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INTRODUCTION: RECENT TRENDS IN THE BOND MARKET

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March 18, 2015
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Debt 2: Accessing the Market

Key Trends And How They Are Affecting Issuers

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- Interest Rates
- Credit Trends
- Players
- Regulation
- What's it All Mean to You

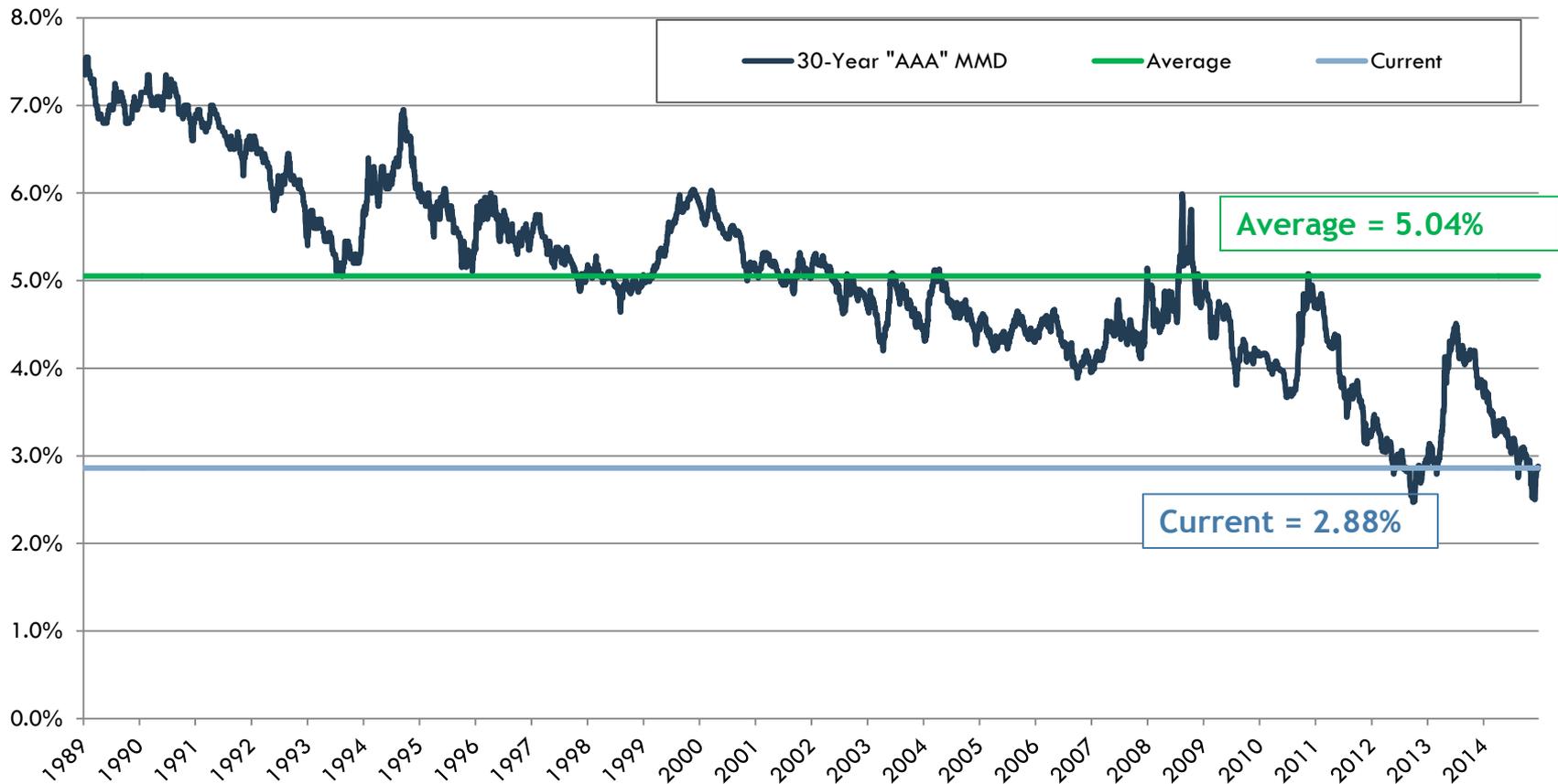
From “Boring Bonds” To ... 2015

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Trend 1: Low Rates

Historical "AAA" MMD

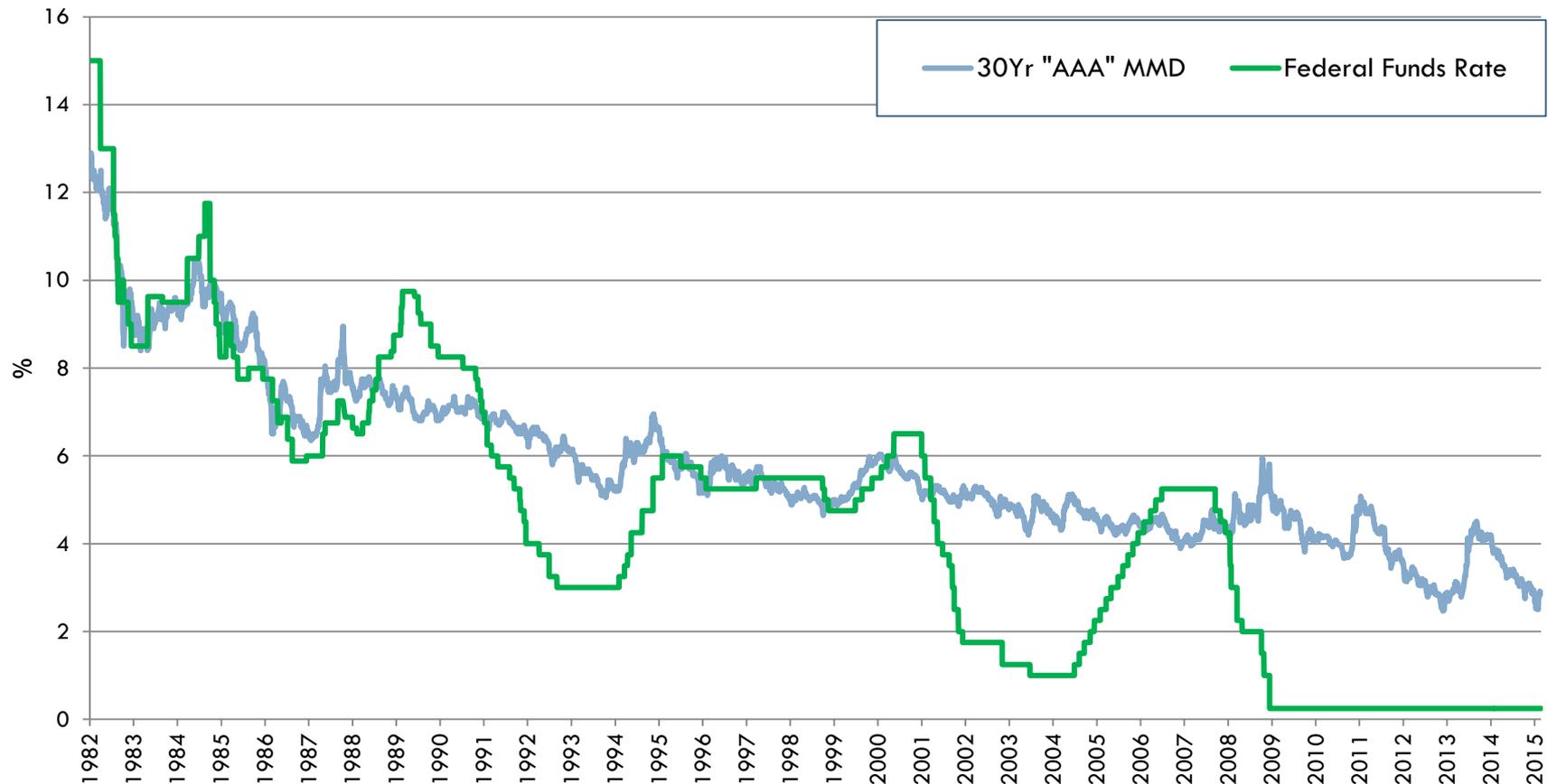


Source: Municipal Market Data; as of February 26, 2015

Why? Is It The Fed?

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Historical Federal Funds Rate and 30Yr "AAA" MMD

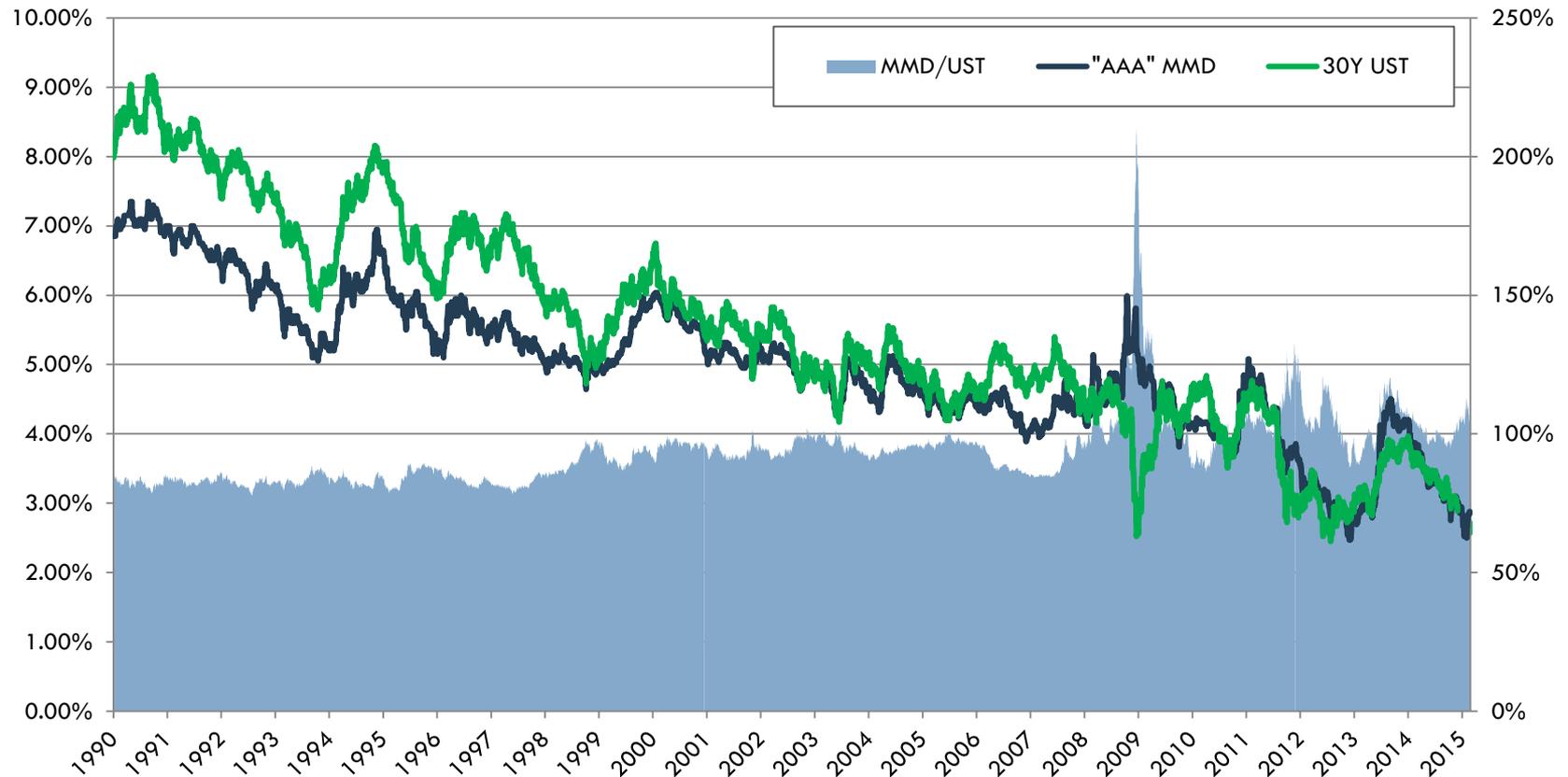


Source: Municipal Market Data and Thomson Reuters; as of February 26, 2015

Tax-Exempt/Taxable Ratio Changes

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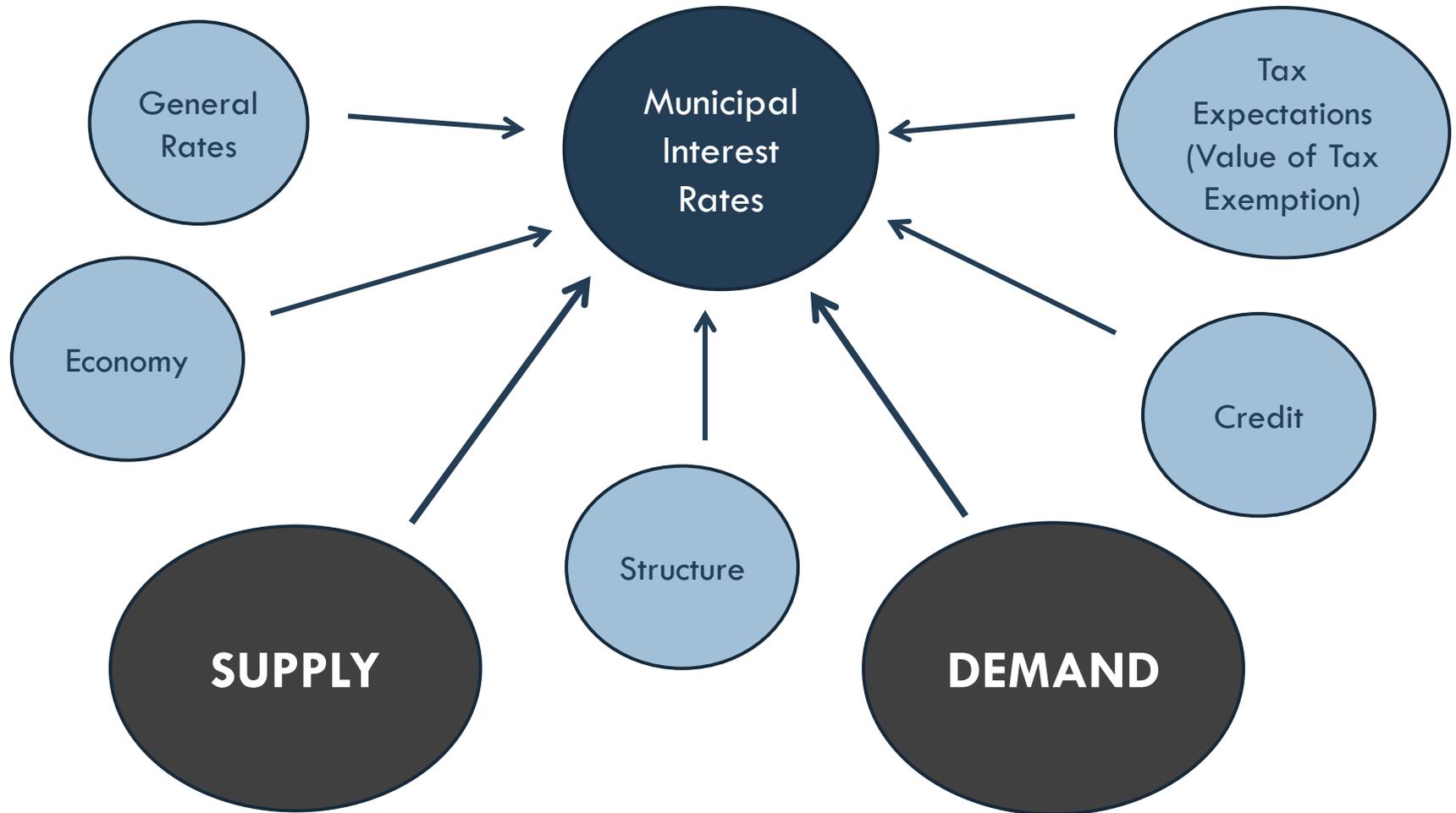
Historical Taxable and Tax-Exempt Interest Rate Ratios



Source: Municipal Market Data and Thompson Reuters; as of February 26, 2015

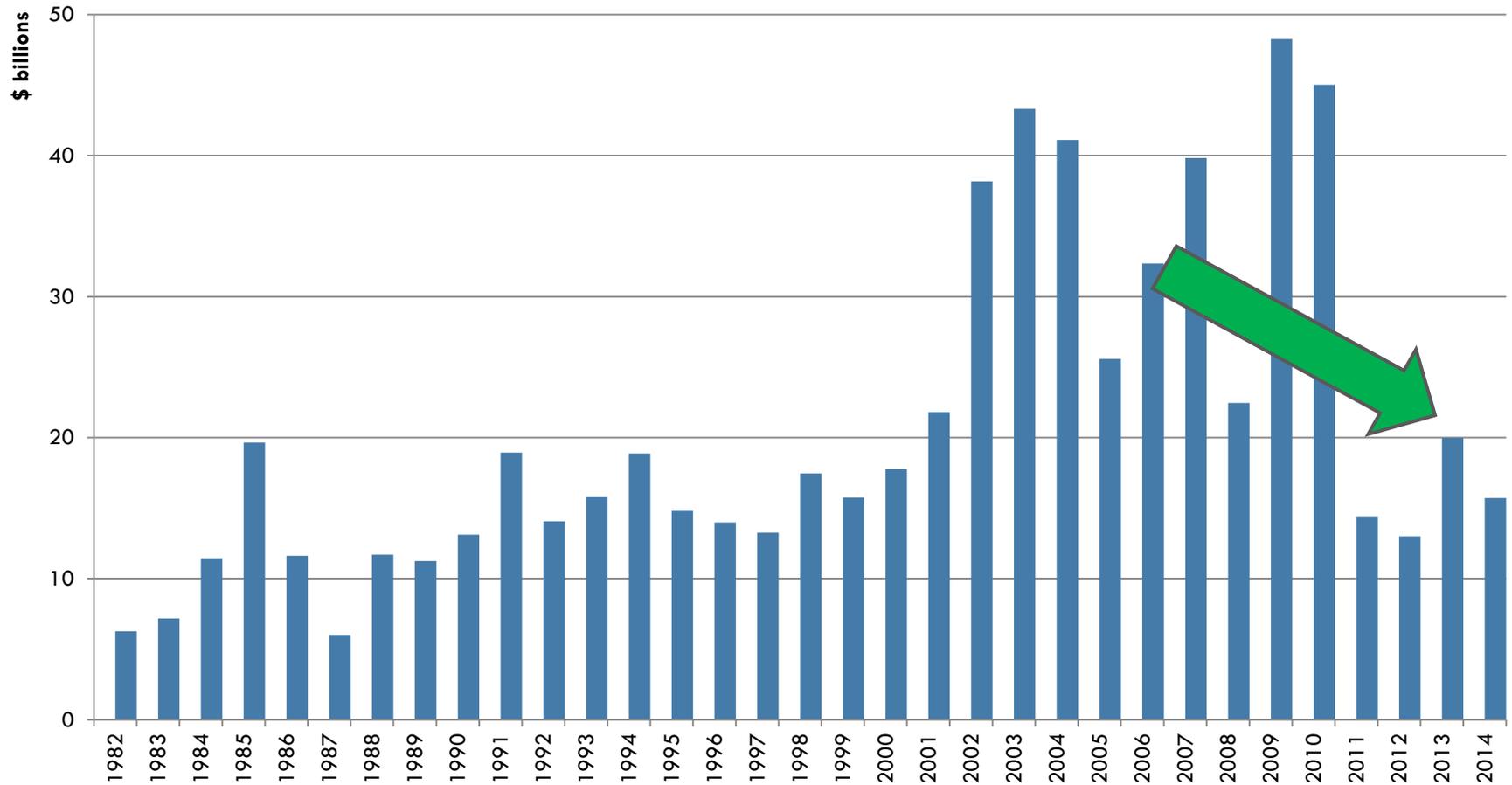
Many Factors Drive Rates

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Why? Supply Is Down

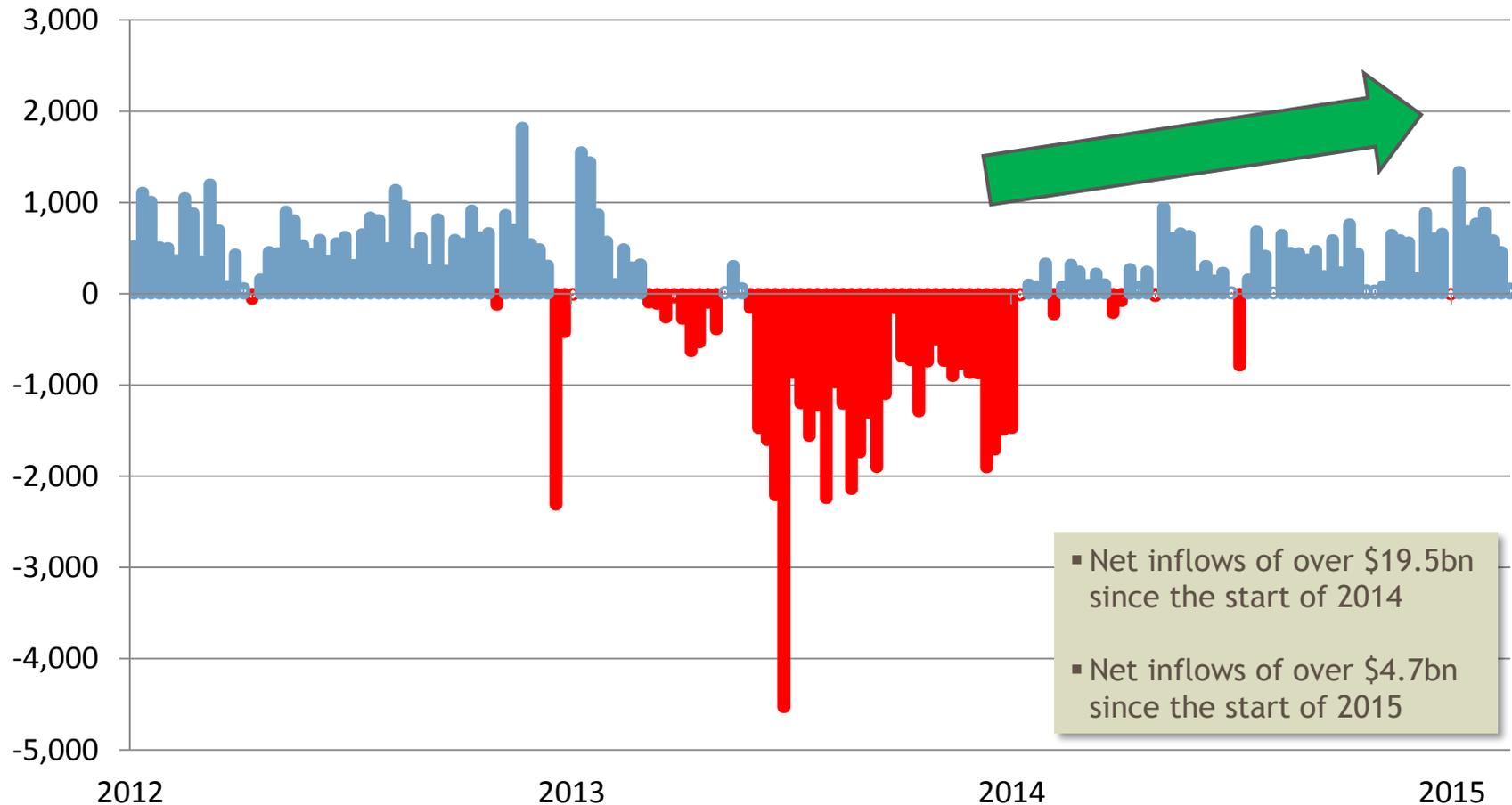
Historical New Money Issuance in California



Source: Thomson Reuters; as of February 26, 2015

Why? Demand Is Up Again

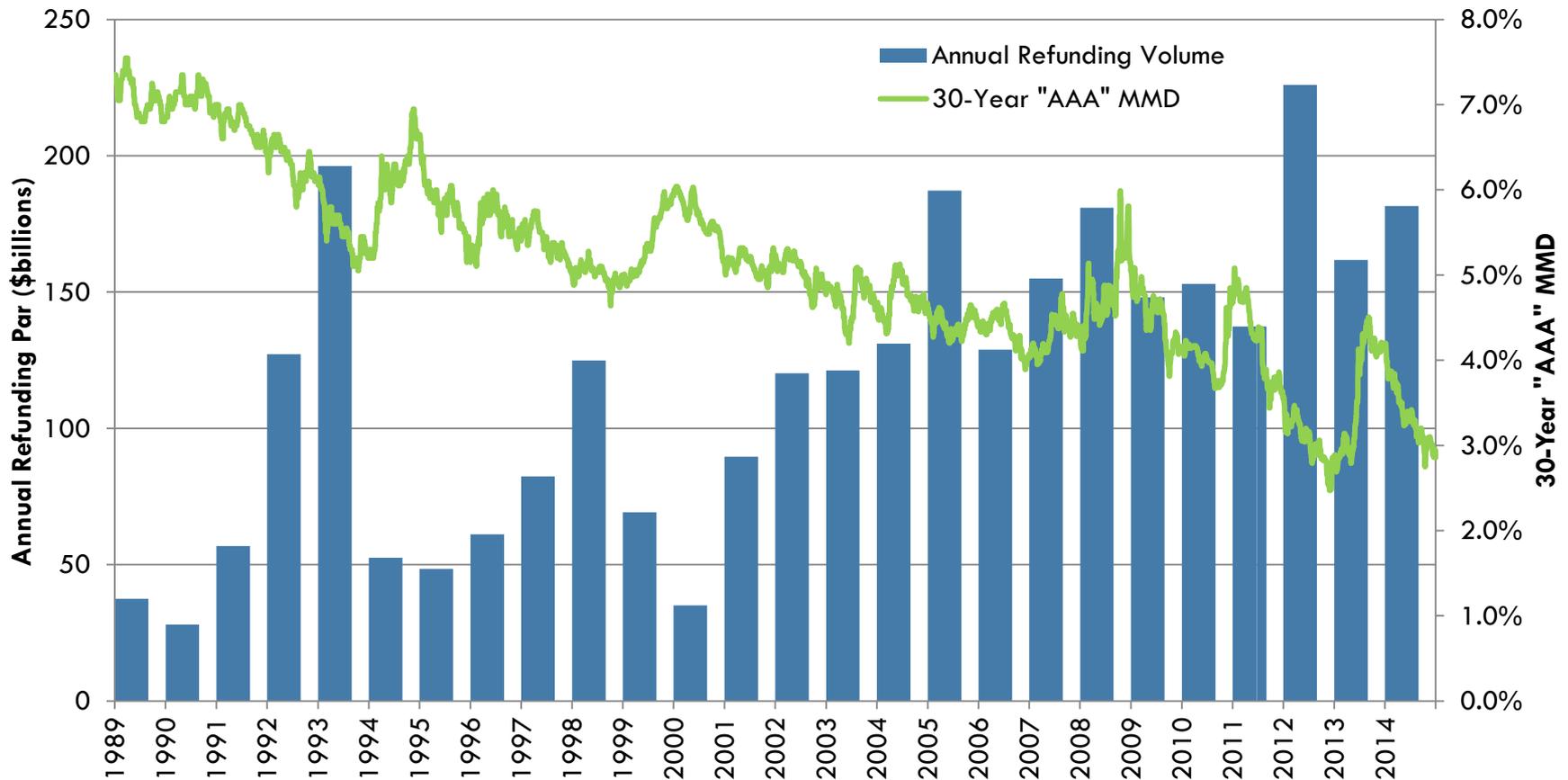
Municipal Bond Fund Flows (2014 to Present)



Source: Lipper, Thomas Reuters Company; as of February 26, 2015; represents only funds that report weekly

Result: Refunding Opportunities

Historical Refunding Issuance Volume and 30-Year "AAA" MMD

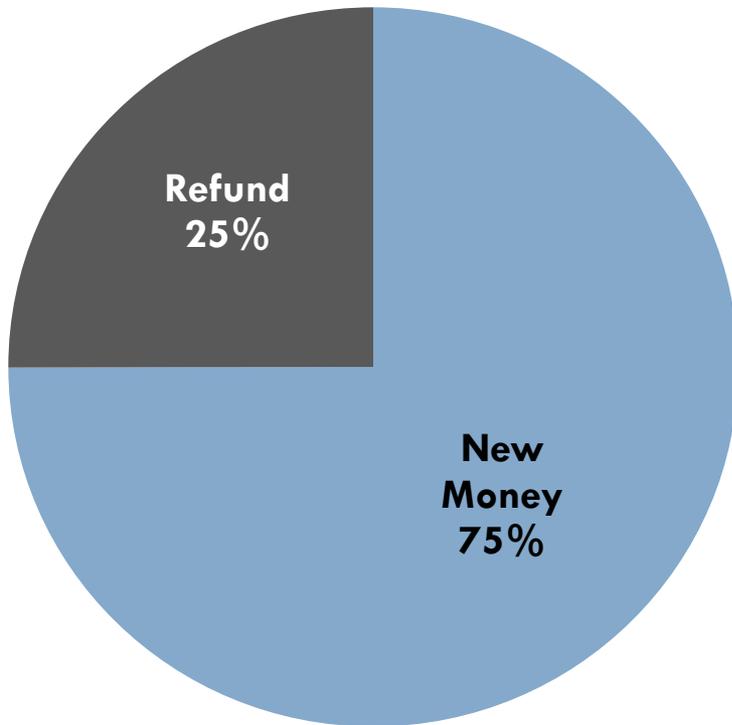


Source: Thomason Reuters and Municipal Market Data; as of February 26, 2015

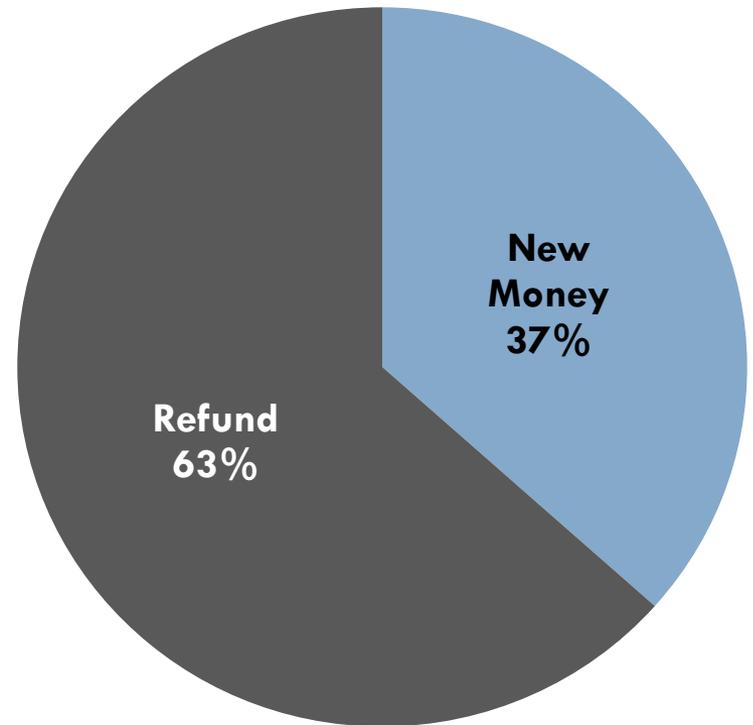
A Renewed Focus On Refundings

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2004 California Issuance



2014 California Issuance



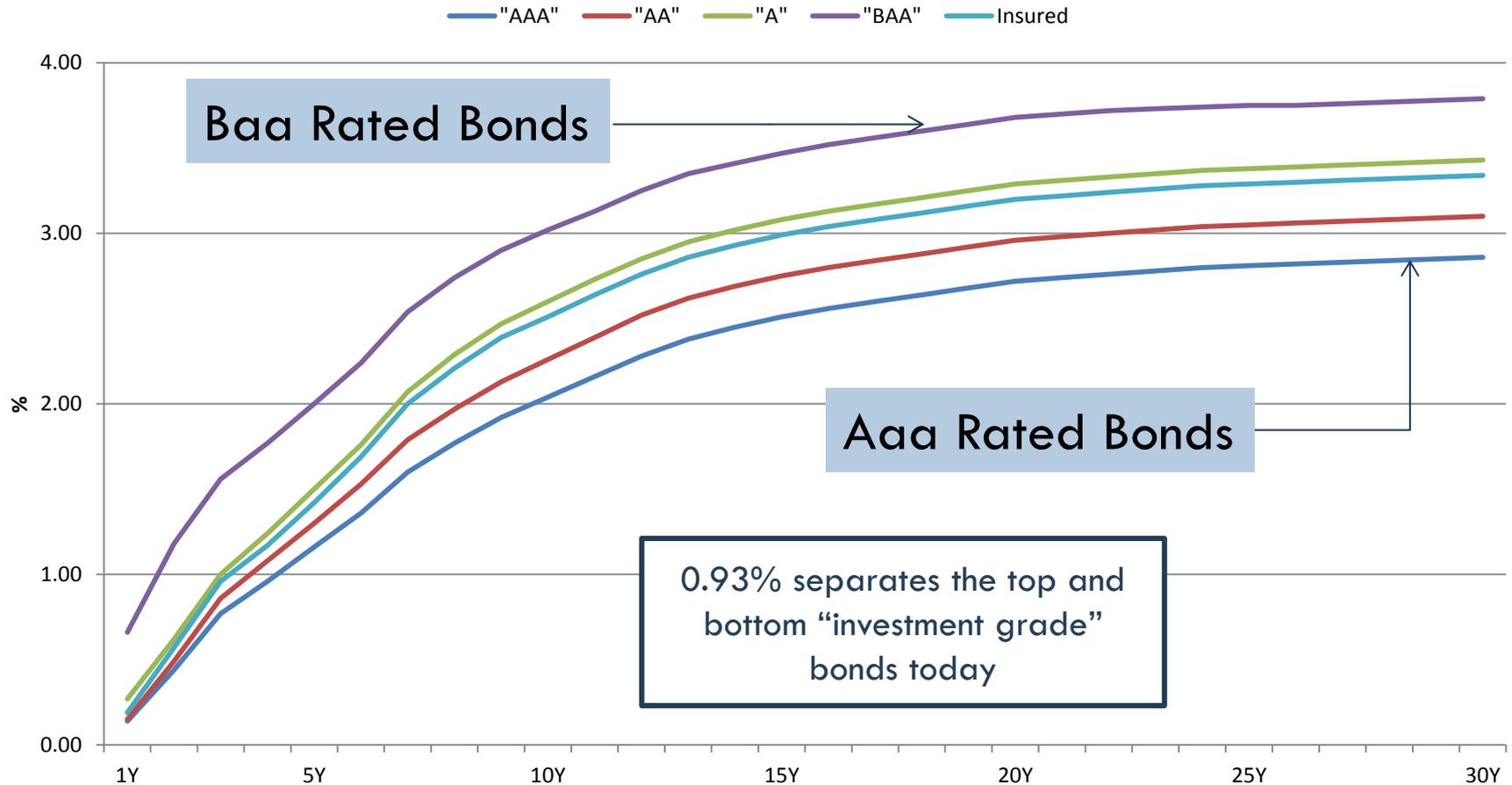
Refunding Opportunities

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- Assuming most bonds have a 10 year call, any outstanding bond from 2005 and earlier is a potential current refunding candidate
 - Careful as not all bonds had a 10 year call so some more recent bonds have been current refunding candidates
- Rates have recently been so low that depending on the call date, even bonds issued as recently as 2012 have penciled for advance refunding savings

Trend 2: Credit Spreads Remain Wide For The Weak

Interest Rates by Credit Rating Today



Source: Municipal Market Data; as of February 26, 2015

Credit Flight Follows Credit Turmoil

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Historical Credit Spreads



Source: Municipal Market Data; as of February 26, 2015

Trend 3: The Re-Appearance Of Credit Enhancement

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- **Once upon a time ...**
 - Seven bond insurers with gilt-edged, “Triple-A” (Aaa/AAA/AAA) ratings
 - One “double-A” rated bond insurer
- The bottom fell out in 2007-2008
- But in its wake a new bond insurance industry has emerged...

The Disappearance Of Bond Insurance

| Insurer | Moody's | S&P | S&P | Fitch | Fitch | |
|--|--------------------------|-------------------------|-------------------------|---------------------------|-----------|-----------|
|  BERKSHIRE HATHAWAY Assurance Corporation | Aa1 Stable Outlook | Aa1 Stable | AA+ Stable Outlook | AA+ Negative | N/A | Not Rated |
|  ASSURED GUARANTY | Aa3 Negative Watch | Aa3 Negative Outlook | AAA Negative Outlook | AA- Stable | Withdrawn | Withdrawn |
|  Ambac | Aa3 Negative Watch | Withdrawn | AAA Negative Outlook | Withdrawn | Withdrawn | Withdrawn |
|  Ambac | Caa2 Watch Developing | Withdrawn | CC Positive Outlook | Withdrawn | Withdrawn | Withdrawn |
|  national public finance guarantee | Baa1 Watch Developing | Baa2 Negative | A Watch Developing | BBB Outlook Developing | Withdrawn | Withdrawn |
|  RADIANT RADIANT | Ba1 Stable Outlook | Withdrawn | BB Negative Watch | Withdrawn | Withdrawn | Withdrawn |
|  CIFG The Value Within | Caa2 Negative Watch | Withdrawn | Withdrawn | Withdrawn | Withdrawn | Withdrawn |
|  FGIC Guarantee | Withdrawn | Withdrawn | Withdrawn | Withdrawn | Withdrawn | Withdrawn |
|  SYNCORA Guarantee | Ca Watch Developing | Ca | R Negative Outlook | Withdrawn | Withdrawn | Withdrawn |
| | Outlook Developing | | | Withdrawn | | Withdrawn |

Source: Moody's Investors Service, Standard and Poor's and Fitch Ratings

And Re-Appearance

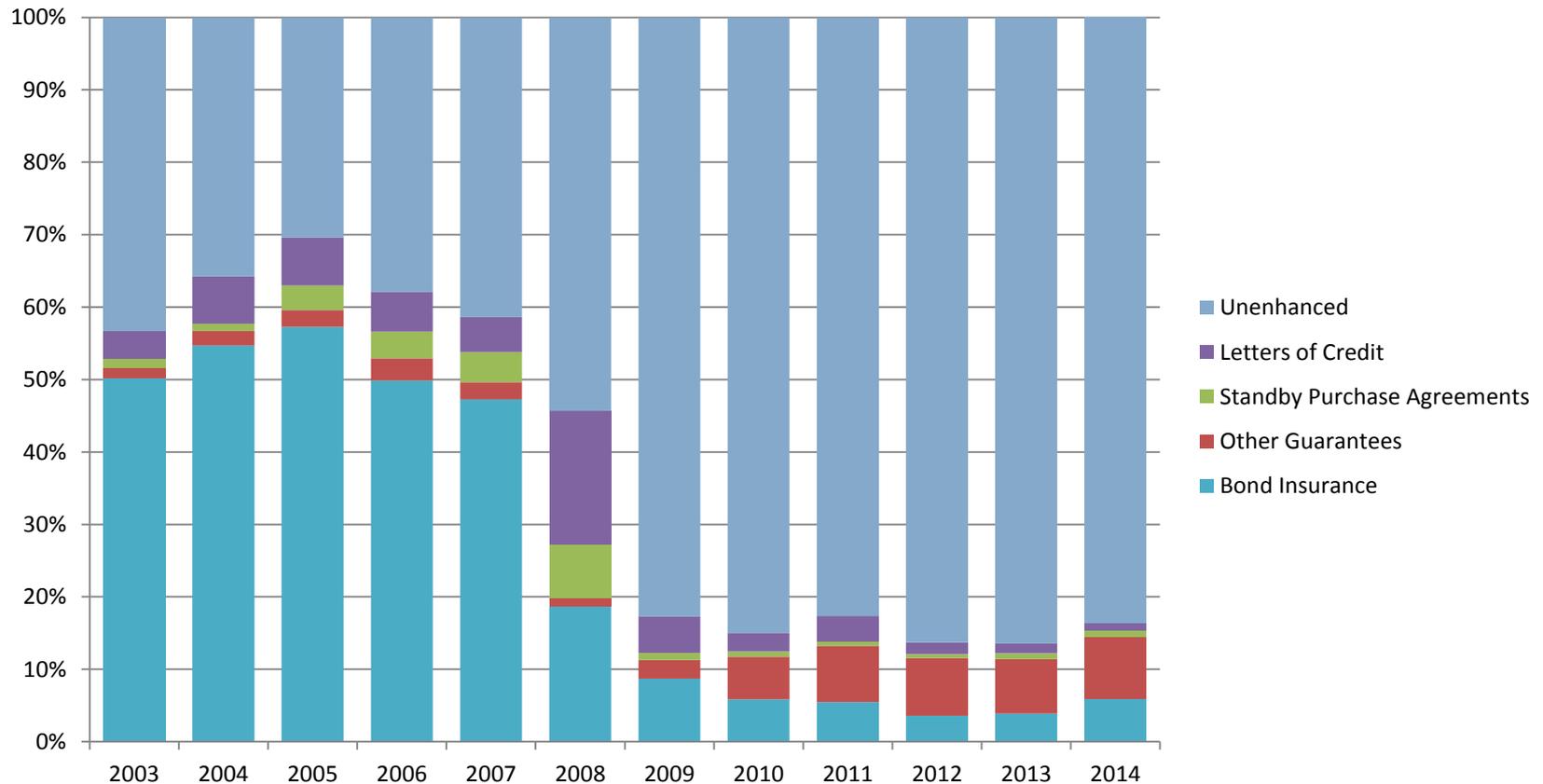
- But in its wake a new bond insurance industry has emerged... although low rates have hampered growth

| <u>Insurer</u> | <u>Moody's</u> | <u>S&P</u> | <u>Fitch</u> | <u>Kroll</u> |
|---|----------------|----------------|--------------|--------------|
|  | A2 | AA | Not Rated | Not Rated |
|  | Not Rated | AA | Not Rated | Not Rated |
|  | Not Rated | AA | Not Rated | AA+ |
|  | A3 | AA- | Not Rated | AA+ |

Some Recent Growth, Still Small Share of Market

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Issuance by Credit Enhancement



Source: Thomson Reuters, Securities Data Corporation; as of February 26, 2015

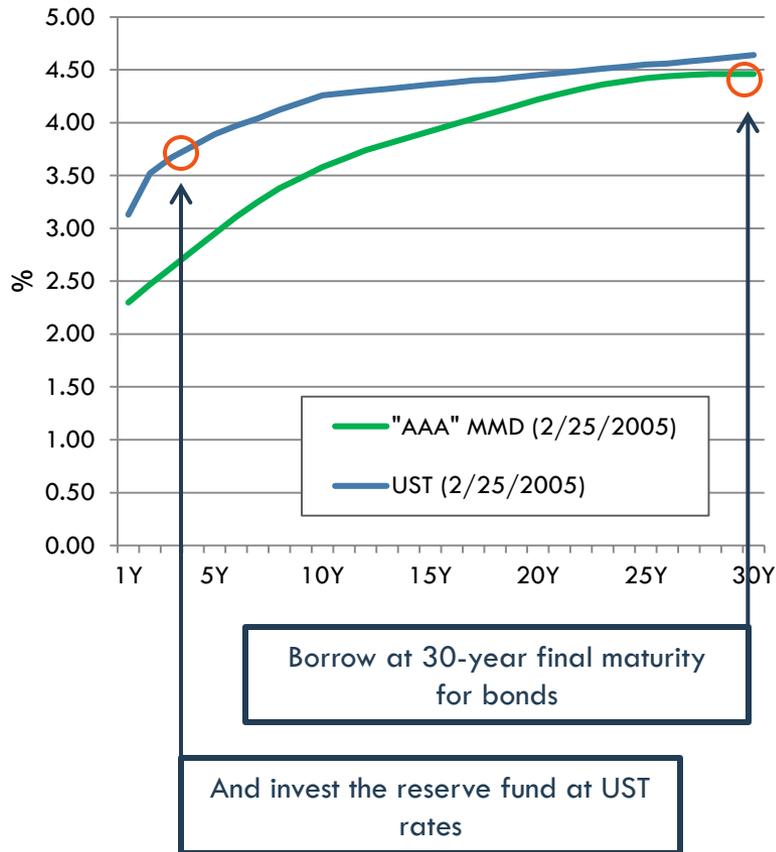
Trend 4: The Disappearing Reserve Fund

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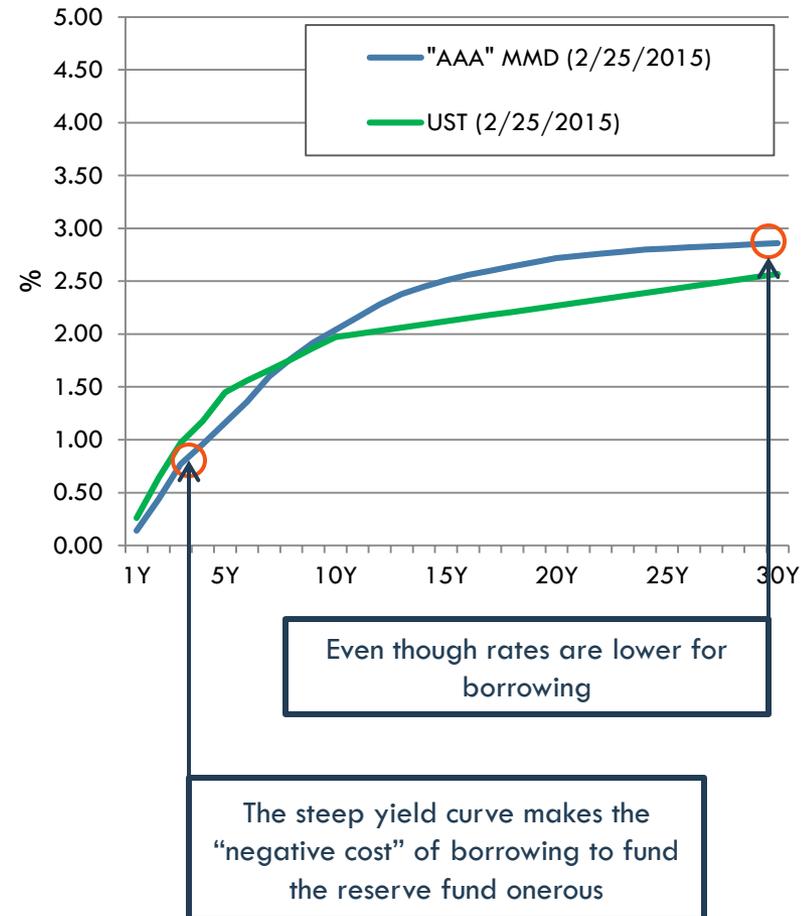
- Changing economics
- Changing credit tolerance
- Changing availability of substitutes
 - Stand-alone Debt Service Reserve Fund sureties from Bond Investors (see Trend 3)

Economics Of Reserve Fund

Typical Yield Curve: 2005



Steep Yield Curve: 2015



Source: Municipal Market Data and Thomson Reuters; as of February 26, 2015

Trend 5: Changing Dynamics in Bond Ratings

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Moody's Investors Service
Standard & Poor's
Fitch Ratings
Kroll Bond Ratings

Why: What's Been Happening

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- Investors / regulators were upset by:
 - Aaa/AAA rated bonds that were downgraded or defaulted
 - “Global Ratings Adjustments”
 - Downgrades and Readjustments
 - Policy Changes

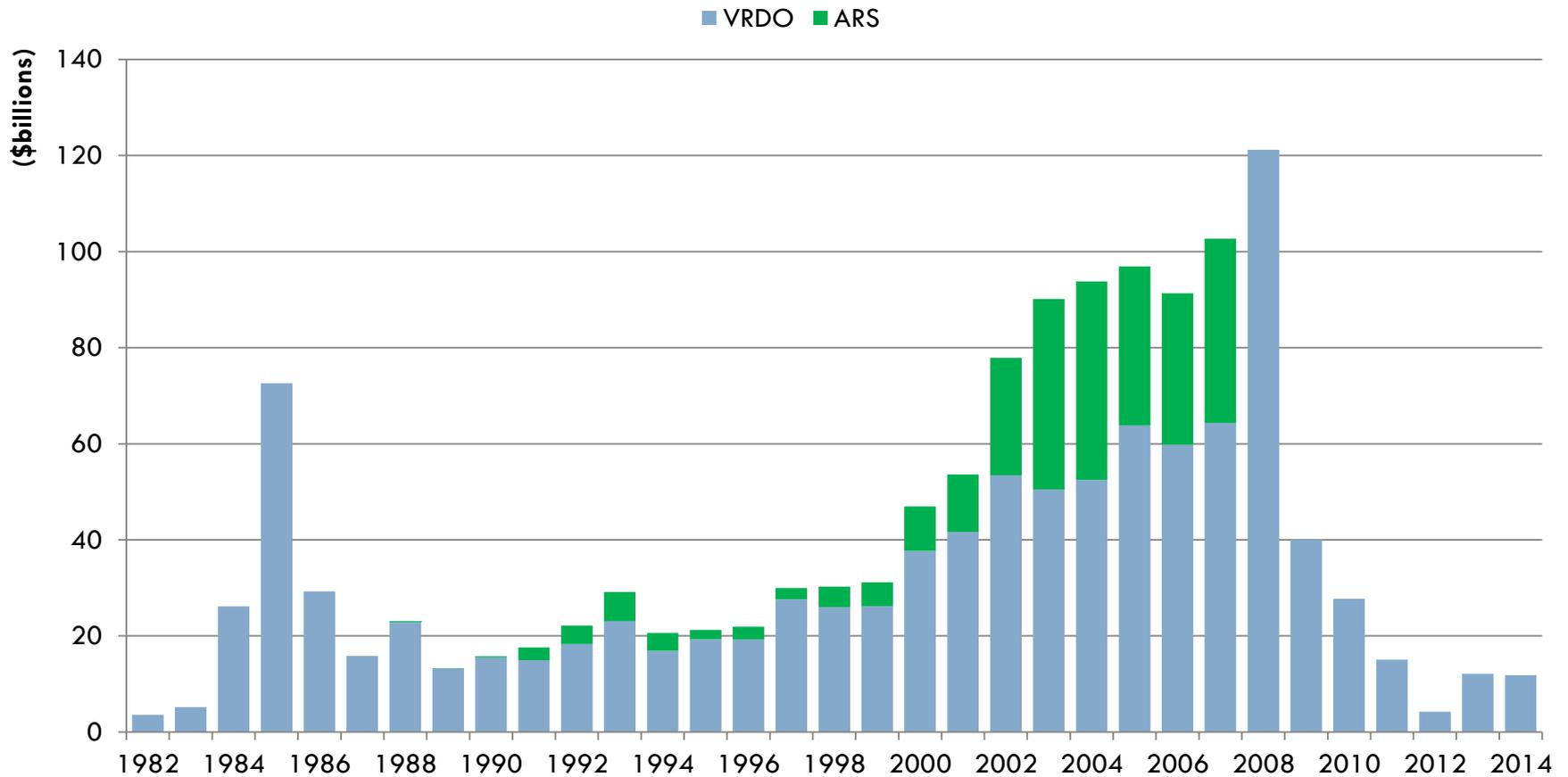
How has industry changed

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- Underlying Ratings More in Demand than Ever
- Investors Make Own Credit Quality Judgments
- Need to Reach Investors Directly
- Pressure for Continuing Disclosure / Access
- Rating “Relationship Management”
- Regulation of Rating Agencies
- Criteria/Policy Requests for Comment
- Explicit Methodology

Trend 6: Dramatic Decline In VRDOs

Historical Variable Rate Issuance

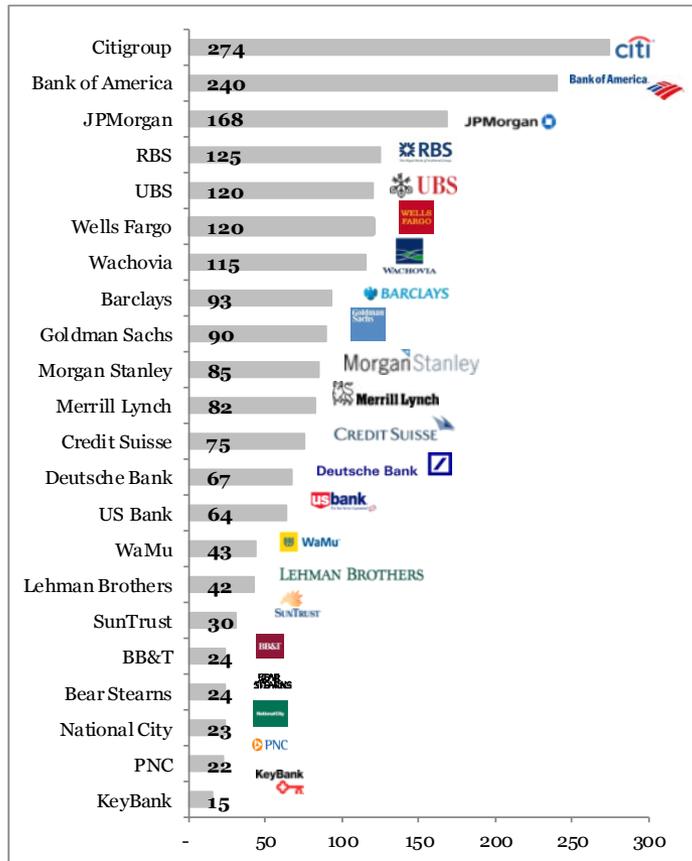


Source: Thomson Reuters; as of February 26, 2015

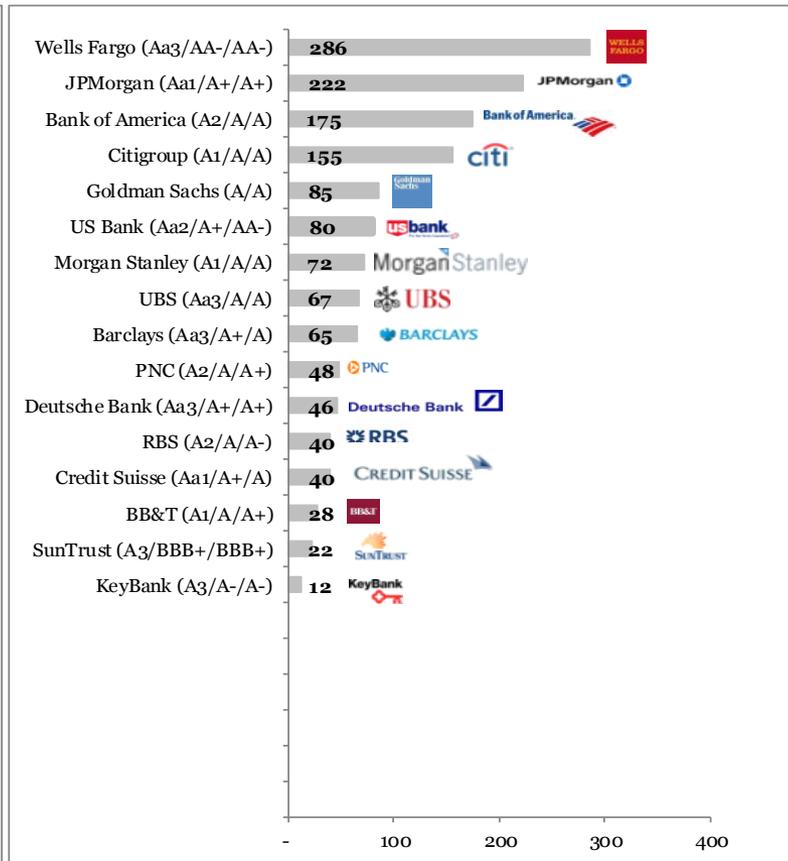
Why: Changes In The Bank Industry

Total Market Capitalization

January 1, 2007



February 20, 2015



Source: Bloomberg; as of February 20, 2015

Why: Changes In The Letter Of Credit Industry

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Top 20 LOC Banks in 1994

| Rank | Bank | Principal Amount | Mkt. Share | National Flag |
|------|------------------------------------|------------------|------------|--|
| 1 | JPMorgan Chase Bank | 7,974.0 | 12.02% |  |
| 2 | Union Bank of Switzerland | 4,772.4 | 7.19% |  |
| 3 | CS First Boston | 4,343.3 | 6.55% |  |
| 4 | Bank of America | 4,161.5 | 6.27% |  |
| 5 | Societe Generale | 4,132.5 | 6.23% |  |
| 6 | Canadian Imperial Bank of Commerce | 4,000.6 | 6.03% |  |
| 7 | BNP Paribas SA | 3,956.9 | 5.96% |  |
| 8 | Westdeutsche Landesbank | 3,945.0 | 5.95% |  |
| 9 | Toronto-Dominion | 3,763.0 | 5.67% |  |
| 10 | Citibank | 3,758.5 | 5.66% |  |

Top 20 LOC Banks in 2004

| Rank | Bank | Principal Amount | Mkt. Share | National Flag |
|------|-----------------------------|------------------|------------|--|
| 1 | Bank of America NT&SA | 2,509.7 | 16.80% |  |
| 2 | Dexia Group | 1,595.2 | 11.50% |  |
| 3 | Depfa Bank | 1,451.0 | 8.90% |  |
| 4 | JPMorgan Chase Bank | 1,230.5 | 8.70% |  |
| 5 | Citibank | 1,192.2 | 7.50% |  |
| 6 | The Bank of New York Mellon | 1,082.1 | 6.58% |  |
| 7 | LaSalle Bank | 1,025.0 | 5.30% |  |
| 8 | Wells Fargo Bank | 998.0 | 5.00% |  |
| 9 | BNP Paribas | 940.0 | 4.70% |  |
| 10 | Suntrust Bank | 776.5 | 4.50% |  |

Top 20 LOC Banks in 2014

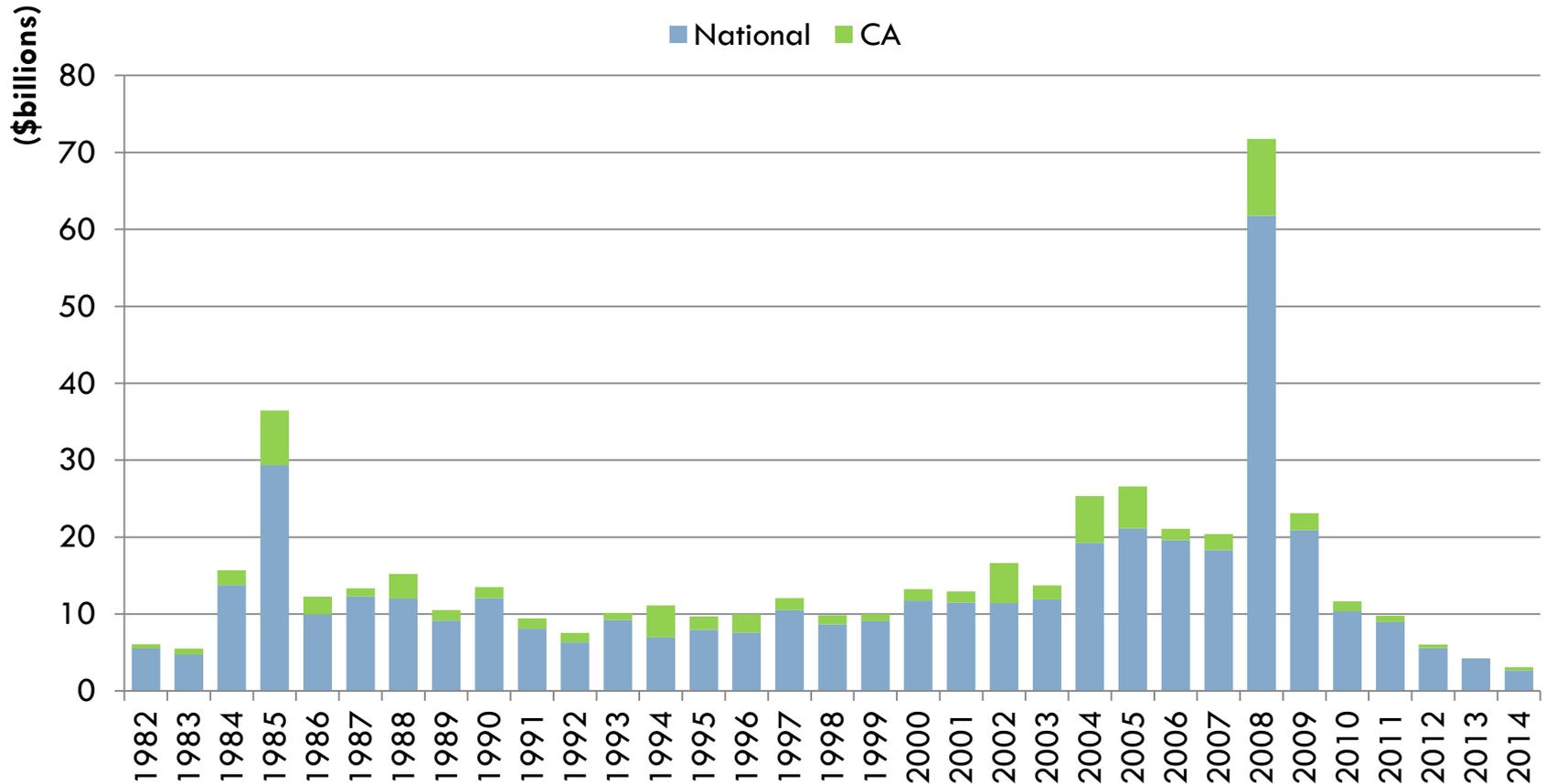
| Rank | Bank | Principal Amount | Mkt. Share | National Flag |
|------|-----------------------------|------------------|------------|--|
| 1 | Bank of China | 2,110.8 | 17.40% |  |
| 2 | Wells Fargo Bank | 618.0 | 9.00% |  |
| 3 | JPMorgan Chase Bank | 227.1 | 8.90% |  |
| 4 | US Bank NA | 210.4 | 7.90% |  |
| 5 | The Bank of New York Mellon | 200.0 | 7.40% |  |
| 6 | MUFG Union Bank NA | 180.0 | 6.70% |  |
| 7 | RBC Capital Markets | 145.0 | 6.70% |  |
| 8 | Sumitomo Mitsui Banking | 115.9 | 5.30% |  |
| 9 | TD Bank NA | 79.1 | 4.60% |  |
| 10 | Bank of America | 71.8 | 3.90% |  |

Source: Thomson Reuters; as of February 26, 2015; Full Credit to Lead.

Changes In The Letter Of Credit Volume

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Historical LOC Issuance



Source: Thomson Reuters; as of February 26, 2015

General Trends In Credit Enhancement

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- Banks retaining capacity for existing clients
- Pricing remains competitive
- Greater attention to documentation
- Top three banks accounted for 35% of LOC volume¹
- Number of banks providing enhancement has declined since 2008¹
- Cost advantages for non domestic banks

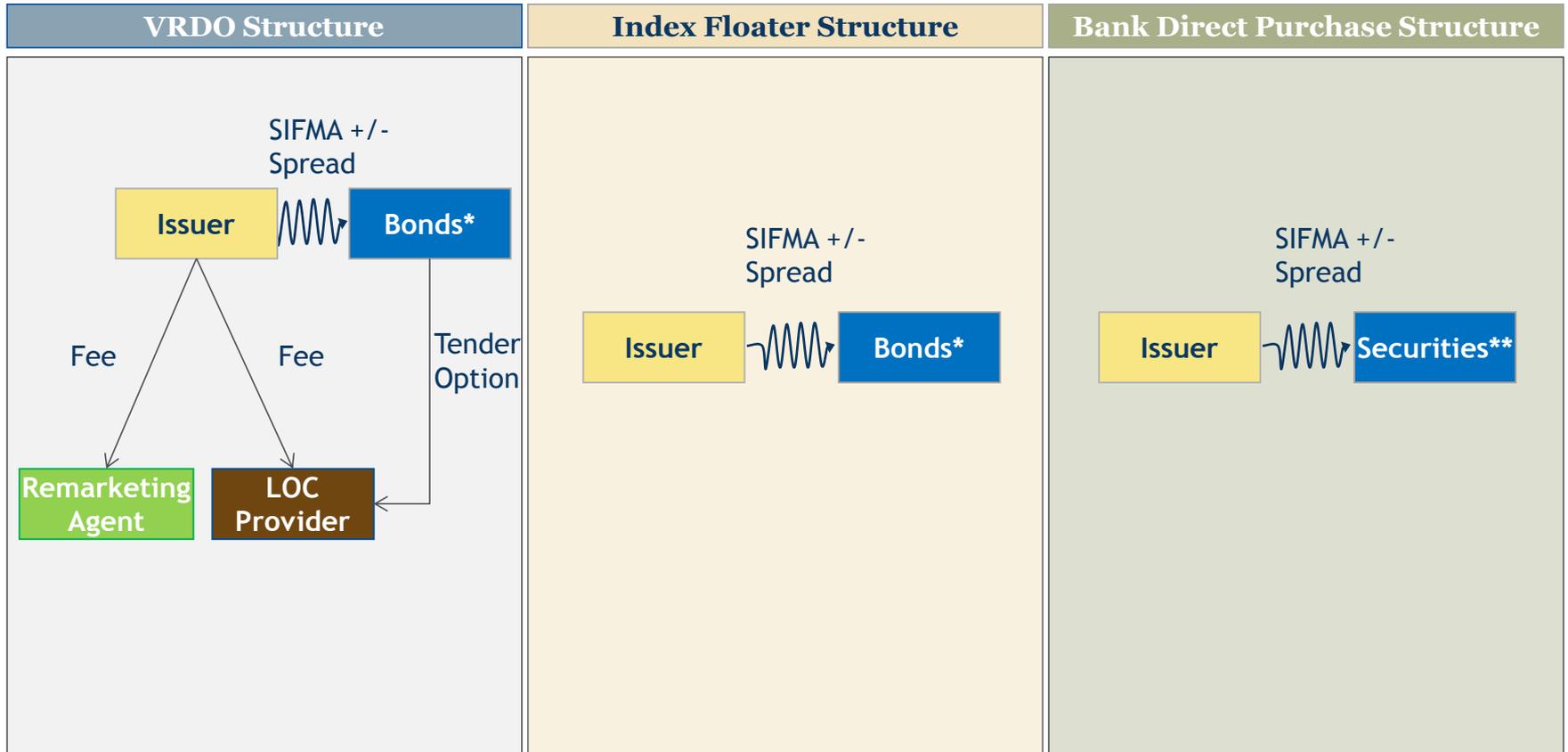
But The Stats Are Misleading...

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- While the decline in variable rate and LOC issuance is genuine, it is also vastly overstated
- Significant movement to on-balance sheet enhancement alternatives: Direct Purchase by Banks
- Different banks are doing the product differently and the generic term really describes multiple products
- Volume significant
 - Some banks buying as securities, some as loans
 - Some show up in market data, much does not

Three Basic Models

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* Bonds purchased by Investors

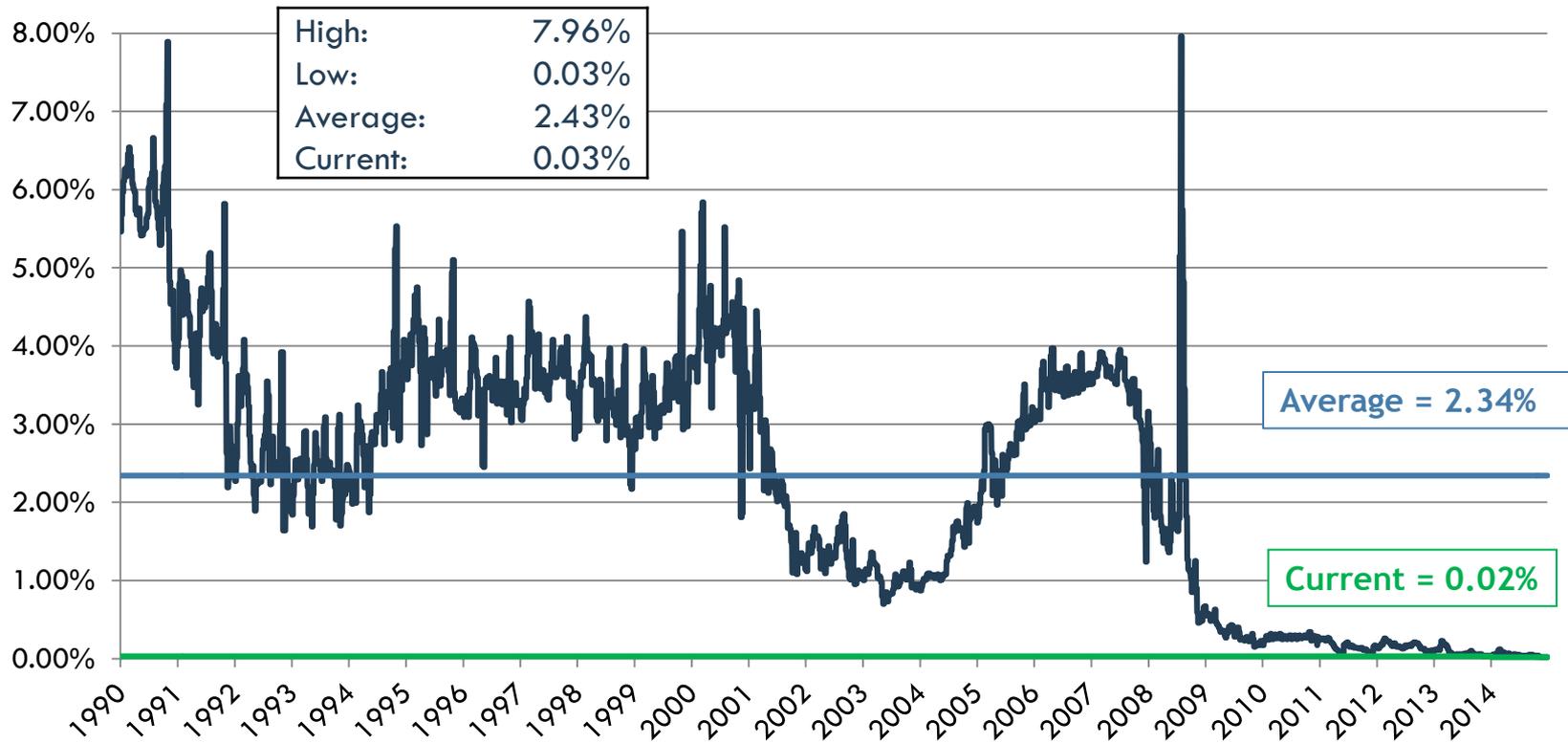
* Bonds purchased by Investors

** Bonds purchased by Bank

Trend 7: Low Variable Rates

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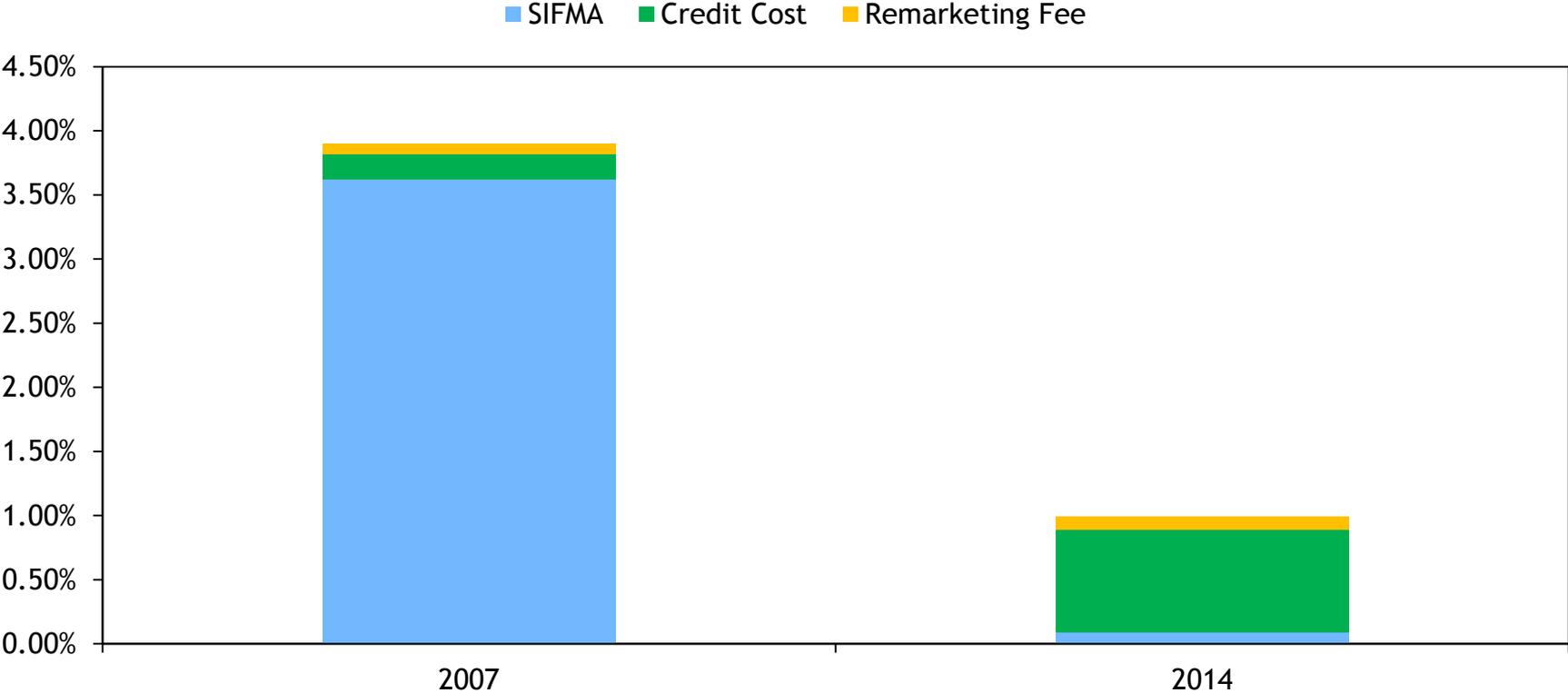
Historical SIFMA



- An extended period of extraordinarily low interest rates

Result: Changing Borrowing Dynamics

Generic Variable Rate Cost Comparison (2007 vs. 2015)



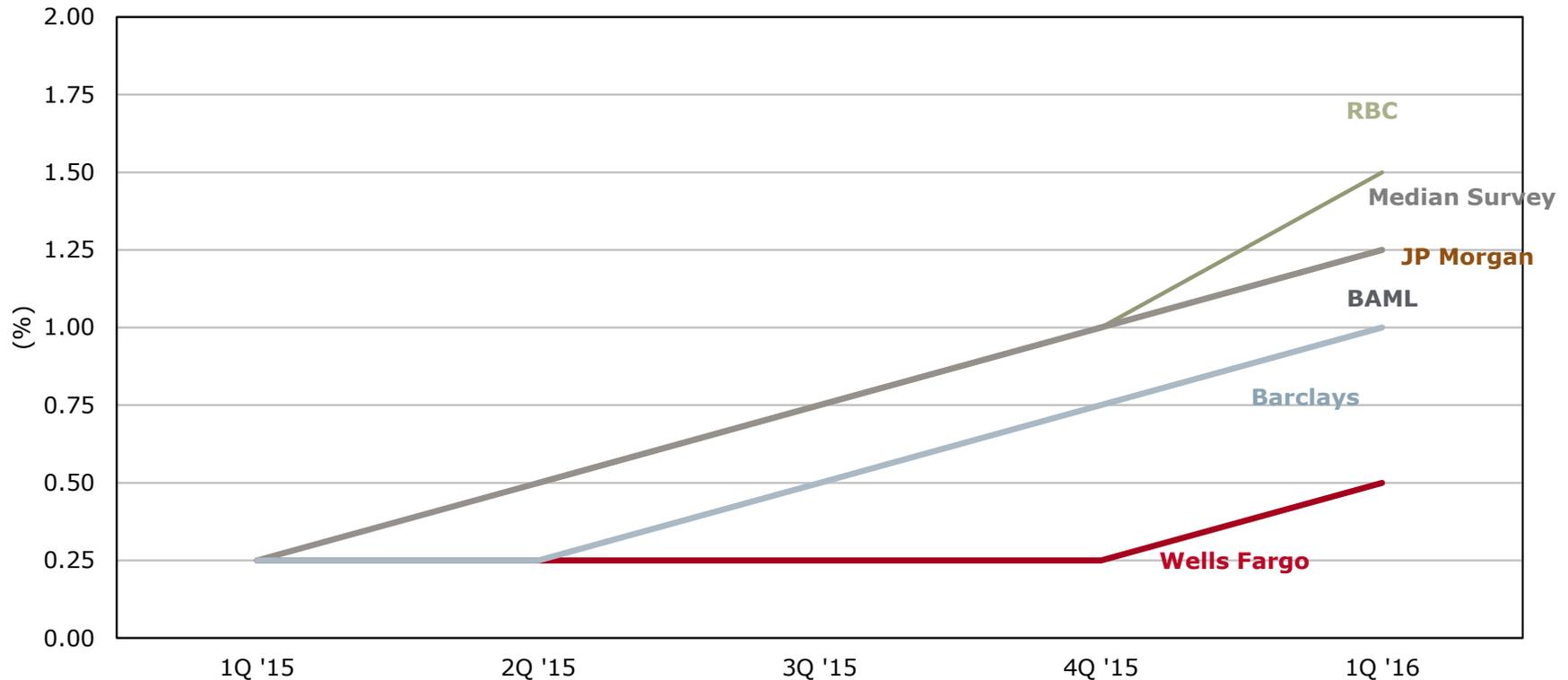
Assumptions: 2007 SIFMA average of 3.62%; 2014 SIFMA Average of 0.09%; 2007 Credit Costs of 0.20%; 2014 Credit Costs of 0.80%; 2007 Remarketing Fee of 0.08%; 2014 Remarketing Fee of 0.12%.

But Differing Market Views On Future Rates

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Economist Outlook on the Federal Funds

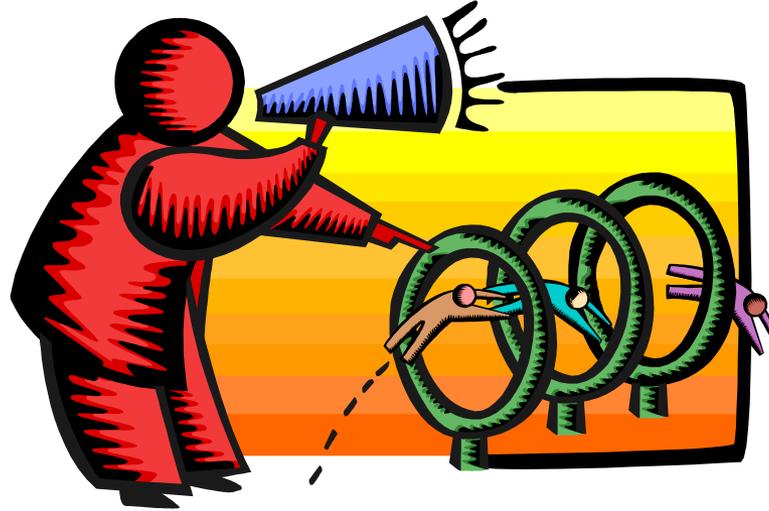
(as of February 25, 2015)



Source: Bloomberg; as of February 25, 2015.

Trend 8: Regulatory Changes

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- Municipal Securities Rulemaking Board
- Securities Exchange Commission
- Internal Revenue Service
- Disclosure and Continuing Disclosure

Questions And Follow Up

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