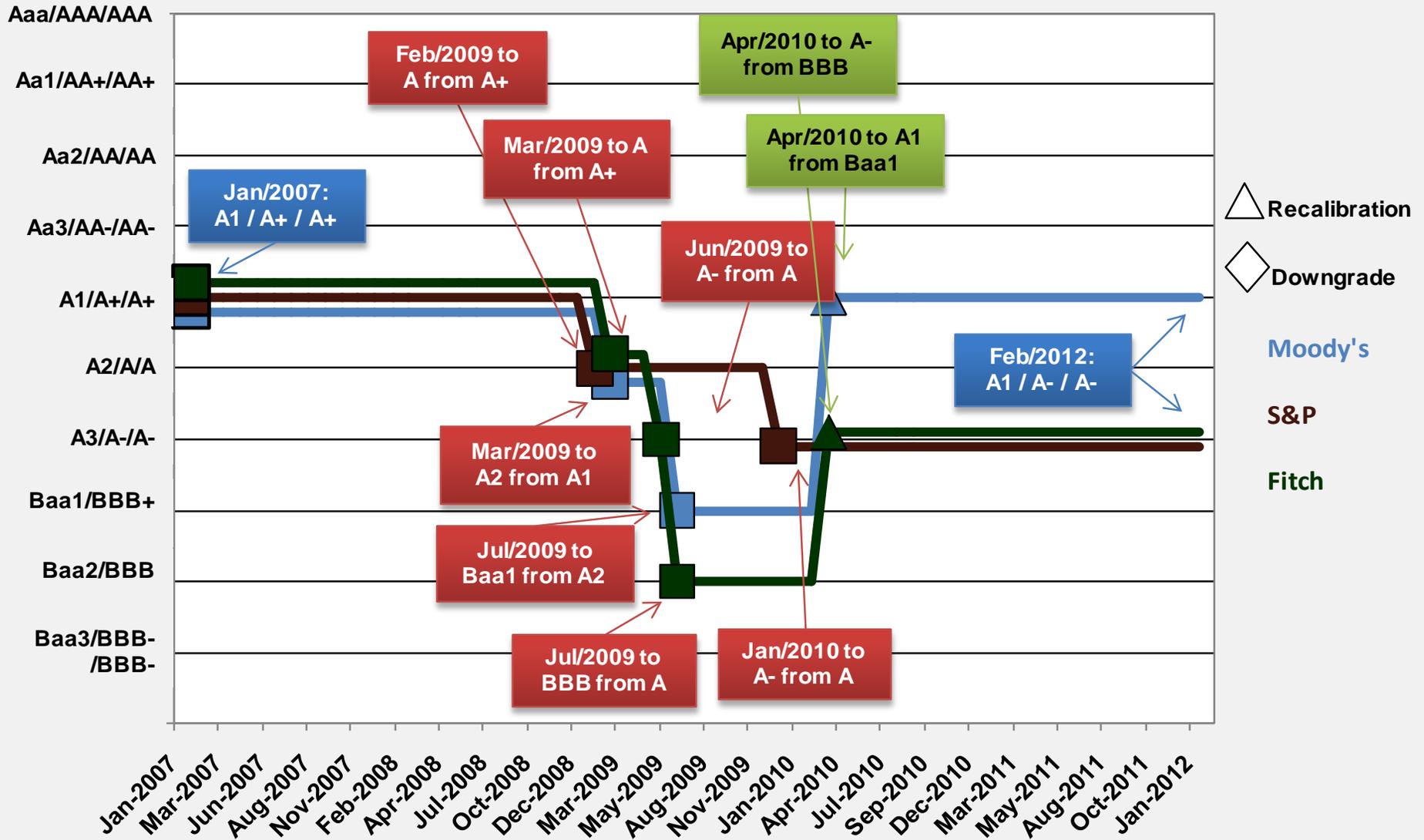
U.S. Public Finance Rating Changes by Number



Source: Standard & Poor's Corporation
Note: Does not include housing sector

California's General Obligation Ratings

History of California's GO Ratings



Source: Moody's Investor Service, Standard & Poor's Corporation, Fitch Ratings

Developing a Rating Strategy In A Challenging Environment

- Respond to rating agency inquiries a timely manner
 - Most likely to ask for latest audited financial statements and adopted budget
 - May ask for completion of questionnaire, depending on sector
 - *Ratings may be suspended due to insufficient information!*
- Schedule a conference call or meeting
 - Opportunity to provide explanation of financial results if audit hasn't been completed and/or discuss outlook for current fiscal year
- Focus on issues of concern cited in the report that was issued at the time of the last review or sale
 - In most cases, it is not necessary to go back any further
- Demonstrate if and how you have addressed these issues or have a long-term strategy
- *Same approach applies when seeking an upward rating or outlook adjustment*
- *Be prepared to discuss funding of pension and OPEB requirements*

Good News?

- Most reviews during the economic downturn have resulted in rating and outlook affirmations
- In recognition of the relative strength of the municipal sector, Moody's and Fitch implemented widespread rating recalibrations
- Over the past few years, S&P criteria revisions have resulted in many upgrades in conjunction with full, regularly-scheduled reviews
- A number of credits have been upgraded to "Triple-A," based on improved credit quality
 - San Diego County issuer credit rating upgraded to "AAA" by S&P in September 2008!
- Rating process has become more transparent for issuers and investors

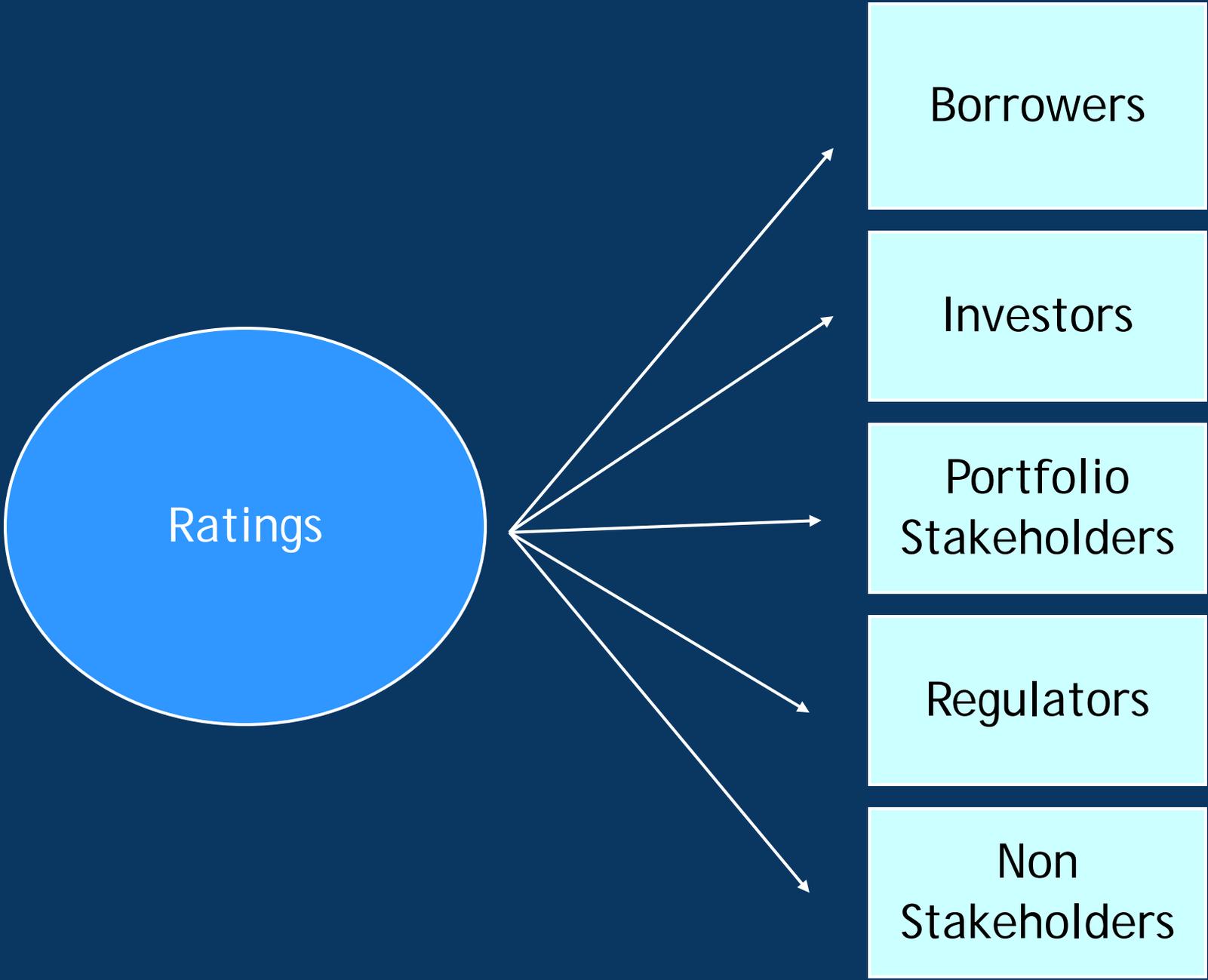
Disclaimer

The information contained in this presentation is not a complete analysis of every material fact. Any estimates or projections included herein are preliminary, provided solely for your information and consideration, constitute our judgment as of the date hereof and are subject to change without any notice. Prior to any transaction, you should determine, without reliance on us, the economic risks and merits, your ability to assume such risks, as well as the legal, tax and accounting characterizations and consequences of any such transaction. In this regard, by attending this presentation, you acknowledge that (i) we do not provide, nor do you rely upon us for, legal, tax or accounting advice, (ii) there may be legal, tax or accounting risks associated with any transaction, (iii) you should seek advice based on your particular circumstances from independent and qualified legal, tax and accounting advisors and (iv) you should apprise senior management in your organization as to such legal, tax and accounting advice including any risks associated with any transaction and our disclaimer as to these matters. The statements herein represent the views of the presenter as of the date of the presentation, which statements may differ from those of other divisions or affiliates of FirstSouthwest and are subject to change without notice. Attendance of this presentation in no way creates or implies any advisory or fiduciary relationship between FirstSouthwest and you.

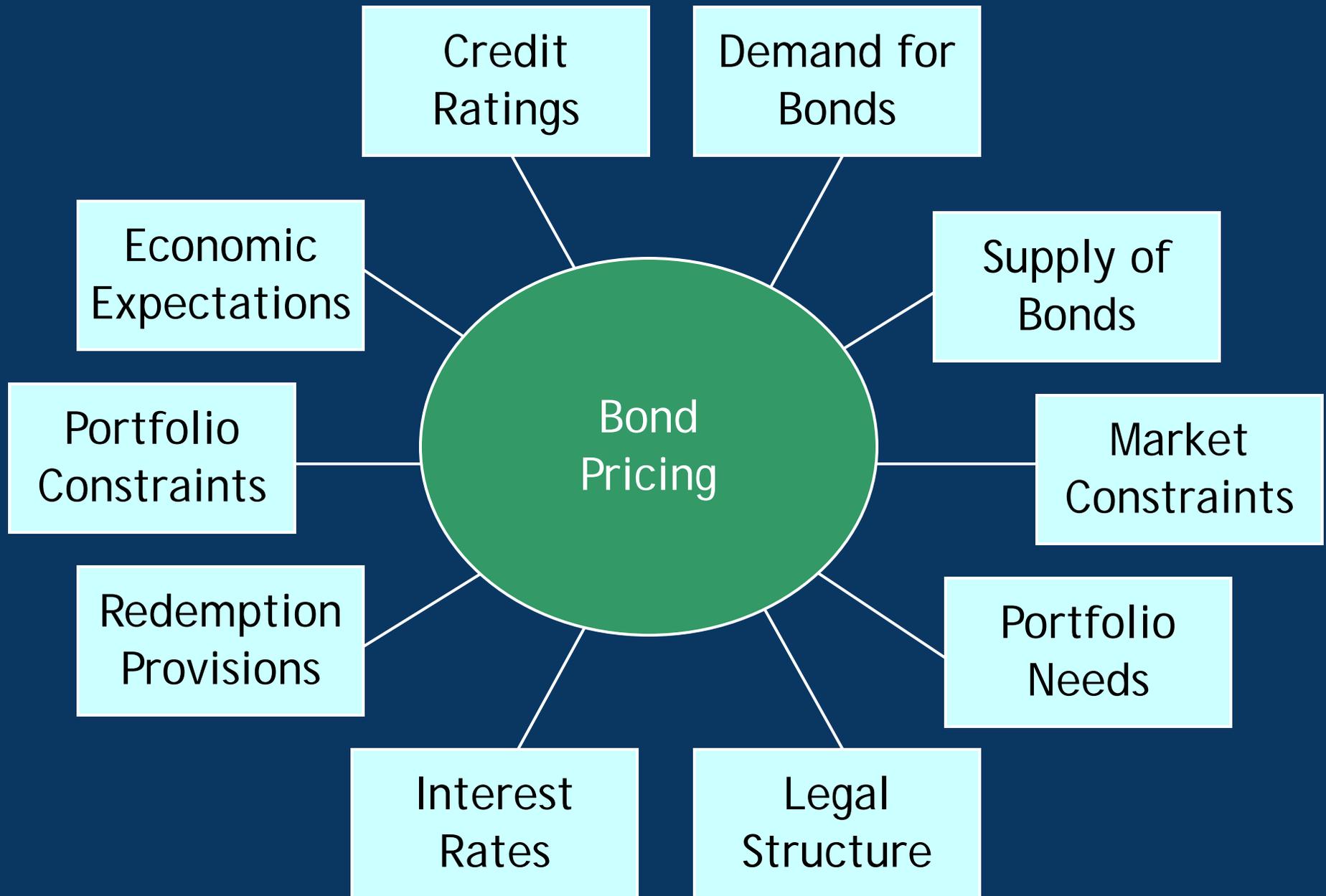
Closing Thoughts

Nikolai J. Sklaroff

Ratings Are Used in Many Ways



Factors in the Pricing of Bonds



Market Perceptions of Rating Agencies

Global Financial
Turmoil

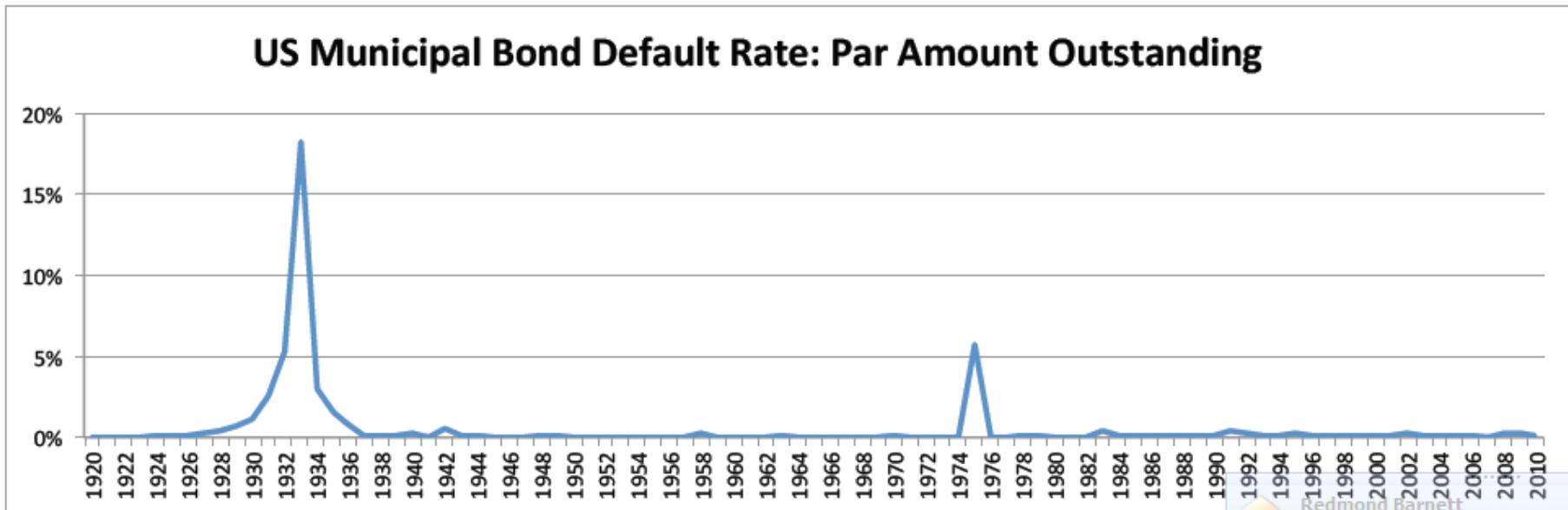
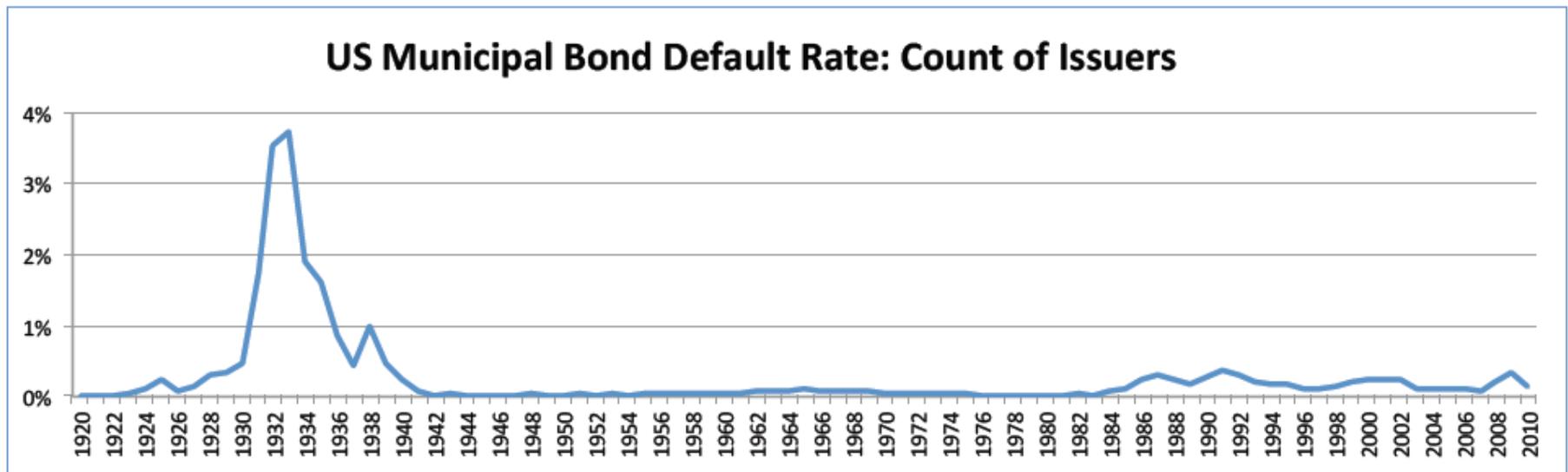
Regulatory
Oversight

Role of the Rating?

Potential New
Competitors

Role of the Rating
Agencies is More
Important than Ever

Defaults? Kroll Ratings Default Study



Sources: The 1920-1939 default counts and amounts are from KBRA's default database. The 1940-1979 data are from KBRA's default database, plus US Advisory Commission on Intergovernmental Relations publications (1973, 1985). Post-1980 default data are from Income Securities Advisors, Inc. and market size data comes from *The Bond Buyer* and SIFMA.

Outlook for Rating Agencies

- Remain vital and relevant
- Changes are coming around the globe
- Regulatory focus
- Congressional focus
- Internal changes and introspection

Tips for Working with Rating Agencies

- Selecting a Rating Agency
- Selecting the Number of Ratings
- Managing the Rating Request and Process
 - What are you asking for?
- Tips for Communicating with Rating Analysts (and Other Credit Analysts)
 - How to deal with bad or negative news
- Presentations and Site Tours
- Maintaining the Rating After the Bonds Are Sold

Questions and Follow Up

Angela M. Kukoda
Senior Vice President

FirstSouthwest
325 North St. Paul Street
Suite 800
Dallas, TX 75201
214-953-4009 Direct
214-953-4050 Fax
angela.kukoda@firstsw.com

Nikolai J. Sklaroff
Public Finance Investment Banker

Wells Fargo Securities
550 California Street, 10th Floor
MAC A0112-108
San Francisco, CA 94104
415-222-6825 Direct
415-975-7537 Fax
nikolai.j.sklaroff@wellsfargo.com

Wells Fargo Securities is the trade name for certain capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association and Wells Fargo Securities, LLC, member NYSE, FINRA and SIPC.

Disclaimer

This message is a product of the Municipal Products Group, and is not a product of the Wells Fargo Securities, LLC Global Research Department. The views of the Market Strategist may differ from that of the Global Research Department. Publications of Wells Fargo Securities, LLC's Global Research Department may be viewed at www.wellsfargo.com/research. This communication is for informational purposes only, is not an offer, solicitation, recommendation or commitment for any transaction or to buy or sell any security or other financial product; and is not intended as investment advice or as a confirmation of any transaction. The information contained herein is (i) derived from sources that Wells Fargo Securities ("WFS") in good faith considers reliable, however WFS does not guarantee the accuracy, reliability or completeness of this information and makes no warranty, express or implied, with respect thereto; and (ii) subject to change without notice, and WFS accepts no liability for its use or to update or keep it current. Products shown are subject to change and availability. WFS and/or one or more of its affiliates may provide advice or may from time to time have proprietary positions in, or trade as principal in, securities that may be mentioned herein or other securities issued by issuers reflected herein; or in derivatives related thereto. WFS is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Securities, LLC, member NYSE, FINRA and SIPC, and Wells Fargo Bank, National Association. Municipal Derivatives solutions are provided by Wells Fargo Bank, N.A. This communication is not intended to provide, and must not be relied on for, accounting, legal, regulatory, tax, business, financial or related advice or investment recommendations and does not constitute advice within the meaning of Section 15B of the Securities Exchange Act of 1934. You must consult with your own advisors as to the legal, regulatory, tax, business, financial, investment, and other aspects of this communication. Neither WFS nor any person providing this communication is acting as a municipal advisor or fiduciary with respect to any transaction described or contemplated therein unless expressly agreed to in a written financial advisory or similar agreement.