Northern California Power Agency

February 2014 Finance Committee Materials

February 19, 2014

The PFM Group

Municipal Market Update

2008 Hydroelectric Bonds LOC Expiration

MARKET SNAPSHOT

- The municipal market in 2013 can be characterized by market volatility, rising long term interest rates, and significant outflows from municipal bond funds
- In December 2013, the FOMC announced it would taper its quantitative easing program by $10 billion per month beginning in January 2014. After more dramatic reactions to earlier announcements of tapering, investors generally reacted calmly to the news and so far in 2014, tax-exempt interest rates have declined materially, driven by a supply demand mismatch, with issuance lagging considerably compared to reinvestment needs

February 18, 2014

Year	Maturity	MMD	UST	Year	Maturity	MMD	UST
1	2015	0.17%	0.09%	16	2030	3.23%	-
2	2016	0.31%	0.30%	17	2031	3.32%	-
3	2017	0.51%	0.67%	18	2032	3.40%	-
4	2018	0.80%	-	19	2033	3.48%	-
5	2019	1.09%	1.48%	20	2034	3.53%	3.44%
6	2020	1.50%	-	21	2035	3.58%	-
7	2021	1.85%	-	22	2036	3.63%	-
8	2022	2.16%	-	23	2037	3.67%	-
9	2023	2.38%	-	24	2038	3.71%	-
10	2024	2.51%	2.71%	25	2039	3.75%	-
11	2025	2.66%	-	26	2040	3.79%	-
12	2026	2.79%	-	27	2041	3.81%	-
13	2027	2.91%	-	28	2042	3.83%	-
14	2028	3.02%	-	29	2043	3.84%	-
15	2029	3.13%	3.19%	30	2044	3.85%	3.68%

Source: Thomson Reuters

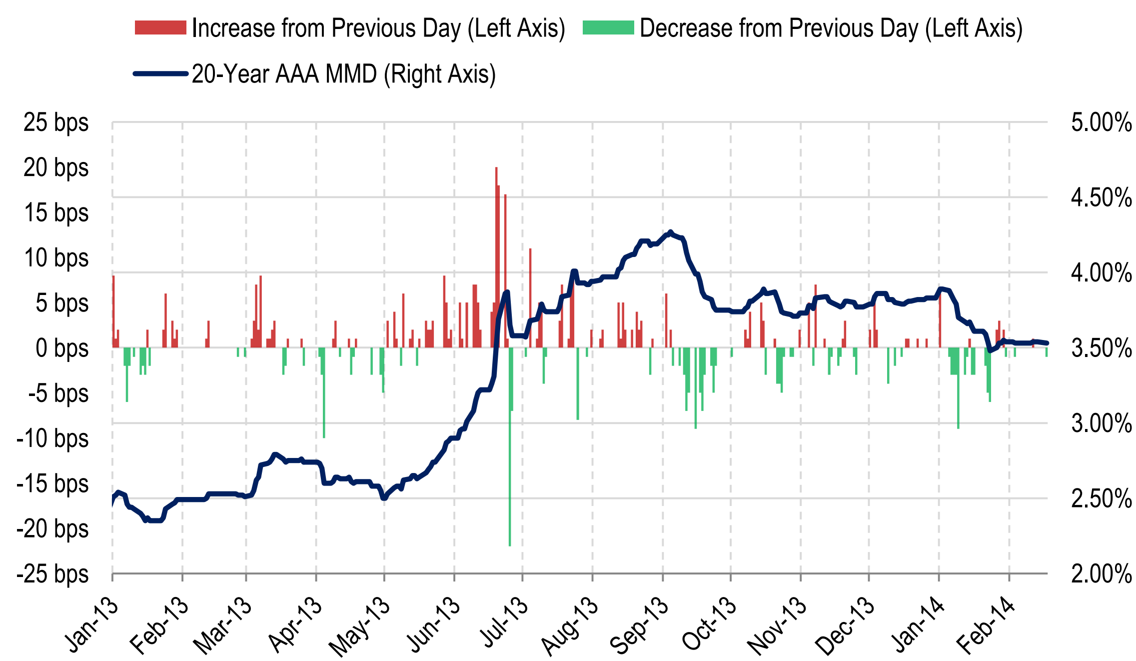
BENCHMARK TAX-EXEMPT INTEREST RATE PROGRESSION

- After trading in a relatively narrow band for the first four months of the year, benchmark tax-exempt rates increased considerably over the summer, before retreating over the month of September, trading in a relatively narrow band during the final quarter of 2013, and decreasing so far this year
- Since the start of 2014:
  - 2-Year AAA MMD: - 4 bps
  - 5-Year AAA MMD: - 23 bps
  - 7-Year AAA MMD: - 25 bps
  - 10-Year AAA MMD: -28 bps
  - 20-Year AAA MMD: - 36 bps
  - 30-Year AAA MMD: -35 bps

20-Year AAA MMD Rate History

(June 1, 1981 Inception to February 18, 2014)

(January 2, 2013 to February 18, 2014)



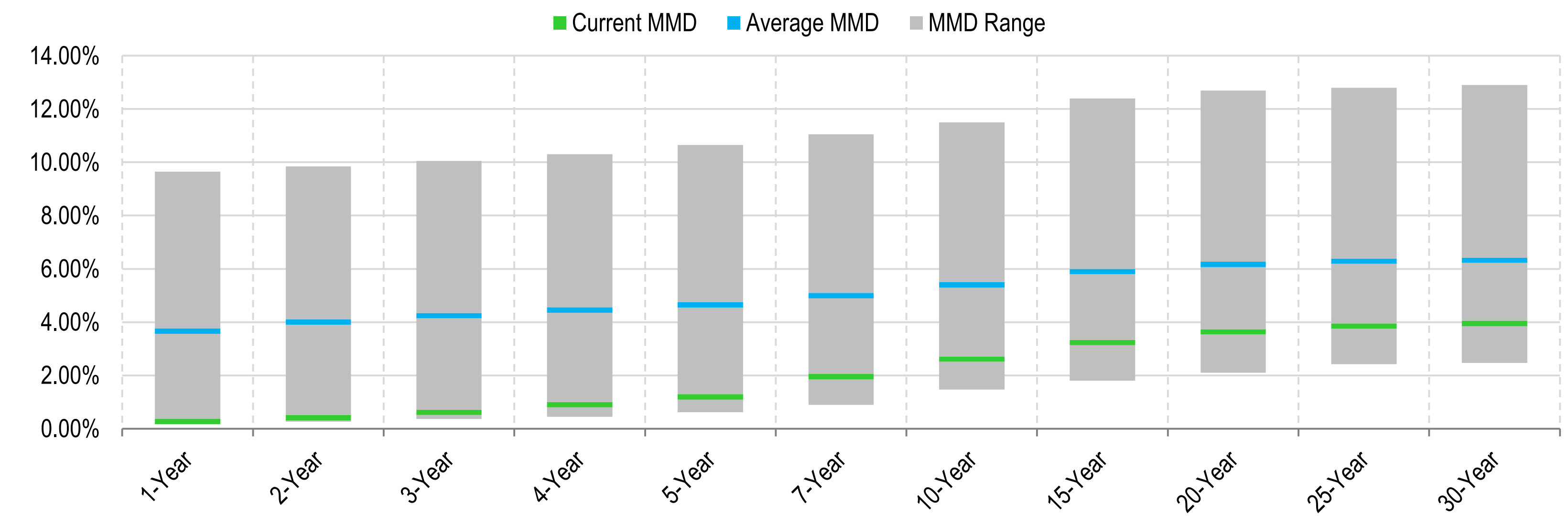
Source: Thomson Reuters

BENCHMARK TAX-EXEMPT INTEREST RATE POSITION

- The increase in benchmark tax-exempt rates since May 2013 has brought rates to levels well off the all-time lows reached at the end of November 2012—on the intermediate- and long-end of the yield curve, AAA MMD rates are currently approximately 130 bps – 140 bps higher, but have fallen over 35 bps since the start of 2014
  - Interest rates remain close to their historic lows on the short-end of the yield curve
  - Taking a longer view, interest rates across the yield curve are below their long-term averages

AAA MMD Rate Position

(June 1, 1981 Inception to February 18, 2014)



Summary of February 18, 2014 vs. Historical (since June 1, 1981 Inception) MMD Rates

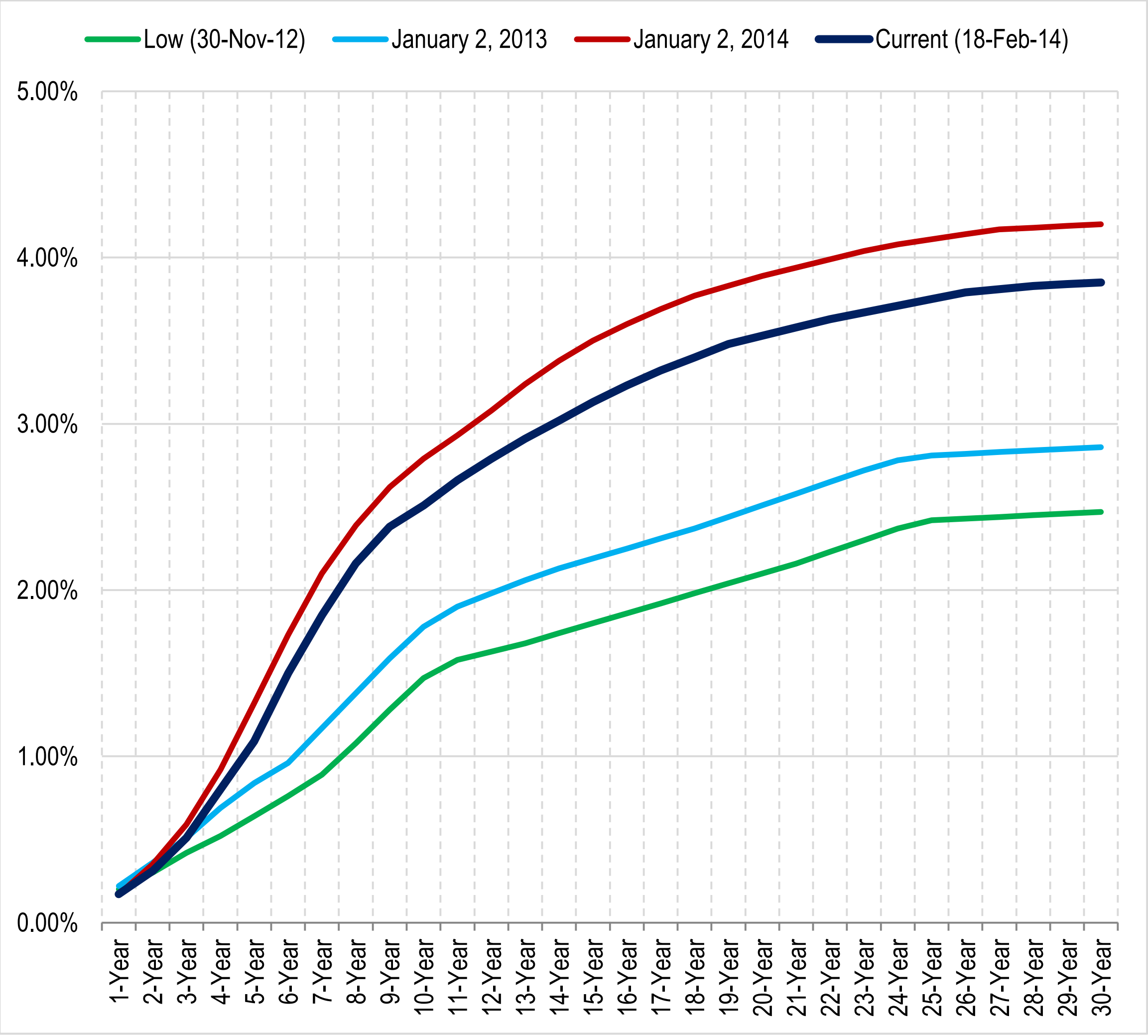
Statistic	1-Year	2-Year	3-Year	4-Year	5-Year	7-Year	10-Year	15-Year	20-Year	25-Year	30-Year
February 18, 2014	0.17%	0.31%	0.51%	0.80%	1.09%	1.85%	2.51%	3.13%	3.53%	3.75%	3.85%
Average since Inception	3.36%	3.70%	3.94%	4.16%	4.35%	4.69%	5.10%	5.60%	5.87%	5.99%	6.02%
Spread to Average	-3.19%	-3.39%	-3.43%	-3.36%	-3.26%	-2.84%	-2.59%	-2.47%	-2.34%	-2.24%	-2.17%
Minimum	0.17%	0.26%	0.36%	0.44%	0.62%	0.89%	1.47%	1.80%	2.10%	2.42%	2.47%
Spread to Minimum	0.00%	0.05%	0.15%	0.36%	0.47%	0.96%	1.04%	1.33%	1.43%	1.33%	1.38%
Maximum	9.65%	9.85%	10.05%	10.30%	10.65%	11.05%	11.50%	12.40%	12.70%	12.80%	12.90%

Source: Thomson Reuters

AAA MMD Yield Curve Movement

- The MMD yield curve has steepened as long-term interest rates have risen more than short-term interest rates

AAA MMD Yield Curve Movement



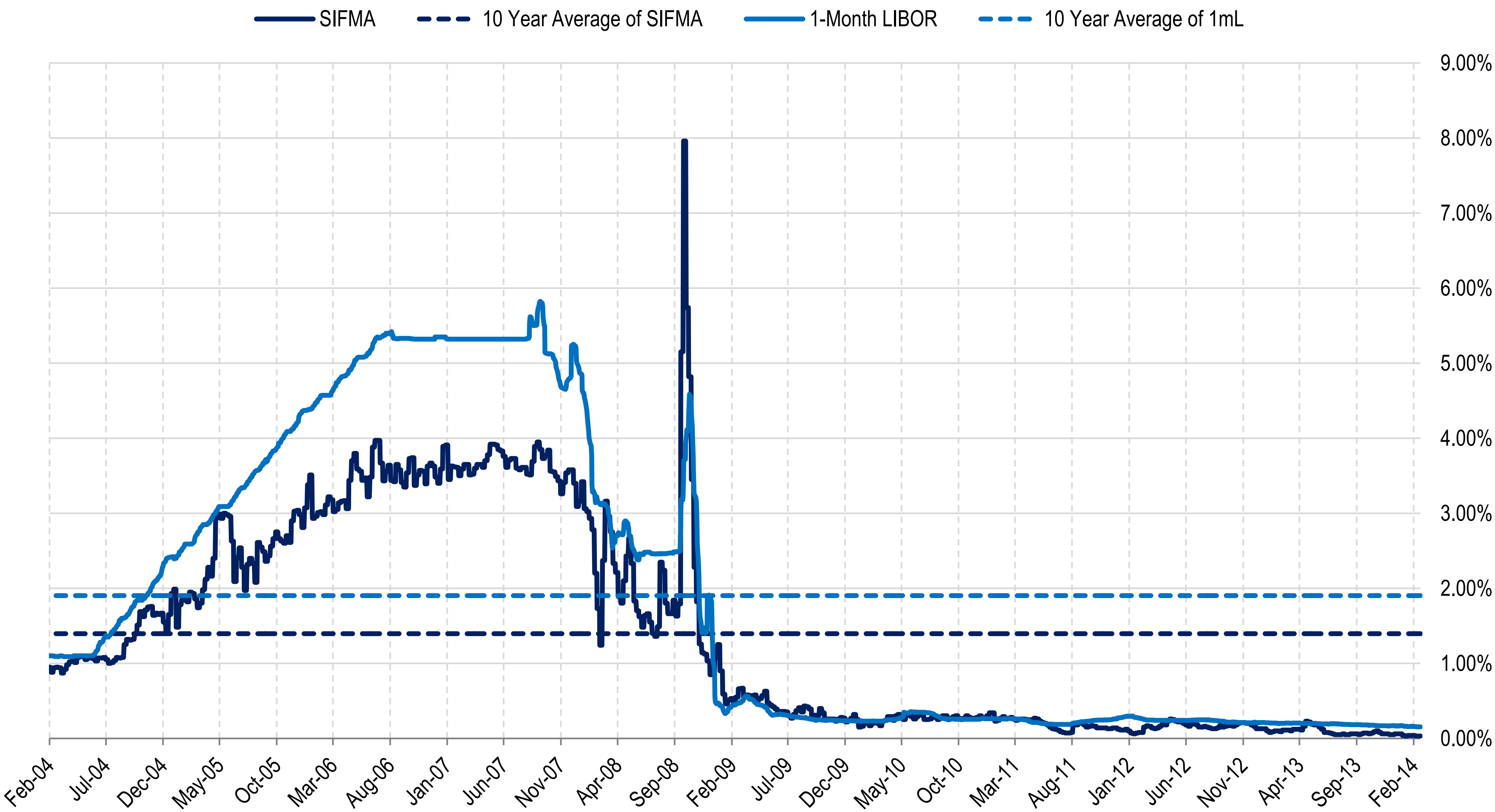
Maturity	Δ Since 11/30/13	Δ Since 01/02/13	Δ Since 01/02/14
2014	-0.03%	-0.05%	0.00%
2015	0.01%	-0.05%	-0.04%
2016	0.09%	0.00%	-0.08%
2017	0.28%	0.11%	-0.12%
2018	0.45%	0.25%	-0.23%
2019	0.74%	0.54%	-0.23%
2020	0.96%	0.68%	-0.25%
2021	1.08%	0.78%	-0.23%
2022	1.10%	0.79%	-0.24%
2023	1.04%	0.73%	-0.28%
2024	1.08%	0.76%	-0.27%
2025	1.16%	0.81%	-0.29%
2026	1.23%	0.85%	-0.33%
2027	1.28%	0.89%	-0.36%
2028	1.33%	0.94%	-0.37%
2029	1.37%	0.98%	-0.37%
2030	1.40%	1.01%	-0.37%
2031	1.42%	1.03%	-0.37%
2032	1.44%	1.04%	-0.35%
2033	1.43%	1.02%	-0.36%
2034	1.42%	1.00%	-0.36%
2035	1.40%	0.98%	-0.36%
2036	1.37%	0.95%	-0.37%
2037	1.34%	0.93%	-0.37%
2038	1.33%	0.94%	-0.36%
2039	1.36%	0.97%	-0.35%
2040	1.37%	0.98%	-0.36%
2041	1.38%	0.99%	-0.35%
2042	1.38%	0.99%	-0.35%
2043	1.38%	0.99%	-0.35%

Source: Thomson Reuters

SHORT-TERM INTEREST RATE HISTORY

- Short-term rates remain at historically low levels

SIFMA and 1-Month LIBOR History and Position
(February 1, 2004 to February 18, 2014)

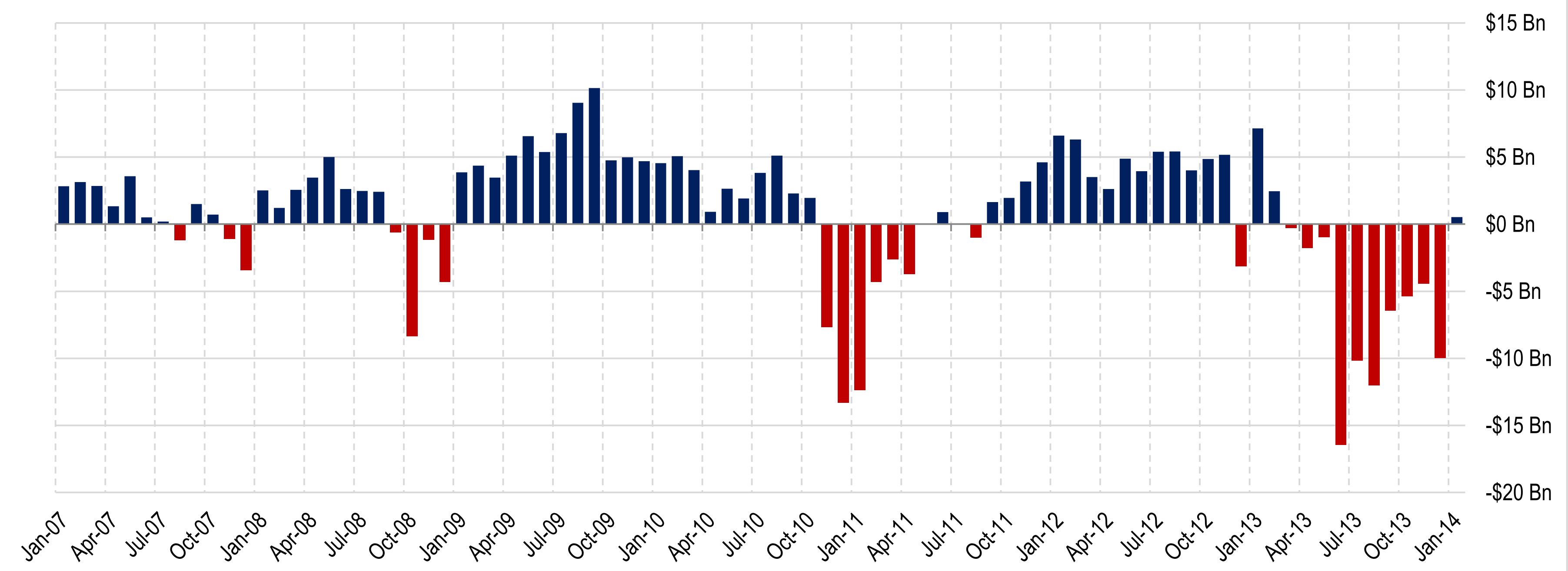


Source: Bloomberg

MUNICIPAL MARKET DEMAND

- Tax-exempt bond funds experienced significant net outflows of nearly $60 billion in 2013
  - — Trend was a reversal of 2012 which saw net inflows of almost $50 billion
  - — Outflows since June 2013 year totaled almost $65 billion
  - — December 2013 was the tenth consecutive month of outflows
- Given the January 1 coupon redemption date, municipal bond funds typically see inflows during January
  - — In 2014, supply/redemption dynamics should counter the impact of any continued outflows in the municipal market

Net Long-Term Municipal Bond Mutual Fund Flows
(January 2007 to January 2014)



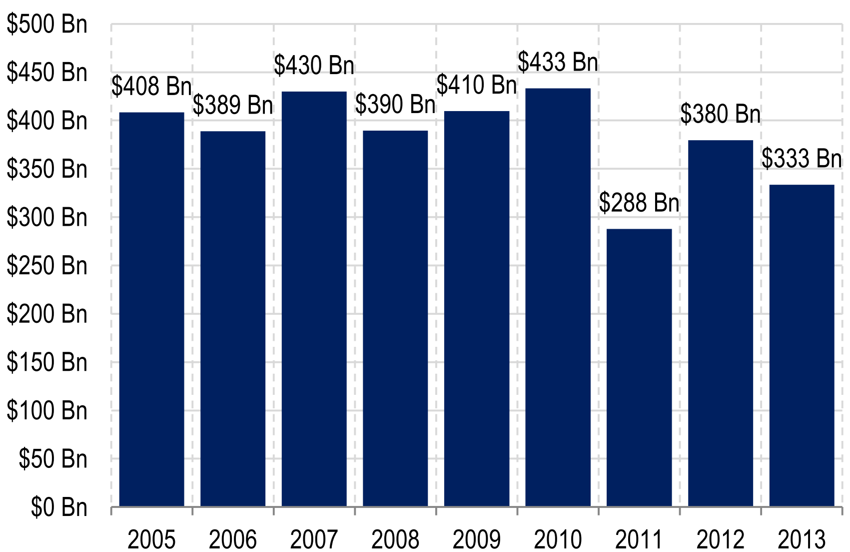
Source: Investment Company Institute

MUNICIPAL MARKET SUPPLY

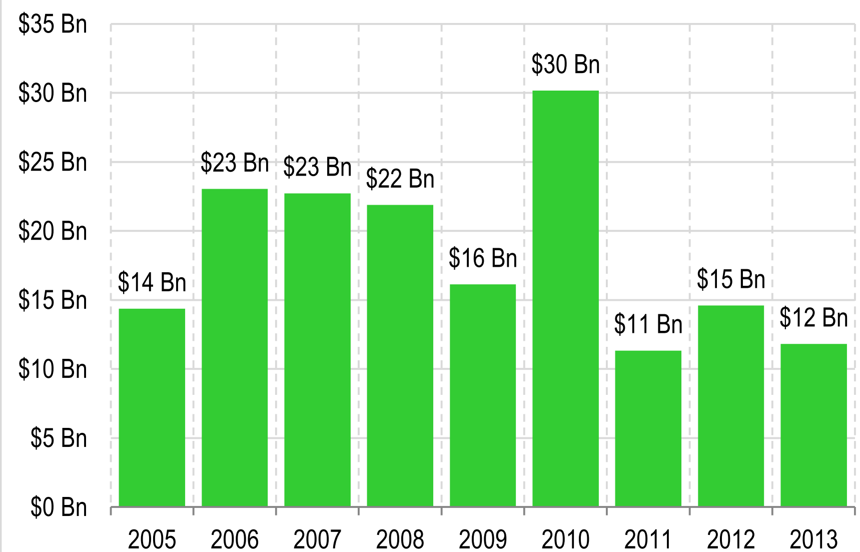
- Overall municipal market volume in 2013 fell 12% to $333 billion from $380 billion in 2012 as volatility in the markets and rising interest rates deterred both new money and refunding issuances
- Public power volume in 2013 fell 19% to $12 billion from $15 billion in 2012
  - — 4% of total municipal issuance, in line with 2011 and 2012, and down from 7% in 2012
  - — Issuance was dominated by a handful of issuers: LIPA, Santee Cooper, LADWP, LCRA, and PREPA accounted for over half of all public power volume
- Various market participants are forecasting a 10-15% decline in new issue volume in 2014 to $280-$300 billion as a result of a combination of lower refunding activity and modest new money financing.

Issuance Volume History
(2005 - 2013)

Overall Municipal Market Volume



Public Power Volume



Source: Thomson Reuters

BOND YIELD FORECASTS

- The table below provides an average of interest rate forecasts by industry professionals compiled

The Street's Interest Rate Forecast (As of February 18, 2014)							
Average Forecasts	**Current**	**Q1 14**	**Q2 14**	**Q3 14**	**Q4 14**	**Q1 15**	**Q2 15**
30-Year UST	3.68%	3.85%	3.99%	4.11%	4.23%	4.31%	4.42%
10-Year UST	2.71%	2.91%	3.06%	3.20%	3.35%	3.48%	3.60%
2-Year UST	0.30%	0.41%	0.50%	0.62%	0.77%	0.88%	1.04%
3M LIBOR	0.23%	0.28%	0.31%	0.34%	0.38%	0.43%	0.54%
Fed Funds Target Rate	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.38%

- Most economists see a steady rise in rates as the Federal Reserve phases out its Quantitative Easing program
  - However, the Federal Reserve is expected to maintain the Federal Funds rate at the 0.00% - 0.25% level through 2014 as inflation remains below the Federal Reserve’s long run goal and the unemployment rate is still at 6.7%

Source: Bloomberg; Averages are Bloomberg Weighted Averages as of February 18, 2014

FEDERAL DEBT CEILING BILL AND SEQUESTRATION UPDATE

- The President signed a debt ceiling bill over the weekend, which frees up federal borrowing capacity until March of 2015, eliminating the chance of a default in that time period
  — As a result, the SLGS program has been reinstated

- The bill also includes an amendment which will extend sequestration (including cuts to subsidies for BABs and other direct pay subsidy bond programs) for an additional year, to 2024
  — The December 2013 bipartisan budget agreement included a 2-year extension of the sequestration beyond the initially planned 2021 final year out to 2022 and 2023
  — The current federal fiscal year subsidy reduction is 7.2%. This is reset every year on October 1

2008 HYDROELECTRIC BONDS LOC EXPIRATION

SUMMARY OF 2008 HYDROELECTRIC BONDS

- NCPA's 2008 Hydroelectric Bonds are backed by a Letter of Credit from Citibank, N.A.
  - — These facilities expire on Sep. 27, 2014
  - — The fee for these facilities is 50 bps
- NCPA last renewed the facilities with Citi back in September 2011 for three years
- NCPA and Hydroelectric Project Members should begin considering steps to replace / renew the facilities
  - — New LOC fees should be lower than the current 50 bps level; however, a consideration will be if any new proposed fees from a different provider will be low enough to justify the additional costs associated with a replacement versus a renewal
- The 2008 Hydroelectric Bonds have been trading well

Summary of 2008 Hydroelectric Bonds		
Feature	**2008 A**	**2008 B**
Par Amount	$85,160,000	$3,165,000
Par Amount Outstanding	$85,160,000	$2,365,000
Final Maturity	July 1, 2032	July 1, 2020
Security Type	VRDBs	VRDBs
Tax Status	Tax-Exempt	Taxable
Liquidity Type	Letter of Credit	Letter of Credit
Liquidity Provider	Citibank, N.A.	Citibank, N.A.
Liquidity Provider Ratings	LT: A2/A/A ST: P-1/A-1/F1 Stable/Stable/Stable	LT: A2/A/A ST: P-1/A-1/F1 Stable/Stable/Stable
Liquidity Termination	September 27, 2014	September 27, 2014
Current Liquidity Cost	50 bps	50 bps
Credit Ratings	S&P: AAA/A-1 ; Fitch: AA/F1	S&P: AAA/A-1 ; Fitch: AA/F1
Underlying Credit Ratings	S&P: A+ ; Fitch: A+	S&P: A+ ; Fitch: A+
Mode	Weekly	Weekly
Remarketing Agent	Citigroup Global Markets	Citigroup Global Markets
Latest Trading Level	0.03%	0.12%
Hedge Status	Hedged	Unhedged (LIBOR Receiver)
Swap Counterparty	Citibank, N.A.	Citibank, N.A.
Reserve Fund	No	No

- The 2008A Hydroelectric Bonds are hedged by a fixed-payer swap with Citibank and the 2008B Hydroelectric Bonds have an associated LIBOR receiver swap also with Citibank

Summary of 2008 Hydroelectric Bond Swaps						
Related Series	**NCPA Pays**	**NCPA Receives**	**Maturity Date**	**MTM Value**	**Current Notional**	**Bank Counterparty**
2008A	3.8190%	54% of USD-LIBOR + 0.54%	07/01/2032	($15,911,573.83)	$85,160,000.00	Citibank, N.A
2008B	USD-LIBOR	5.2910%	07/01/2032	$274,110.62	$1,320,505.00	Citibank, N.A