California Society of Municipal Finance Officers

The Municipal Securities Market in the Midst of Economic Chaos

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The Brave New World of Public Finance

Bond Insurer and LOC Bank Downgrades

Changes in Underwriting and Underwriters

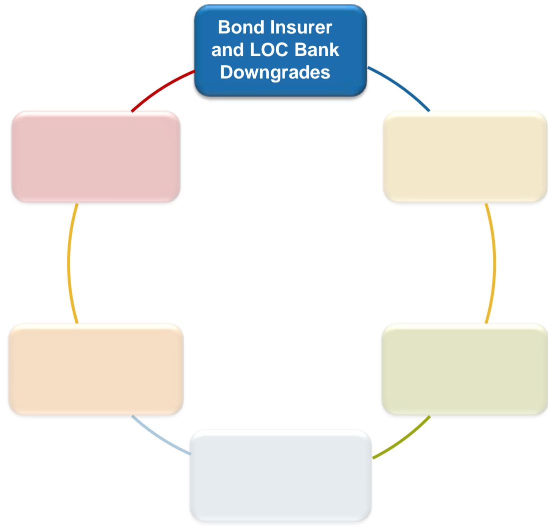
Local Budget Stress

Credit is King

State Budget and Market Impacts

Stimulus Package Introduces BABs

As the World Turns



The Fall of Insurance and Other Credit Intermediaries

Before the World as We Knew it Ended

- Why insurance worked for investors
  - Safety for retail investors
  - Liquidity for institutional investors
  - Allowed institutional investors to at least partially outsource credit review and surveillance to bond insurance companies
- Why insurance worked for issuers
  - Present value savings from lower interest rates were greater than cost of insurance
  - Cost of insurance could be included in calculation of arbitrage yield, allowing issuer to earn back premium through proceeds investment
  - In California, bond insurance would often achieve 80% market penetration
    - Solid AA-rated credits would still find insurance to be cost effective
- The 21st Century saw emergence of several new AAA-rated insurers

After the World as We Knew it Ended

- Half of the municipal bond world—i.e., all insured bonds— has been downgraded: some $1.3 trillion in par value

- Insurance penetration fell to 8% in 2008, relative to 57% of the national market in 2005

- One insurer remains: Assured Guaranty (who acquired FSA and renamed it AGMC)
  - AA3/AAA/AA- ratings

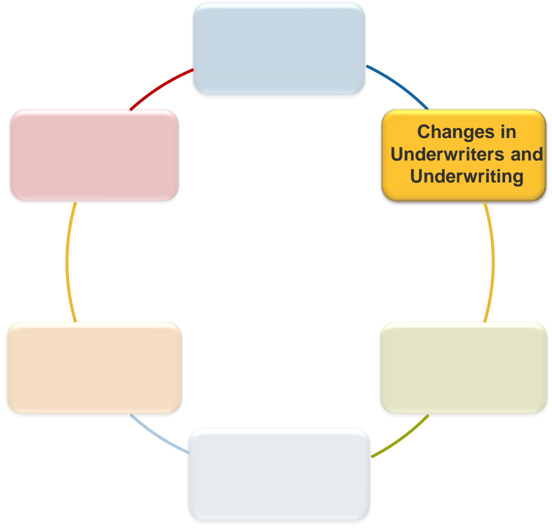
- Is there a future for bond insurance?
  - Some investors still want credit protection and the liquidity it brings
  - But many institutional investors not willing to give up much yield in return
  - The company with three AAA ratings may be a thing of history

- Often additional bonds require insurer consent, even legal amendment
  - Can you find anybody at home?
  - And what are their incentives to cooperate

- Legacy of sureties in lieu of cash funded debt service reserve funds

Letters-of-Credit

- The old days: credit and liquidity were cheap and plentiful for variable rate bonds
    - 20 basis point instruments were common
    - Bank ratings were stable
    - Long-term letters could be procured
- The last two years
    - Many ratings collapsed (e.g., Dexia, Depfa)
    - Bonds were put back to banks, especially when bond insurance was paired with bank liquidity
    - Reading old bank documents for outstanding bonds became a full time job
    - Refunding of auction rate and VRDO's that were matched with swaps for "synthetic fixed rate" strained the available liquidity market
- Now
    - Credit is expensive (140 basis points and higher for a new LOC)
    - Much fewer participants (though getting better)
    - Legal provisions even more bank-biased than ever



Changes in Underwriters and Underwriting

Fall of the Investment Banks

- Of the 8 largest underwriters of municipal bonds in 2007, only four remain in the municipal bond business and none of those four maintain their status as independent investment banking firms.

Rank	Firm	Amount in (millions)	Percent	Comment	
1	Citi	$61,890,000	14.6%	Continues to be the worlds largest financial services organization.	
2	Merrill Lynch	47,988,000	11.3	Plans for Banc of America to acquire Merrill were announced on September 14, 2008.	
3	UBS Securities	36,311,000	8.6	UBS announced plans to exit the municipal bond operations on May 6, 2008.	
4	Goldman Sachs	28,562,000	6.7	Announced plans to change status from an investment bank to a bank holding company on September 21, 2008; Warren Buffett plans to take a stake in Goldman.	
5	Morgan Stanley	25,532,000	6.0	Announced plans to change status from an investment bank to a bank holding company on September 21, 2008; Mitsubishi Financial Group plans to take a stake in Morgan Stanley.	
6	JP Morgan	25,514,000	6.0	JP Morgan was acquired by Chase Manhattan Bank on September 13, 2000.	
7	Lehman Brothers	24,838,000	5.9	Filed for chapter 11 bankruptcy protection on September 5, 2008; (the largest bankruptcy in U.S. history); Barclay has acquired much of Lehman's broker/dealer business.	
8	Bear Stearns	24,750,000	5.8	"Merged" with JP Morgan Chase on March 16, 2008, after having received an emergency bailout loan two days earlier.	
	Total	$275,385,000	64.9%		

= Firm continues to participate in the municipal market.

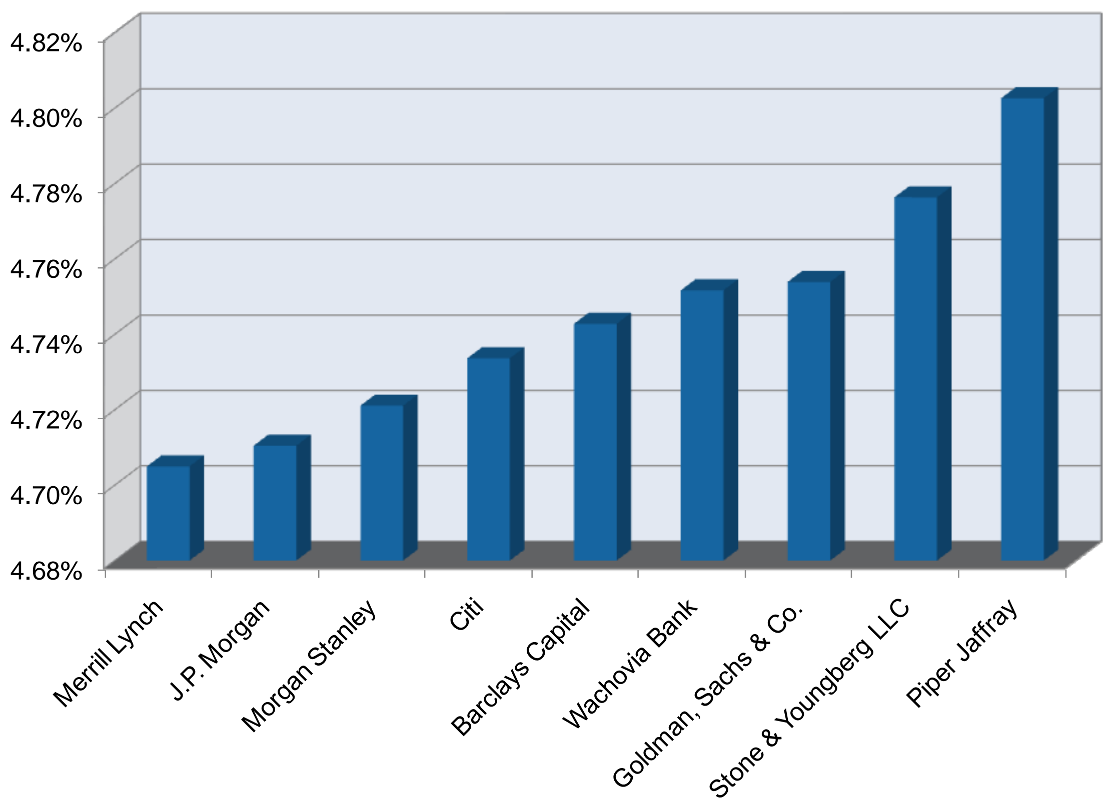
= Firm no longer exists or no longer participates in the municipal market

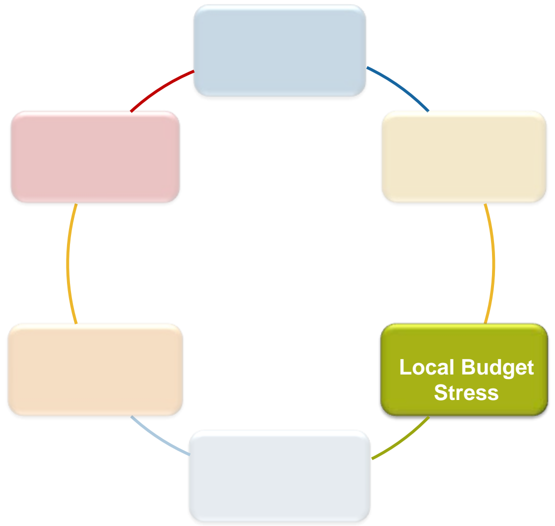
Changes in the Underwriting Environment

- Increased importance of regional firms with a major municipal focus
- Changes in willingness to underwrite
- Higher underwriting takedowns
- Changes in the buyer base
  - The diminished importance of "non-traditional" buyers such as hedge funds
  - The growing importance of "professional retail"
- Further increased use of negotiated sale to navigate challenging market

But Competitive Market is Still Alive and Successful for the Strongest Credits

County of Santa Clara General Obligation Bonds (Election of 2008) 2009 Series A	
Par Amount:	$350 million
Rating:	AA+
Sale Date:	May 5, 2009
Dated Date:	May 27, 2009
Maturity Date:	August 1, 2031





Local Budget Stress

Local Credit Challenges

- 2009-10 AV declines as much as 15% projected for some areas
  - Median home prices declined 39.9% statewide from February 2008
  - Prop 8 reassessments in most counties
  - Foreclosure activity off its 2008 peaks, but remains near record levels
  - Delinquencies as high as 13+% in some counties
- Sales tax decline hammering local revenue base
- Even diversified revenue bases—with utility taxes, business taxes, transfer taxes, TOT—are getting squeezed
- Increased chatter by cities regarding bankruptcy and default
- Investors have turned to favoring water and other "essential service" revenue bonds even over unlimited property tax-secured general obligation bonds

On the Expenditure Side: Pressure on Pension Costs

CalPERs Annual Rates of Return[1]

Year Ending 12/31

30.00%
20.00%
10.00%
0.00%
-10.00%
-20.00%
-30.00%

1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

2008
-27.1%

Rate of Return

[1] PERs Facts at a Glance, April 4, 2009.

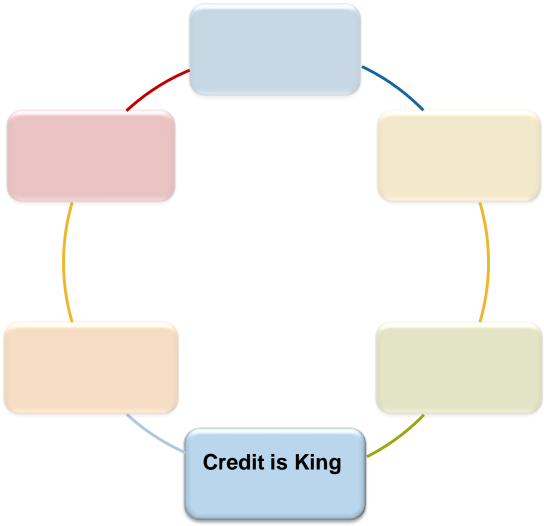
POBs are Again Being Discussed as a Budget Balancing Tool

- POBs can achieve budgetary savings in short-run if borrowing rate is lower than actuarially assumed interest rate.

- However, unlike a traditional refunding, POBs do not lock in savings over long-term, because the actuarial rate is not a fixed, guaranteed cost of funds.
  - The actuarial rate is higher than the bond cost, because retirement systems assume more risk and are exposed to more volatility in their investments than muni bond investors.
  - POBs are designed to take advantage of risk arbitrage, to accelerate reinvestment earnings and shrink unfunded obligations.

- Whether a POB program is successful over the long-run will depend on whether actual investment results exceed the cost of borrowing, which can only be known after many years.

- Moreover, POBs generally abandon the benefits of dollar cost averaging, increasing exposure to market risk. Thus, the timing of losses and gains matter!



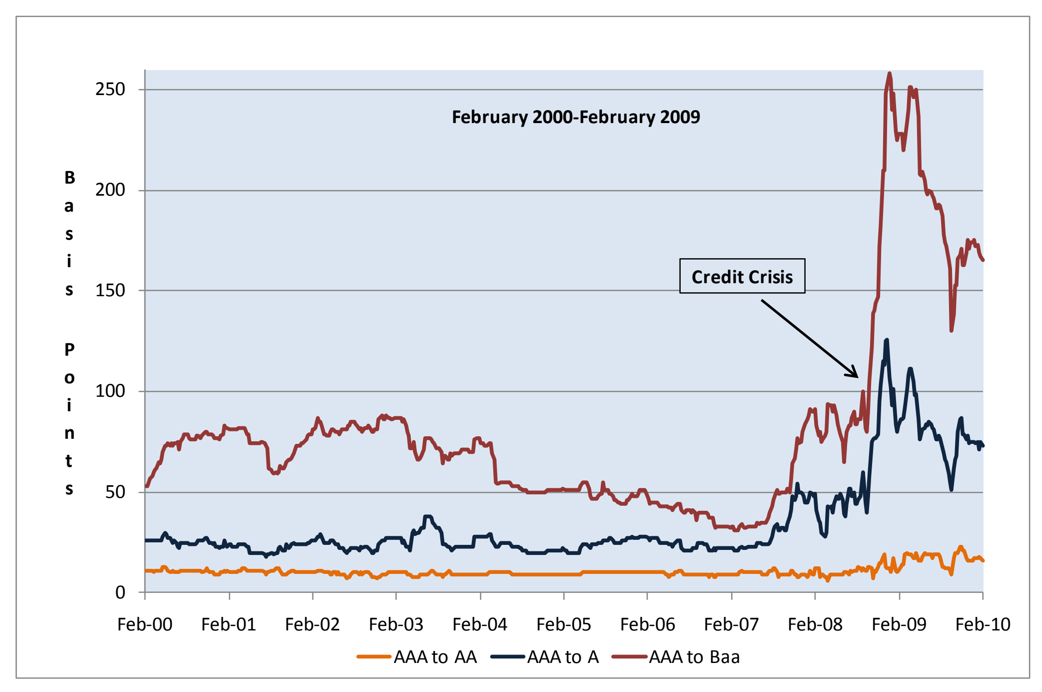
Credit is King

A Combination of Factors Spotlighting Credit

- In times of uncertainty, there is always a flight to quality
  - Disconnect between Treasuries vs. Municipals
  - Money managers were burned by toxic insurance and bank names
- Greater reliance on underlying ratings to determine the cost of funds
  - Even though many point fingers at the agencies' pre-crisis performance
  - Many institutional investors assign internal ratings
- Continuing debate on the relationship of municipal and other ratings
  - Before the crisis, much talk of "globalizing" the rating scale
  - S&P proceeded, while Moody's and Fitch put the project on hold for a while
- Often superficial factors will impact bond liquidity which affects pricing
  - "Name" value and market perceptions
  - Revenue "bonds" can price 50 basis points better than revenue "COPs"

Credit Spreads Widened During the Crisis

- Interest rates for municipal bonds = "AAA" interest rate + "credit spread"
- "Credit spread" represents the additional yield required to compensate investors for taking on more credit risk
- General Obligation bonds, essential service revenue bonds and "AA" or higher rated bonds are most in demand
- Credit spreads are tightening again for "A" rated credits, including COPs and Lease Revenue, but still wider than the "good old days"
- Very difficult market for BBB and unrated bonds, though also some improvement in that sector



Recent Credit Spreads in Today's Market

Interest Rate Spread

2.50%
2.00%
1.50%
1.00%
0.50%
0.00%

Glendale RDA (2/11/2010)
$26.97 MM (Baa2/A-)

Chula Vista COPs (2/10/2010)
$29.36 MM (A-)

Fresno Water System (1/21/2010)
$68.81 MM (A/A+)

Santa Monica CCD (1/26/2010)
$33.14 MM (Aa2/AA)

"AAA" MMD

2010 2012 2014 2016 2018 2020 2022 2024 2026 2028 2030 2032 2034

Maturity

Telling Your Credit Story

- Proactive investor outreach is more important this year, given the focus on underlying credit
- Direct conference calls and meetings with key purchasers to answer questions, walk though cash flow assumptions and projections
- Preliminary Official Statement still the key instrument for investor communication
- Allow for ample time with POS in the hands of investors – at least one week
- **Retail investors** are driving demand – retail order period may be advisable

Retail Sale Case Study: San Francisco COPs

- On May 12, 2009, the City sold $163 million COPs (“A1/AA-/A+”)
- The City received over 201 orders totaling over $335 million
- Retail order period - $86.2 MM of retail orders submitted
- Institutional order period - $222 MM of “going away” orders submitted
- 31% of the bonds were sold to retail investors in block sizes of $500K - $1 MM
  - Suggests strong participation by money managers, investment advisors, high net worth individuals
- 55% of the bonds were sold to institutional investors

Retail Orders	86,180,000
Institutional Orders	222,030,000
Member Orders	27,500,000
Total Orders	**$ 335,710,000**

KNN public finance

Retail Order Period – Distribution Summary

Distribution of Sales by Number of Orders Placed

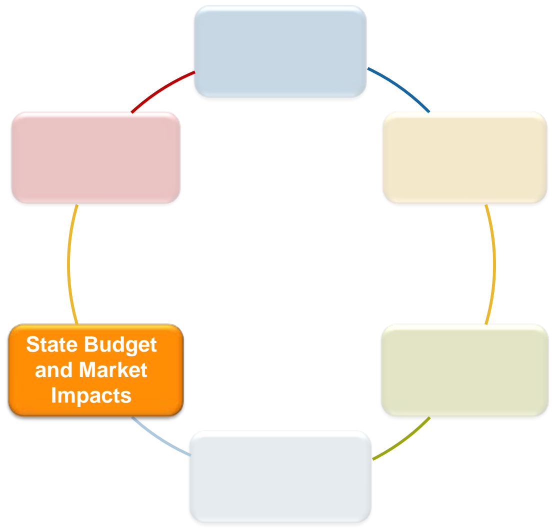
Bonds	Number of Orders	%
$0-100	35	21%
$101-250	29	18%
$251-500	35	21%
$501-999	10	6%
$1,000 *	56	34%

Distribution of Sales by Order Amount

Bonds	Par Amount (000's)	%
$0-100	2,280	3%
$101-250	6,005	7%
$251-500	14,490	17%
$501-999	7,405	9%
$1,000 *	56,000	65%

*No retail orders over $1 million were permitted.

- Over 74% of the retail orders were in the $500K - $1 MM size
- Large block sizes suggest strong participation by "professional retail" (e.g. money managers, investment advisors, bank trust departments & high net worth individuals)
- Smaller retail buyers placed 27% of the total retail orders



The State Budget and Market Impacts

The State of California: The Gift that Keeps on Giving

- The California penalty
  - State budget problems cast a shadow over the California market
  - Many investors simply avoiding investments in the State
  - The result are higher yields on California paper
  - The irony is that California used to have an advantage due to double income tax exemption
- The problem of supply
  - The State floods the market with higher yielding paper (e.g. Fall 2009)
  - Especially a problem with short-term notes (e.g. TRANs)
- The problem of a State that balances it budget by reallocating traditionally local resources

Issuance in 2009 – State of CA vs. Local Issuance

State of California
Breakdown of State versus Local Issuance Volume

State Issuance
Local Issuance
State to Local Issuance

Volume (Billions): $60, $50, $40, $30, $20, $10, $-

Ratio of State to Local Issuance: 60%, 50%, 40%, 30%, 20%, 10%, 0%

1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009

State of California – Fall 2009 Issuance

$22 bn Total Issuance
5-Yr Spread
10-Yr Spread
30-Yr Spread

Spread to AAA MMD (bps)
Par Amount Issued (Billions)

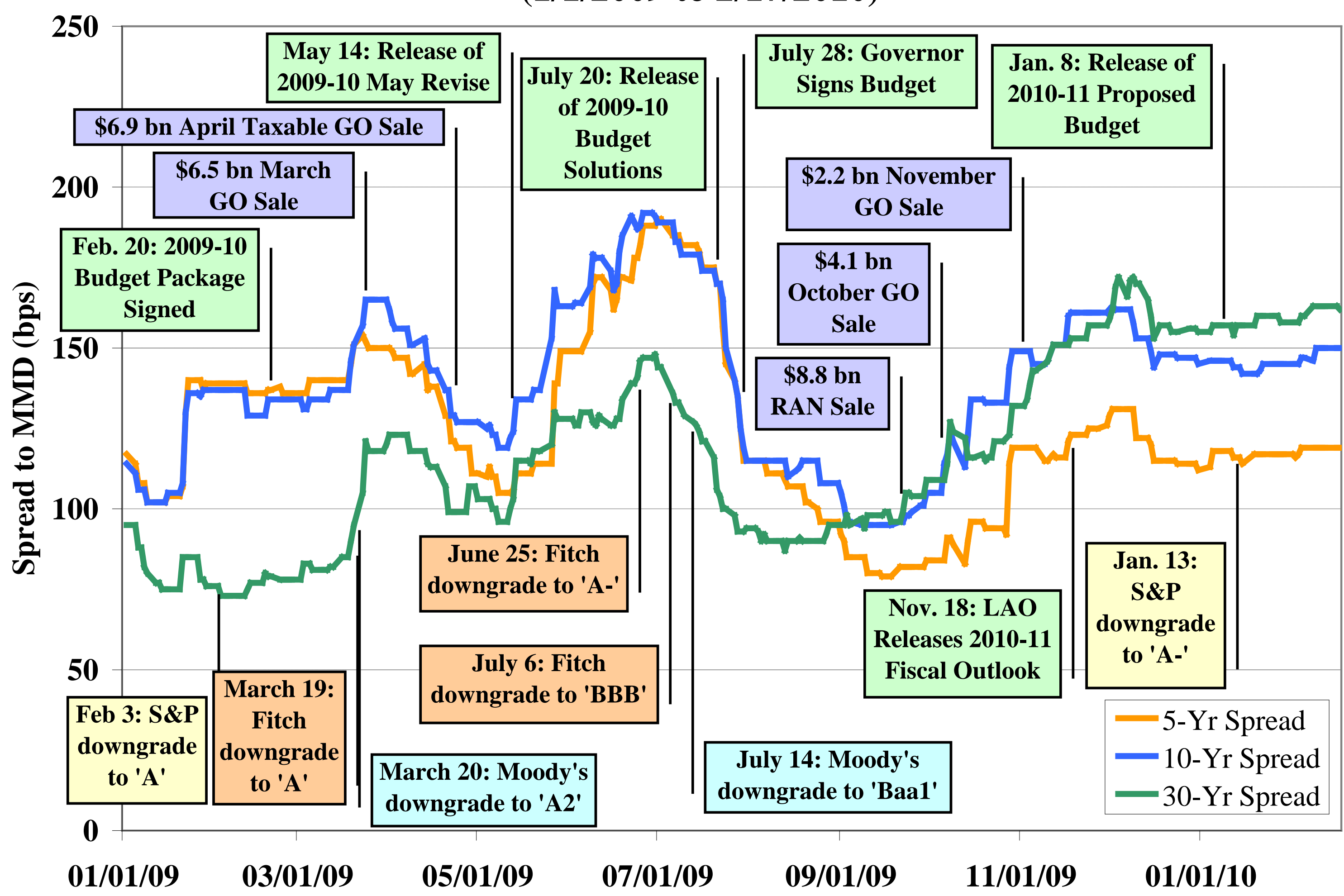
180
160
140
120
100
80
60
40
20
0

$25
$20
$15
$10
$5
$-

RANs - $8.8 bn
GO's - $4.1 bn
SPWB - $805 mm
ERBs - $3.4 bn
GO's - $2.2 bn
Prop. 1A - $1.9 bn
SPWB - $743 mm

9/22/2009
10/6/2009
10/21/2009
11/4/2009
11/19/2009

State of California – Pricing Spreads



Comparison of Pricing Spreads

Comparison of Various States
30-Year Spreads to 30-Year AAA MMD

Spread (Basis Points)

200
180
160
140
120
100
80
60
40
20
0

1/2/2009 | 3/2/2009 | 5/2/2009 | 7/2/2009 | 9/2/2009 | 11/2/2009 | 1/2/2010

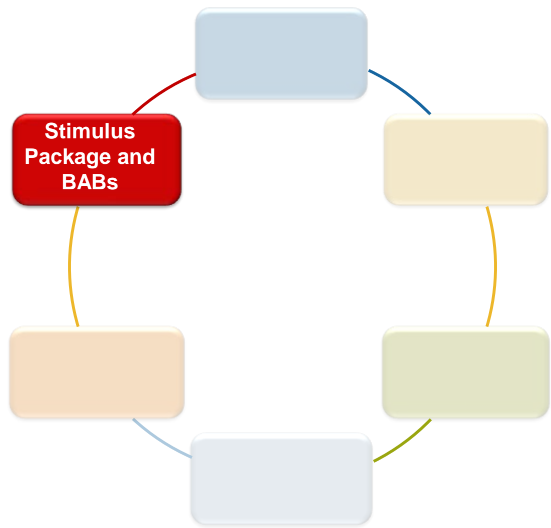
- New York (Aa3/AA/AA-)
- Florida (Aa1/AAA/AA+)
- Texas (Aa1/AA+/AA+)
- California (Baa1/A-/BBB)

State of California – Pricing Comparison

Sale Date Issue	10/8/2009 Cal GO		10/8/2009 Folsom Redev. Agcy		
Size	$1,313,090,000		$18,095,000		
Rating	Baa1/A/BBB		A		
Call Feature	10-Year		10-Year		
Maturity	Yield	Spread (bps)	Yield	Spread (bps)	Difference (bps)
2015	2.95%	92	3.62%	166	74
2016	3.37%	107	3.85%	163	56
2017	3.70%	118	4.07%	162	44
2018	3.93%	124	4.25%	162	38
2019			4.40%	164	
2020	4.28%	136	4.53%	166	30
2021	4.39%	136	4.64%	166	30
2022	4.47%	137	4.73%	168	31
2023			4.81%	169	
2024			4.89%	170	
2025	4.69%	138			
2029	4.90% - 5.00%	131 / 141	5.25%	171	30 / 40

* S&P downgraded the State G.O. credit to "A-" in early January 2010.

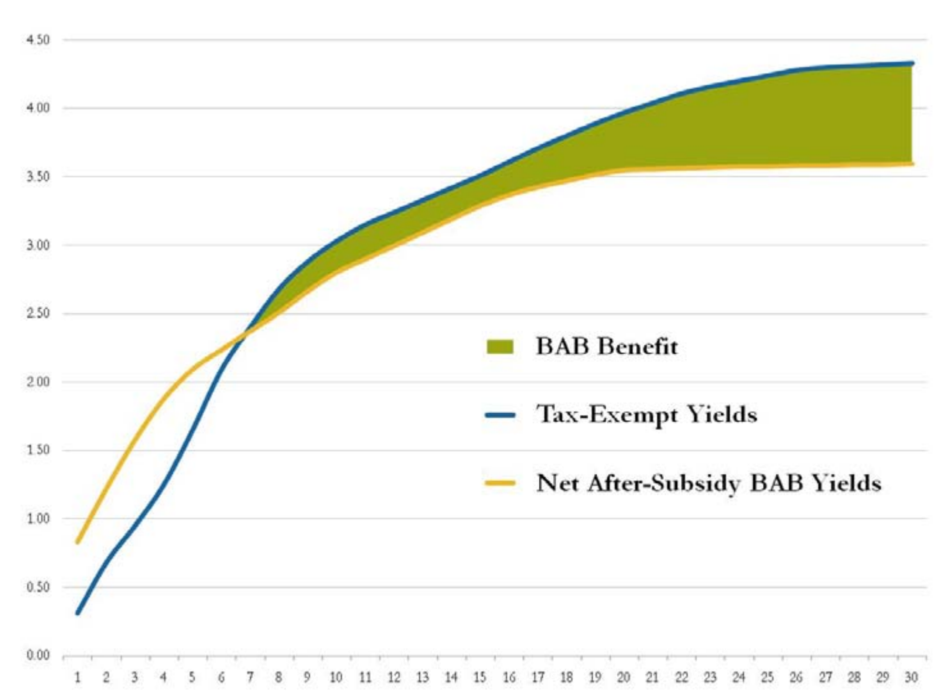
- Folsom Redevelopment Agency carries the same S&P credit rating as the State
- On a spread to AAA MMD basis, the State priced 74 basis points better than Folsom in 2015, and 30-40 basis points better in later maturities



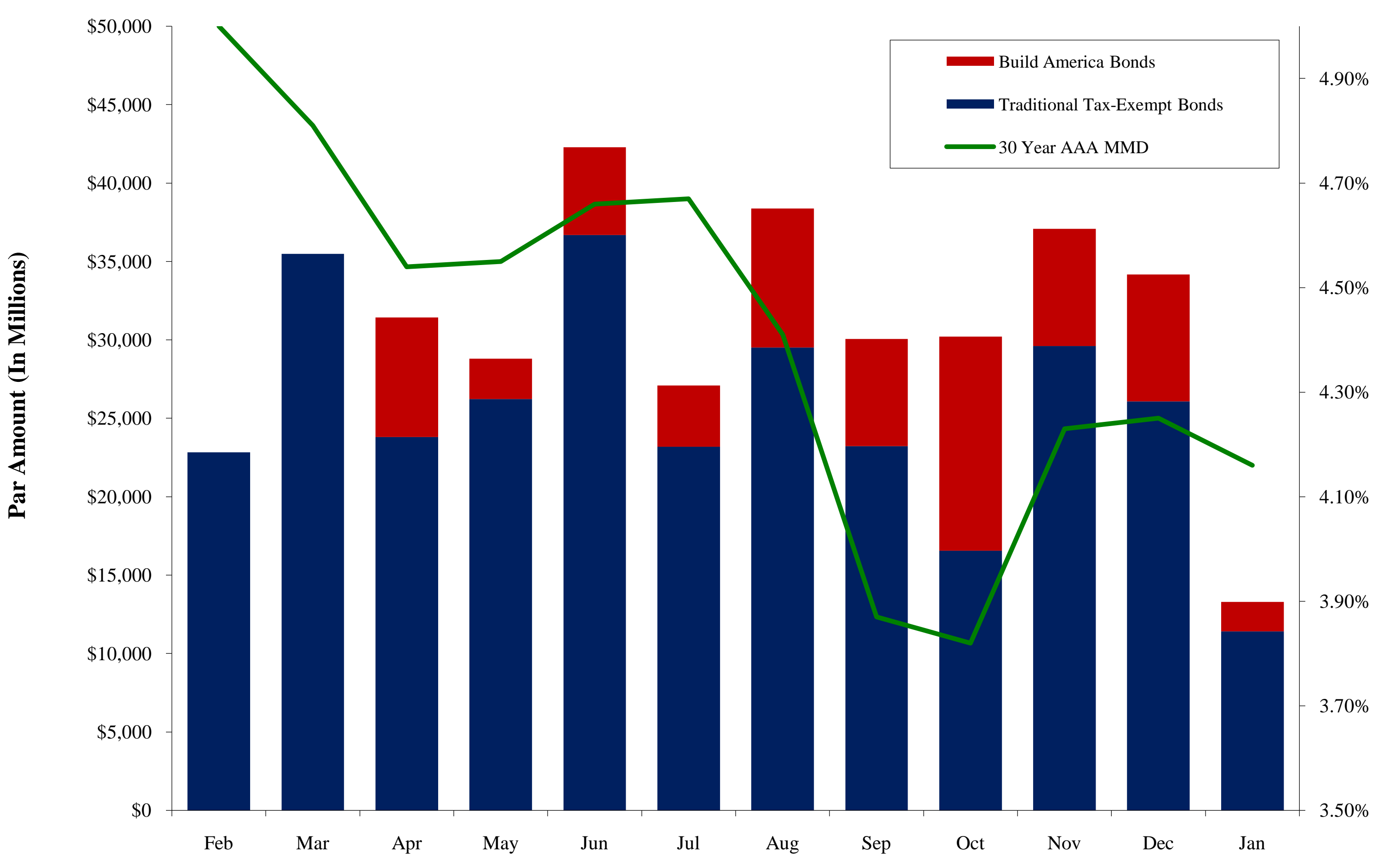
The Stimulus Package and BABs

Build America Bonds (BABs)

- Stimulus bill had a number of provisions for expanded bond powers
- The big winner proved to be Build America Bonds, taxable bonds for which the federal government provides an annual subsidy equal to 35% of interest to offset the increased cost
- About $75 billion issued since first issue April 15, 2009, about 20% of the municipal market
- Currently a significant advantage to the issuer for maturities in the 20 - 30-year range
- Typical strategy: traditional tax-exempt bonds in early maturities and longer maturities marketed as BABs ("hybrid" BABs)
- <u>Added benefit</u>: Diminished supply in tax-exempt municipal market



BAB Issuance Increases Tax-Exempt Demand



BABs Product Continues to Develop

- Early transactions dominated by mega deals with a traditional taxable structure
  - Large bullet maturities rather than level debt service
- Taxable investors favor "make-whole" calls, which are expensive and rarely (if ever) used
  - More transactions being marketed to traditional municipal buyers with municipal features.
  - 10 year par call at additional 50 bp in interest rate
- BABs spread to Treasuries have narrowed significantly since the first transactions in April 2009 from 365 bps to the 30-year Treasury to recent EBMUD at a 120 bps spread
- Decision should be based primarily on the numbers, but there are other considerations
  - Analyzing the cost/benefit of call optionality
  - Accepting some tax risk, including risk of audit and future elimination of subsidy
  - Accepting additional administrative responsibility
  - 35% subsidy level expires after 2010; 28% subsidy level is contemplated

30-Year Treasury	Spread	BABs Rate	35% Subsidy	28% Subsidy	Difference
4.50%	1.50%	6.00%	3.90%	4.32%	0.42%
4.50%	2.00%	6.50%	4.23%	4.68%	0.46%
4.50%	2.50%	7.00%	4.55%	5.04%	0.49%
4.50%	3.00%	7.50%	4.88%	5.40%	0.53%

Conclusions

- Credit quality and credit ratings matter more than ever
  - Wider credit spreads for all transactions, especially those rated below "AA"
- Bond insurance/LOCs may not be available and more expensive when it is available
  - Particularly missed in BBB market and helping to homogenize pooled credits
- Lower Bonding Capacity
  - Higher borrowing cost in certain cases (e.g. redevelopment)
  - Debt Service surety bonds previously used to "boost" capacity generally no longer available
  - Investment rates of bond proceeds much lower than interest rates on your bonds.
- Execution Risk
  - Everything is harder than it used to be
  - Negotiated sale may be preferable for most issuers
  - Allow for a longer planning horizon to receive funds
- Positive Factors for 2010
  - Attractive construction environment
  - Relatively low interest rates
  - BABs helped drive up demand for tax-exempt bonds (35% subsidy likely goes away after 12/31/10)