Municipal Market Weekly

Ramirez Municipal Strategy

Municipals largely underperformed last week due to continued secondary market oversupply, elevated BWICs and constrained market liquidity. BWICs averaged $1 bil. daily last week, or +37% above average and dealer balance sheets remained heavy with unsold inventory. Technical factors are otherwise supportive of prices with relatively muted new issue supply YTD (-28% YoY) and healthy fund inflows (+$407 mil. last week, +$3.6 bil. YTD). The new issue calendar last week of $8.7 bil. was generally well received (e.g. State of CAL GO), although State of MD GO and Wash GO still have unsold balances. On the week, Muni 5s30s bear steepened +2 bps to 109 bps as the 5yr spot was cut +2 bps to 1.98% and the 30yr spot was cut +4 bps to 3.07%. Treasury 5s30s in contrast bear flattened -3 bps to 50 bps with a +5bps yield increase in the 5yr to 2.66% and a +2 bp increase in the 30yr yield to 3.16%. The Treasury market was influenced by mixed economic data on jobs and wages, Trump's steel / aluminium tariffs, resignation of White House economic advisor Cohn over the tariffs, North Korea's invitation to meet with Trump (and him accepting on the spot), and the ECB keeping rates unchanged. The key US economic data last week was Feb nonfarm payrolls beating expectations (313k vs 205k consensus) and Feb average hourly earnings missing expectations (0.1% vs 0.2% consensus). The S&P Main Muni index returned -11 bps on the week, +4 bps in March, and -129 bps YTD, outperforming Treasuries which returned -12 bps on the week, -4 bps in March, and -215 bps YTD. Notably, short-duration Munis (eff dur ~2yrs) are the only sector with positive YTD returns, up +27bps.

Muni demand generally remains strong due to outperformance in short-duration and the tax-exempt nature of the product, especially specialty retail demand, given the now limited deductibility of SALT and despite fair-to-rich valuations for short paper (e.g. 2yrs @69% UST vs 85% UST 3yr avg; 5yrs@ 75% UST vs 82% UST 3yr avg). High-tax states NY and Cal with negative net supply are prime examples of this demand as general market names in both of these states are fairly well bid, particularly inside 10yrs. However, the Muni market overall appears stuck in a rut. We are now 10 weeks into 2018 and the market remains plagued by secondary market oversupply, partially from the Dec, 2017 deluge, but also from accounts liquidating and/or repositioning portfolios to a shorter duration posture from longer durations. The elevated level of BWICs of $1 bil. + on a daily basis is indicative of this phenomenon. Lack of investor sponsorship for maturities 10yrs and out is contributing to the low turnover and dealers are still heavy with inventory (+$22.7 bil., or +30% above average at Feb 28) and are therefore generally reluctant to buy offerings maturing beyond 10yrs. Investor preference for shorter duration is rational given fear of higher/faster inflation growth and adverse effects of a resulting steeper curve. The acute secondary supply / demand mismatch means that Munis will likely struggle to find a footing until the logjam is cleared, which likely means in this case that Munis 10yrs and out need to get cheaper before getting stronger. We suspect this will occur to the extent inflation surprises to the upside (Feb CPI?) and the curve dramatically bear steepens. For this reason, we continue to like 5-7 yrs eff duration using longer duration 5%+ coupons with shorter calls (5-8 yr calls) for optimization of carry, rolldown, and reinvestment opportunities (See Pg 2 for simulations).

Gross supply YTD is down -28% YoY ($49.3 bil.) which is relatively in-line vs our full-year estimate of gross supply of -27% YoY ($317 bil.). Issuance last week was a relatively low $8.7 bil. and supply this week remains light at only $6.3 bil., led by two large NY transactions, including $1 bil. NYC TFA (negotiated) and $1.3 bil. NYS Sales Tax (competitive). These transactions will likely feature more short par calls, which appear to be gaining traction with both issuers and investors. Net market supply is -$9.46 bil. over the next 30 days, which includes +$7.5 bil. new issues, -$10.4 bil. maturing, and -$6.6 bil. announced calls. The states that stand to experience the largest change in outstanding debt include New York (-$1.40 bil.), Georgia (-$929 mil.), Texas (-$717 mil.), California (-$710 mil.), and Illinois (-$538 mil.).

Rates markets this week should be primarily affected by three events through Wed. The first event is the US Treasury sale of $34 bil. of Treasury supply, including $21 bil. of 10yr notes and $13 bil. of 30yr bonds today and Tues (demand for the 10yr bond today garnered a 2.889% yield bid-to-cover of 2.5). The second event will likely be Tuesday's release of CPI for Feb by BLM. Most economists expect that inflation slowed in Feb after Jan's surprise uptick, although another strong inflation reading for Feb could pressure rates. The third event is Wed's speech by Draghi of the ECB to explain the bank's bond purchase policy that is currently restraining rates in Europe. And of course, we have Trump vs Stormy Daniels / 60 Minutes.

Muni Performance & Relative Value

MMD/UST Ratios

	2018						WTD		MTD		YTD	
Mty	12/29/17	2/28/18	3/2/18	3/9/18	3y Avg	Value	Ratios	Perf	Ratios	Perf	Ratios	Perf
1	81	67	68	**71**	93	Fair	2.9	Under	3.8	Under	-10.2	Out
2	82	68	68	**69**	85	Rich	1.1	Under	1.1	Under	-13.2	Out
5	76	75	75	**75**	82	Fair	-0.6	Out	-0.9	Out	-1.2	Out
10	81	87	86	**86**	93	Rich	0.0	Under	-1.3	Out	4.6	Under
30	92	98	97	**97**	102	Fair	0.7	Under	-1.1	Out	5.7	Under

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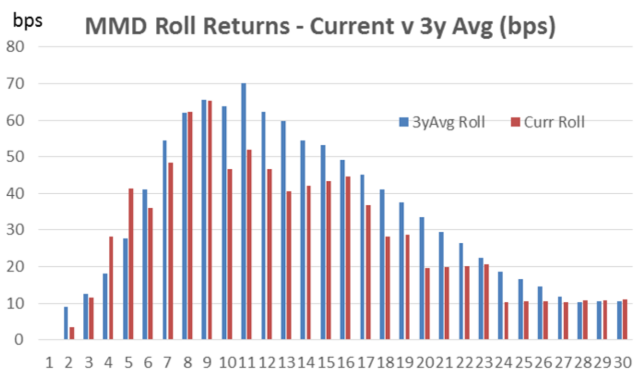
2018 Strategy

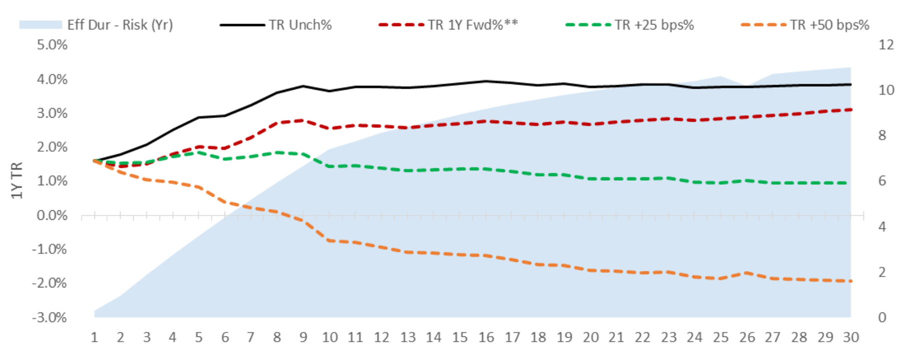
- Ladder strategy
- Defensive posture (5yr eff dur; 7yr WAM)
- Intermediate-long bonds with shorter calls (5-8yrs vs 10y); cheaper vs longer calls, capture better spread and roll-down, faster reinvestment
- Best rolldown range is 8-15yrs.
- Coupon: 5%+ (lower convexity vs 4%)
- Credit: 'AA' GOs, 'A' rated or better Revenue Bonds;

Market Scenarios					
	Bear	Base Case		Bull Case	
Strategy	Ladder (Short)	70/30 Bar	Ladder	30/70 Bar	Ladder
Crv Shft (avg bps)*	50	25	25	10	10
Quality	>/= A+	>/= A+	>/= A+	>/= A+	>/= A+
TR % Proj.	1.43%	2.31%	1.88%	3.54%	3.55%
OAS (bps)	-17	38	23	53	53
Eff Dur (yrs)	0.3	6.9	4.3	9.6	10.9
WAM	1.0	15.0	6.0	25.3	28.5
Cnvx	0.00	-0.69	0.38	-1.83	-1.84

10 **avg bps shift =FWD curve*



MMD Callable Curve (5% Cpn) - 1Y Total Return Projections*



Source: MMD, Bloomberg, Ramirez & Co.

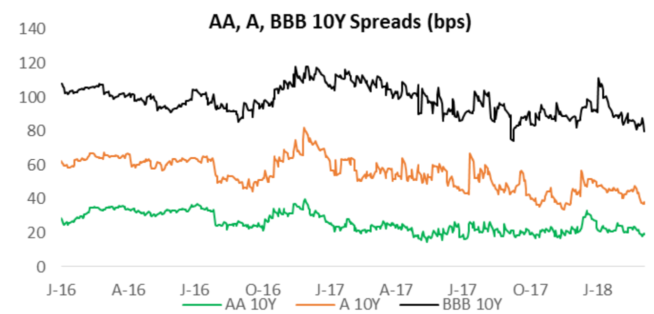
**OAS; **MMD / UST Implied*

MMD Callable Curve (5% Cpn) - 12M FWD Total Return Projections*							
Mty	1-30y	1-5y	6-10y	11-15y	16-20y	21-25y	26-30y
Eff Dur	0.0	2.5	6.1	8.4	9.6	10.4	10.8
Scenarios: Unch	3.72%	2.45%	3.49%	3.79%	3.86%	3.80%	3.80%
1Y Fwd Rates	2.72%	1.78%	2.50%	2.63%	2.71%	2.79%	3.00%
Parallel +25 bps	1.22%	1.72%	1.68%	1.37%	1.21%	1.03%	0.96%
Parallel +50 bps	-1.26%	0.99%	-0.10%	-1.02%	-1.41%	-1.73%	-1.86%

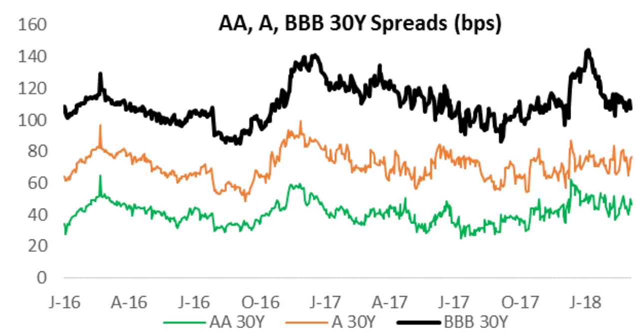
Rates & Ratios

YIELDS (%)	3/9/2018	3/2/2018	1/3/2017	3/10/2017	Lo 12M	Hi 12M	Mean 12M	SD 12M	Value 12M	Value 3Y
AAA MMD / UST										
2 Yr	69%	68%	100%	78%	62%	89%	73%	6.32	Fair	Rich
5 Yr	75%	75%	91%	79%	62%	85%	72%	5.05	Fair	Fair
10 Yr	86%	86%	94%	96%	79%	97%	87%	3.80	Fair	Rich
30 Yr	97%	97%	99%	102%	90%	103%	97%	2.73	Fair	Fair
UST										
2 Yr	2.26	2.23	1.23	1.35	1.18	2.27	1.56	32.28	Cheap	Cheap
5 Yr	2.66	2.61	1.97	2.09	1.61	2.67	2.02	27.54	Cheap	Cheap
10 Yr	2.90	2.85	2.46	2.57	2.03	2.93	2.38	20.26	Cheap	Cheap
30 Yr	3.16	3.14	3.07	3.16	2.65	3.21	2.89	12.32	Cheap	Cheap
AAA MMD										
2 Yr	1.56	1.51	1.23	1.05	0.85	1.57	1.14	25.93	Cheap	Cheap
5 Yr	1.98	1.96	1.79	1.65	1.12	1.98	1.46	24.82	Cheap	Cheap
10 Yr	2.49	2.45	2.32	2.47	1.81	2.49	2.06	18.32	Cheap	Cheap
30 Yr	3.07	3.03	3.05	3.24	2.46	3.25	2.81	15.23	Cheap	Fair

*Rich/Cheap: +/- 1.0 Z-Score



Source: Bloomberg



Source: Bloomberg

Credit spreads remain very tight...

SECTOR CREDIT SPREADS (10Y) — 2Y STATISTICS								
Sector	**Rating**	**3/9/18**	**Avg**	**Min**	**Max**	**SD**	**3Y Z-Scr**	**Value**
GO	**AA**	20	25	12	40	6	-0.83	Fair
	A	44	56	25	86	13	-0.90	Fair
HOSP	**AA**	32	39	25	60	6	-1.25	Rich
	A	55	66	48	102	7	-1.59	Rich
HI ED	**AA**	21	26	12	40	6	-0.73	Fair
	A	42	54	33	94	10	-1.24	Rich
TRANS	**AA**	21	27	12	47	7	-0.76	Fair
	A	35	47	28	87	10	-1.18	Rich
POWER	**AA**	19	17	5	32	6	0.29	Fair
	A	45	48	32	72	8	-0.39	Fair
WTR / SWR	**AA**	16	23	10	41	5	-1.34	Rich
	A	27	62	27	104	15	-2.27	Rich
HY	**<BBB-**	225	307	223	472	55	-1.48	Rich

Source: Bloomberg

Market Performance Indicators

WEEK ENDING: 3/9/18

		TOTAL RETURN (%)								YIELD (%)								
INDEX	Eff Dur	WTD	M-18	F-18	J-18	2018	2017	2016	2015	3/9/18	WTD Δ	YTD Δ	Lo 12M	Hi 12M	Mean 12M	Vol 12M	Z-score 12M	Z-score 3Y
TREASURY-TERM																		
TREASURY - ALL	6.1	-0.12	-0.04	-0.75	-1.36	-2.15	2.31	0.63	0.84	2.63	0.03	0.39	1.73	2.65	2.03	0.25	2.40	2.75
SHORT	2.0	-0.02	0.03	-0.09	-0.27	-0.34	0.87	1.25	0.67	2.48	0.04	0.41	1.42	2.48	1.76	0.30	2.38	3.03
SHORT-INT	3.8	-0.08	0.01	-0.36	-0.87	-1.22	1.75	1.84	1.57	2.86	0.04	0.44	1.91	2.86	2.22	0.26	2.51	3.35
INTRMD	5.3	-0.10	-0.04	-0.57	-1.13	-1.73	2.59	1.78	1.25	3.18	0.03	0.37	2.47	3.18	2.70	0.18	2.65	2.74
LONG-INT	6.8	-0.12	-0.11	-0.93	-1.56	-2.58	3.51	2.20	1.09	3.46	0.03	0.44	2.73	3.47	2.99	0.17	2.72	2.34
LONG	15.0	-0.29	-0.65	-3.14	-2.05	-5.75	10.47	5.77	-3.26	3.94	0.03	0.38	3.45	3.97	3.66	0.12	2.39	0.73
MUNICIPAL-TERM																		
SHORT	2.0	-0.04	0.00	0.06	0.21	0.27	1.16	0.39	0.88	1.75	0.04	0.04	1.03	1.75	1.32	0.23	1.86	2.55
SHORT-INT	3.3	-0.05	0.04	-0.17	-0.17	-0.30	2.39	0.12	1.96	2.04	0.03	0.15	1.30	2.04	1.61	0.18	1.95	2.36
INTRMD	4.8	-0.10	0.06	-0.41	-0.98	-1.32	4.74	0.28	3.27	2.51	0.03	0.32	1.84	2.51	2.13	0.18	2.05	1.71
LONG-INT	5.2	-0.12	0.07	-0.48	-1.25	-1.66	5.42	0.38	3.68	2.65	0.03	0.38	1.99	2.69	2.28	0.18	2.03	1.56
LONG	6.7	-0.11	-0.03	-0.42	-1.84	-2.28	8.19	0.97	4.52	3.37	0.02	0.44	2.79	3.59	3.07	0.17	1.76	1.16
MUNICIPAL-QUALITY																		
MUNI-EXEMPT	5.1	-0.11	0.04	-0.39	-0.95	-1.29	4.95	0.90	3.32	2.66	0.04	0.29	2.05	2.66	2.33	0.16	2.10	1.50
MUNI-TAXABLE	8.1	-0.13	-0.08	-0.83	-1.23	-2.13	6.81	4.16	1.30	4.03	0.02	0.26	3.59	4.06	3.80	0.10	2.27	1.36
HIGH-GRADE	5.1	-0.11	0.06	-0.43	-1.05	-1.42	4.22	-0.09	3.21	2.33	0.03	0.32	1.54	2.33	1.86	0.22	2.12	2.13
'A' RATED	4.9	-0.12	0.04	-0.40	-1.04	-1.39	5.40	0.82	3.60	2.67	0.04	0.30	2.08	2.67	2.34	0.16	2.08	1.53
'BBB' RATED	5.2	-0.09	0.05	-0.49	-0.94	-1.37	7.97	0.94	4.31	3.23	0.03	0.31	2.79	3.60	3.08	0.18	0.80	0.67
HIGH YIELD	7.5	-0.06	0.14	0.07	-0.94	-0.73	9.69	3.52	1.81	5.37	0.02	0.21	5.05	6.34	5.55	0.39	-0.48	0.74
MUNICIPAL-SECTOR																		
PRE-RE	2.4	-0.05	-0.01	-0.05	0.17	0.11	1.07	0.32	0.95	1.69	0.06	0.03	0.93	1.69	1.22	0.25	1.85	2.74
GO	5.2	-0.14	0.03	-0.45	-1.12	-1.53	4.56	0.08	2.99	2.52	0.04	0.31	1.76	2.52	2.08	0.20	2.21	2.10
DED TAX	5.7	-0.11	0.05	-0.34	-0.99	-1.28	3.73	1.92	1.24	2.81	0.03	0.31	2.21	3.12	2.61	0.23	0.88	0.57
WTR-SWR	5.3	-0.12	0.06	-0.50	-1.15	-1.59	5.31	0.53	3.92	2.59	0.03	0.33	1.97	2.60	2.25	0.16	2.13	1.45
PUB PWR	4.6	-0.12	0.03	-0.38	-0.92	-1.26	3.20	1.18	4.57	2.50	0.04	0.28	1.77	2.84	2.25	0.29	0.85	0.59
HEALTHCARE	5.5	-0.14	0.05	-0.36	-1.29	-1.59	7.00	1.24	4.65	3.26	0.03	0.42	2.72	3.38	2.96	0.16	1.93	1.28
HIGHER ED	5.7	-0.12	0.06	-0.49	-1.23	-1.65	6.20	0.62	3.87	2.95	0.03	0.35	2.38	2.97	2.63	0.15	2.11	1.54
TRANSPORT	5.2	-0.11	0.05	-0.49	-1.14	-1.58	6.25	0.93	3.76	2.75	0.03	0.32	2.13	2.80	2.41	0.17	1.93	1.31
HOUSING	9.2	-0.18	0.01	-0.32	-0.94	-1.24	5.59	1.52	3.71	3.11	0.05	0.31	2.66	3.24	2.93	0.12	1.48	0.37
TOBACCO	10.4	0.09	0.42	-0.20	0.21	0.43	17.82	6.17	13.48	4.69	0.00	0.09	4.48	5.26	4.82	0.23	-0.58	-1.00
IDB	4.5	-0.06	0.04	-0.25	-0.50	-0.71	6.41	1.53	3.66	3.33	0.12	0.38	2.73	3.51	3.06	0.17	1.57	1.12
GLOBAL / CORP																		
GLOBAL	7.2	-0.19	0.25	-0.89	1.19	0.55	7.39	1.77	-3.15	1.89	0.02	0.20	1.47	1.89	1.63	0.10	2.53	1.77
US CORP-IG	7.5	-0.15	-0.41	-1.62	-0.96	-2.96	6.42	5.84	-0.68	3.78	0.04	0.47	3.03	3.78	3.26	0.17	3.12	2.23
US CORP-HY	4.2	0.35	-0.15	-0.85	0.60	-0.40	7.50	18.37	-4.47	6.14	-0.10	0.43	5.31	6.36	5.69	0.23	1.99	-0.41

Rich	Fair	Cheap

*Rich/Cheap: +/- 1 Z-scr

MUNI TAX-EXEMPT SPREADS								
2Y STATISTICS								
		3/12/18	Avg	Min	Max	SD	Z-Scr	Value
10Y	AA	19	26	15	40	6	-1.21	Rich
	A	38	55	34	82	9	-1.83	Rich
	BBB	80	98	74	118	8	-2.17	Rich
30Y	AA	47	41	25	65	7	0.82	Fair
	A	76	71	49	99	9	0.59	Fair
	BBB	107	110	85	144	12	-0.27	Fair
	HY	225	307	223	472	55	-1.48	Rich

Muni Primary Market

Gross Supply ($ in millions)

	As of 3/9/18
Last Week	8,668.5
12wk Moving Avg	5,070.8
YTD	49,307.7

Source: Bloomberg

Weekly Visible Supply ($ in millions)

	Week of 3/12/18
Total	6,288.2
Comp.	2,551.1
Neg.	3737,152

Source: Bloomberg, Ramirez

30-Day Visible Supply

	Current	2017 High		2017 Low	
	Total	$	Date	$	Date
Total	9,880.8	12,069.2	(3/7)	4,175.5	(1/2)
Comp.	4,711.7	5,636.0	(3/7)	903.1	(1/26)
Neg.	5,169.1	7,162.1	(1/19)	2618.6	(1/2)

Source: Bond Buyer

Top Competitive Issuances Coming to Market

Issuer	State	Amount ($ 000's)
DASNY Sales Tax	NY	1,334,520
NY Local Govt Assistance	NY	257,820
Clark Co	NV	200,000
NYC Trans Fin Auth BARBs	NY	73,115
Waco	TX	65,850

Source: Bloomberg

Top Negotiated Issuances Coming to Market

Issuer	State	Amount ($ 000's)
NYC Trans Fin Auth BARBs	NY	1,000,920
Miami-Dade Co Ed Fac Auth (U Miami)	FL	250,000
Alameda Co	CA	240,000
Pub Fin Auth (Hawaii Pacific Health)	WI	155,340
Univ of Connecticut	CT	152,000

Source: Bloomberg

Underwriters will attempt to market $6.29 bil. of municipals in the week of 3/12, led in the negotiated space by $1.0 bil NYC Trans Fin Auth BARBs, $250 mil. Miami-Dade Co Ed Fac Auth (U Miami), and $240 mil. Alameda Co. The competitive calendar is highlighted by $1.33 bil.DASNY Sales Tax, $258 mil. NY Local Govt Assistance, and $200 mil. NY Muni Wtr Fin Auth.

Ramirez Negotiated Issuances Coming to Market

Issuer	State	Amount ($ 000's)	Senior Manager	Ramirez Role
NY Energy Research Auth	NY	18,500	Ramirez	Senior Manager
NYC Trans Fin Auth BARBs	NY	1,074,035	Jefferies	Co-Senior Manager
Golden State Tobacco Securitization	CA	110,775	Jefferies	Co-Senior Manager
Miami-Dade Co Ed Fac Auth (U Miami)	FL	250,000	Morgan Stanley	Co-Manager
Univ of Connecticut	CT	152,000	Jefferies	Co-Manager

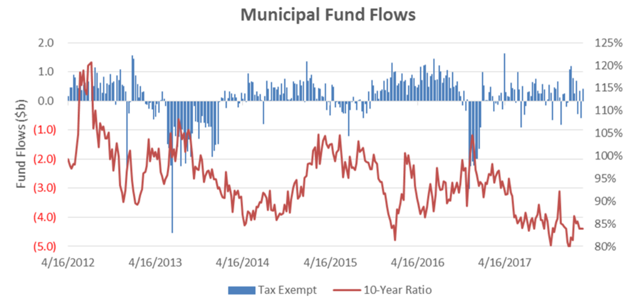
Economic Calendar

Monday (3/12)	Tuesday (3/13)	Wednesday (3/14)	Thursday (3/15)	Friday (3/16)
Monthly Budget Statement	NFIB Small Business Optimism	MBA Mortgage Applications	Empire Manufacturing	Housing Starts
$51 Bln 3-Month Bill Auction	CPI	Retail Sales	Import Price Index	Building Permits
$45 Bln 6-Month Bill Auction	4-Week Bill Auction	PPI	Jobless Claims	Industrial Production
$28 Bln 3-Year Note Auction	$13 Bln 30-Year Bond Reopening		Philadelphia Fed Business Outlook	Capacity Utilization
$21 Bln 10-Year Note Reopening			Bloomberg Consumer Comfort	U. of Mich. Sentiment
			TIC Flows	

Source: Bloomberg

Muni Market Demand

Tax-exempt mutual funds recorded an inflow of $407 million for the week ending March 7, which is 33% above the 12-week moving average of $291 million.

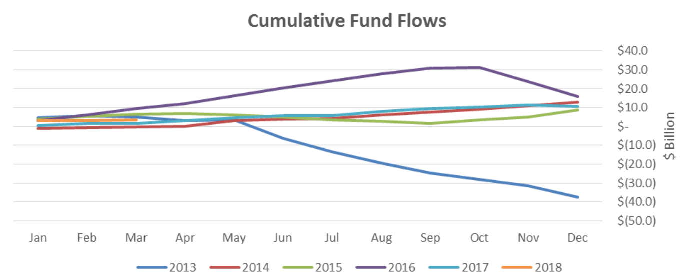


Source: Lipper Fund Flows

US Lipper Fund Flows

Sector	Flow Change ($B)	YTD ($B)
Tax-Exempt	Inflow: 0.407	Inflow: 3.608
Money Market	Inflow: 12.723	Outflow: -2.041
Taxable	Outflow: -0.898	Inflow: 22.657
Equities	Outflow: -9.803	Inflow: 28.472

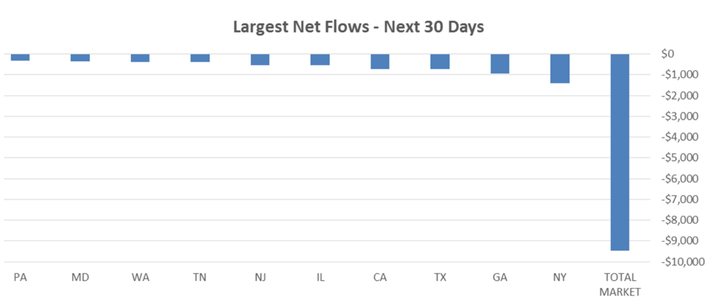
Source: Lipper Fund Flows



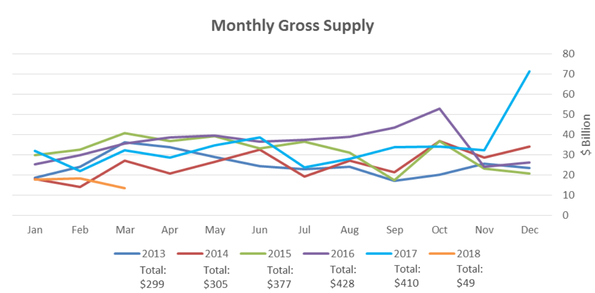
Source: Bloomberg

Muni Market Supply

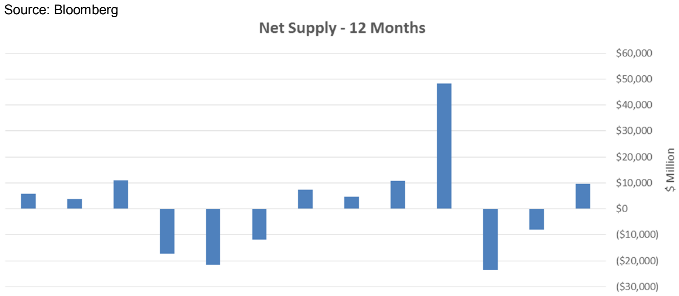
Over the next 30 days we see net muni market supply at –$9.46 bil., comprised of $7.49 bil. new issues, $10.36 bil. maturing, and $6.59 bil. announced calls. The states that stand to experience the largest change in outstanding debt include New York (-$1.40 bil.), Georgia (-$929 mil.), Texas (-$717 mil.), California (-$710 mil.), and Illinois (-$538 mil.).



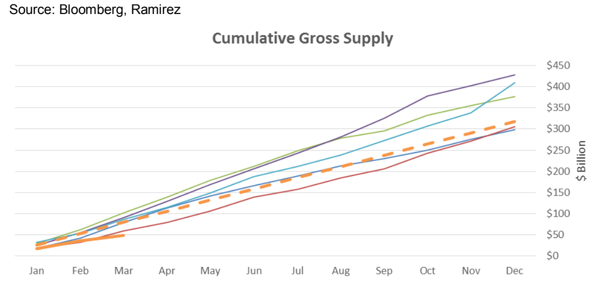
Source: Bloomberg



Source: Bloomberg, Ramirez



Source: Bloomberg



Source: Bloomberg, Ramirez

Muni Market Demand

$18,500,000
New York State Energy Research and Development Authority
Residential Solar Financing Green Revenue Bonds, Series 2018A
(Federally Taxable) (Climate Bond Certified)

Issue: Rated A (sf). Pricing Wednesday, March 14, 2018. Ramirez & Co. is **Senior Manager** of this transaction. New York State Energy Research and Development Authority (Authority) Residential Solar Financing Green Revenue Bonds, Series 2018A (Bonds) finance loans to eligible borrowers to fund installation of solar electric systems for 1-4 family residential structures. Bonds are "Climate Bond Certified" by the Climate Bonds Initiative. Proceeds also fund reserves and pay issuance costs.

Calls: Mandatory: in whole or part on any IPD from unexpended proceeds (2034 mty only) and excess revenues. Excess revenue is used to first call Bonds maturing in the following April, then to Bonds maturing in 2034 until fully redeemed, and then to remaining Bonds ratably. Optional: in whole on any IPD if Bonds outstanding are <10% of original Bond principal.

Security: Bonds are limited obligations of the Authority, secured solely by a pledge of payments derived from a portfolio of residential solar loans (Portfolio Loans) and investment assets held in indenture accounts. Portfolio Loans are unsecured consumer loans made to borrowers that meet the Authority's underwriting criteria for highest credit quality (Tier 1). Credit enhancement is provided by overcollateralization and the reserve account initially equal to 28.9% of Bonds. The reserve requirement is 2% of Bonds, initially cash funded at $370,000.

Credit Overview: The Authority was established by New York State to develop and implement new energy technologies consistent with economic, social, and environmental objectives. The Authority is not authorized to seek protection from creditors pursuant to the US Bankruptcy Code. The Authority is empowered to issue bonds and other obligations to promote its mission. The Authority has purchased residential solar loans since 2014. Residential solar loans for the Bonds are purchased under the Authority's Green Jobs—Green New York revolving loan fund program for eligible borrowers and projects. Loan origination and servicing are contracted out to third-parties. The Authority's current 90+ day delinquency rate for all residential solar loans was 0.89% at Dec 31, 2017. Portfolio Loans consists of the Initial Portfolio ($24.1 mil.) and the Subsequent Portfolio. As of Jan 1, 2018, the Initial Portfolio is comprised of Tier 1 loans in current payment status with an aggregate principal balance of $24.1 mil., consisting of 1,558 loans with a weighted average remaining principal balance of $15,473, coupon rate of 4.04%, and remaining term of 167.7 months. Initial Portfolio loan borrowers have a weighted average FICO score of 751 and debt-to-income ratio of 26.1%. Approximately 47.6% (772 loans) of Initial Portfolio loans are "energy smart loans" in which the borrower makes loan payments through the ACH system. The remaining 52.4% (786) of Initial Portfolio loans are "on-bill recovery loans" where the borrower pays the loan as part of electric or gas utility bills. Bond proceeds ($500,000) are expected to fund Subsequent Portfolio within three months of Bond closing. Subsequent Portfolio loans are expected to be similar to Initial Portfolio loans.

$1,074,035,000
New York City Transitional Finance Authority
Building Aid Revenue Bonds
$500,000,000 Fiscal 2018 Series S-3, Tax Exempt Bonds
$574,035,000 Fiscal 2018 Series S-4
($500,920,000 Subseries S-4A, Tax-Exempt Bonds) ($73,115,000 Subseries S-4B, Taxable Bonds)

Issue: Rated Aa2/AA/AA. Pricing Monday, March 12, 2018. Ramirez & Co. is **Co-Senior Manager** of this transaction. Proceeds of New York City (City) Transitional Finance Authority (TFA) Building Aid Revenue Bonds (BARBs), Fiscal 2018 Series S-3 Bonds will be used to fund capital projects for the New York City school system, while proceeds of the Fiscal 2018 Series S-4 Bonds will be used to refund certain outstanding BARBs.

Security: BARBs are payable by TFA from state building aid receipts, subject to annual appropriation by the State of New York (State) allocated in support of State education facilities pursuant to Section 3602 of the State Education Law. State building aid for BARBs is subordinate to TFA Future Tax Secured Bonds (FTS) issued prior to Nov 16, 2006. Pursuant to the TFA Enabling Act, TFA has the right to receive all or any portion of building aid appropriated by the State to the City for education needs, as determined by the State Education Department (SED). Building aid consists of confirmed and incremental aid. Confirmed building aid for projects is not subject to further statutory or administrative conditions, while incremental aid is to be received for projects expected to be approved by SED. A memorandum of understanding between the City, TFA, and SED establishes the segregation of building aid from education aid, both of which are part of the State's general education aid payments made to the City. The SED annually determines the amount of State building aid payable to the TFA based on aid-able costs of approved projects, a formulaic building aid ratio, an interest rate recalibration, and a 30 year amortization schedule. Once annual appropriation of building aid is made by the State and paid to TFA, funds are retained in the School Bond Account until 110% of BARBs debt service payable in the following fiscal year is collected, with funds received in excess of all obligations transferred to the City. Additional security for BARBs is provided by the 99-b State Education Aid (post-default) Intercept and a State non-impairment covenant. The ABT is 1.0x debt service coverage (DSC) of all current and proposed BARB issues based on receipt of confirmed building aid.

Credit Overview: TFA is a public benefit corporation and an instrumentality of the State, created in 1997, to provide for issuance of FTS bonds for City general capital purposes. State legislation in 2006 authorized TFA to issue up to $9.4 billion of BARBs to finance a portion of the City's five-year education facilities capital plan. Fiscal 2018 Series S-3 and S-4 bonds are on parity with $7.51 billion outstanding BARBs. Confirmed building aid increased at an average annual rate of 7.0% between FY07-17 to total $1.14 billion in FY17, which provided 1.84x maximum annual debt service (MADS) coverage on BARBs. DSC projections indicate at least 1.10x DSC through FY47 and include only confirmed building aid. As the City continues to fund school projects, incremental building aid will be generated, improving coverage. TFA expects to receive $26.8 million of incremental aid in FY18, increasing to $113.7 million by FY20.

Muni Market Demand

$110,775,000
Golden State Tobacco Securitization Corporation
Enhanced Tobacco Settlement Asset-Backed Bonds,
Series 2018A

Issue: Rated A1/A+/A+. Pricing Wednesday, March 14, 2018. Ramirez & Co. is **Co-Senior Manager** of this transaction. Proceeds of the Series 2018A Bonds (Bonds) will be used to refund certain outstanding debt issued by the Golden State Tobacco Securitization Corporation (Corporation).

Security: The Bonds are secured by tobacco settlement revenues (TSRs) and other pledged receipts. The Bonds are further enhanced by a pledge of annual appropriations, if necessary, from the State of California (State). Upon certification from the Corporation that pledged TSRs and other receipts are insufficient to pay debt service, the State will appropriate amounts necessary to cure the deficiency. The state director of finance has the authorization to appropriate up to $200 million annually, while debt service peaks at $181 million.

Credit Overview: California is the most populous state in the nation, with an estimated population of 39.6 million, representing 12% of the total U.S. population. The state's economy is the largest of any state, as reflected by a $2.6 trillion gross state product (GSP) in 2016 (14% of total U.S. GDP). Based on this measure, California's economic activity would rank as the 6th largest economy in the world. Wealth levels are above average, with the median per capita income at 114.5% of the U.S. median. The state's unemployment rate was 4.3% in December 2017, above the national rate of 4.1%. Pledged TSRs are projected to total $191.0-$193.8 million from FY18-22, providing 1.08x-1.18x debt service coverage on the 2018A Bonds and all outstanding parity bonds. The State estimates general fund revenues of $118.7 billion and $127.3 billion in FY17 and FY18, an increase over the $119.7 billion in FY16. The FY16 ending general fund balance is $6.28 billion (5.3% of expenditures), a 2.8% decline from the previous year. The balance for FY17 is expected to further decline by 27% to $4.61 billion (3.9% of expenditures). However, the state has budgeted for a budget stabilization account (rainy day fund) balance of $8.49 billion (6.8% of expenditures) in FY17. Further, based on the 2018-19 Governor's Budget, the State's rainy day fund is projected to achieve its maximum constitutional amount of $13.5 billion by FYE19. Based on the latest actuarial valuation, the state's two largest pension systems, California Public Employees' Retirement System (CalPERS) and California State Teachers' Retirement System (CalSTRS) are funded at 65% and 64%, respectively. The state has total tax-backed debt outstanding of $83.9 billion ($2,271 per capita), or 4.1% of total personal income.

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1 For purposes of the debt Rule FINRA 2242, a “debt security” excludes any equity security, municipal security and security-based swap (each as define under the Exchange Act) and any US Treasury (as defined in FINRA Rule 6710 (p)).