



MUNICIPAL BOND CREDIT REPORT

Second Quarter 2015

RESEARCH REPORT

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TABLE OF CONTENTS

Table of Contents	i
Market Summary	2
Charts & Data.....	5
Long-Term Municipal State Issuance, 2Q'15	5
Long-Term Municipal Issuance by General Use of Proceeds	7
Build America Bonds.....	8
Supply, Yield Curves, Total Return, Spreads & Ratios	8
Trading Summary	9
Municipal CDS	10
Outstanding Municipal Debt.....	11
A Description of the Terminology in the Municipal Bond Credit Report.....	14

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MARKET SUMMARY

Municipal Issuance Overview – Primary Market

According to Thomson Reuters, long-term public municipal issuance volume totaled \$110.4 billion in the second quarter of 2015, an increase of 6.2 percent from the prior quarter (\$104.0 billion) and 32.7 percent year-over-year (y-o-y) (\$83.2 billion). Including private placements¹ (\$2.5 billion), long-term municipal issuance for 2Q'15 was \$113.0 billion.

Tax-exempt issuance totaled \$99.8 billion in 2Q'15, an increase of 5.2 percent and 34.6 percent q-o-q and y-o-y, respectively. Taxable issuance totaled \$7.9 billion in 2Q'15, an increase of 15.3 percent and 27.7 percent respectively, q-o-q and y-o-y. AMT issuance was \$2.8 billion, an increase of 16.8 percent q-o-q but a decline of 4.2 percent y-o-y. Year-to-date, municipal issuance totaled \$214.5 billion, up 50.0 percent from last year and well above the 10-year average of \$186.4 billion, largely due to the surge in issuance from the first quarter.

By use of proceeds, general purpose led issuance totals in 2Q'15 (\$28.1 billion), followed by primary & secondary education (\$25.7 billion), and higher education (\$11.2 billion). Other notable sectors that saw an increase in issuance were public power (\$6.3 billion, an increase of 94.4 percent and 122.4 percent q-o-q and y-o-y, respectively), student loans (\$917.1 million, an increase of 109.8 percent and 64.2 percent q-o-q and y-o-y respectively), and seaports/marine terminals (\$525.9 million, an increase of 226.2 percent and 24.8 percent q-o-q and y-o-y, respectively).

Refunding volumes as a percentage of issuance declined from the prior quarter, with 48.6 percent of issuance refunded compared to 62.2 percent in 1Q'15 and 44.9 percent in 2Q'14.²

Yields, Inflows, and Total Return

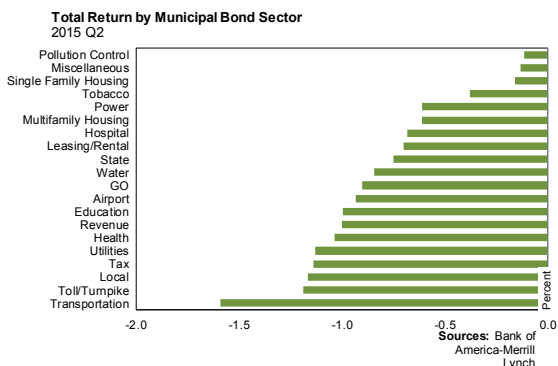
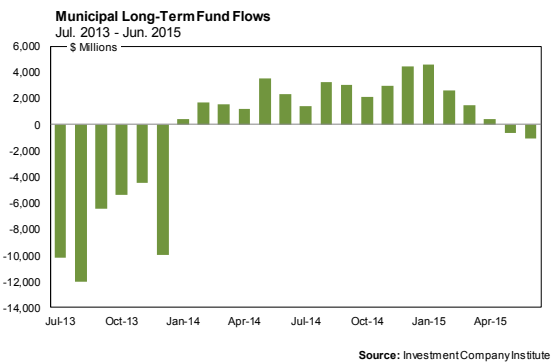
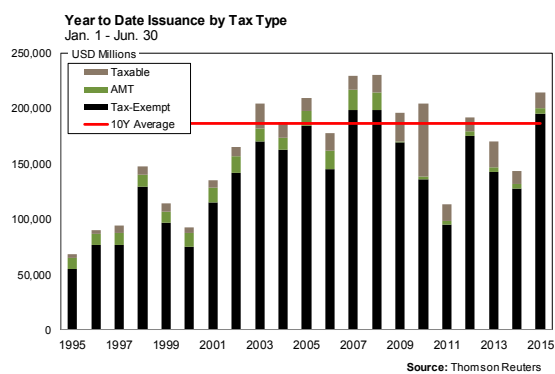
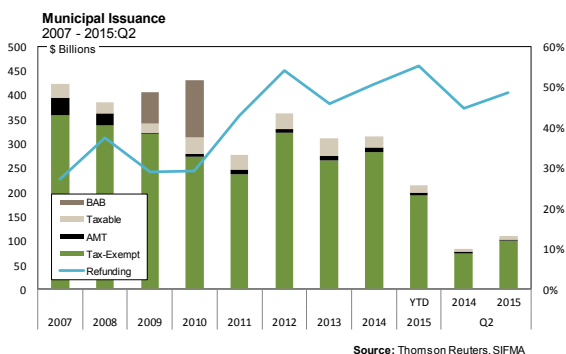
Ratios of 10-year tax-exempt AAA GOs and similar-maturity Treasuries fell in the second quarter on a q-o-q basis but rose on a y-o-y, ending at 100.9 percent end-June from 103.7 percent end-March and 93.6 percent end-June 2014.

According to the Investment Company Institute (ICI), second quarter net flow into long-term municipal funds was negative, with \$1.3 billion of outflow, compared to \$8.7 billion of inflow from the prior quarter and \$7.1 billion of inflow y-o-y.

According to Bank of America-Merrill Lynch indices, municipals lost 0.97 percent in the second quarter of 2015. Build America Bonds (BABs) also had losses of 3.8 percent, performing worse than similarly-rated corporates (2.6 percent loss). Within the municipal asset class, no sector had positive returns, with pollution control, single-family housing and tobacco bonds losing the least, while transportation and toll/turnpike bonds performed the most poorly in 2Q'15. Year to date, pollution control, tobacco, and hospital bonds lead returns within the municipal sector.

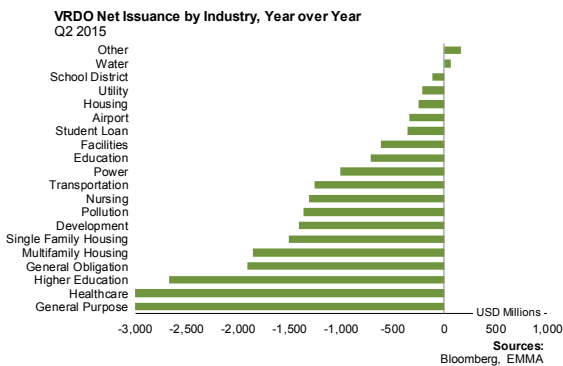
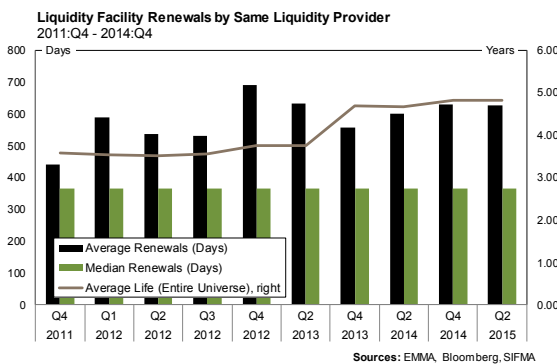
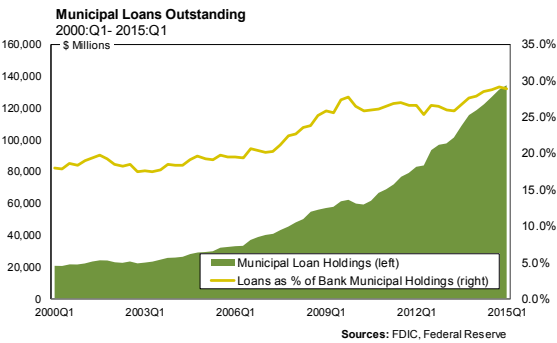
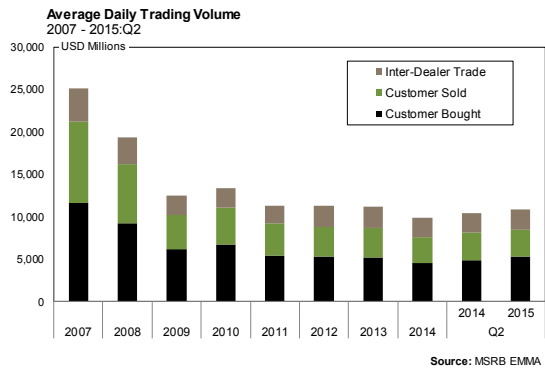
Trading Activity and Broker-Dealers

Trading activity picked up q-o-q to \$10.9 billion daily in 2Q'15, a 17.6 percent increase from 1Q'15 (\$9.3 billion) and an increase of 4.4 percent from 2Q'14 (\$10.4 billion). By number of trades, trading activity increased 10.4 percent q-o-



¹ Private placement figures are included in top line totals, but figures in charts and tables exclude this subset.

² Percentages represent both full refundings and the half the dollar amount of deals that contain both refundings and new financing. For just refunding, refunding volumes represent 37.9 percent of issuance in 2Q'15, 51.0 percent in 1Q'15, and 36.0 percent in 2Q'14.



q and 14.6 percent y-o-y.

Holdings of municipal bonds by broker-dealers rose to \$20.6 billion in 1Q'15, an increase of 9.0 and 21.9 percent q-o-q and y-o-y, respectively. A preliminary examination of primary dealer broker-dealer holdings in second quarter suggest that holdings continued to remain unchanged q-o-q.

Bank holdings of municipal loans and bonds rose in 1Q'15 from the prior quarter, to \$134.2 billion (from \$131.4 billion) and \$331.0 billion (from \$320.1 billion), respectively. Excluding municipal loans, the municipal bond market shrank slightly in the second quarter.

CDS Update

According to DTCC, \$474.6 million of credit default swap contracts on municipal names were executed in the second quarter, an increase of 138.9 percent q-o-q but a decline of 91.9 percent y-o-y. California led state totals (\$179.9 million) in 2Q'14. At the end of the second quarter, \$3.09 billion net notional of municipal CDS contracts were outstanding, unchanged from the prior quarter.

VRDO, FRN, and ARS Update

Issuance of variable-rate demand obligations (VRDOs), puttable long-term municipal bonds with interest rates that reset periodically, rose in the second quarter, with \$1.6 billion issued in 2Q'15, an increase of 79.4 percent q-o-q but a decline of 27.4 percent y-o-y. Year to date, VRDO issuance has been \$2.5 billion, continuing to remain at all time lows.

On net, VRDO outstandings continue to decline, ending 2Q'15 at \$189.7 billion, a decline of 3.0 percent from 1Q'15 and 11.5 percent from end-June 2014. Declines y-o-y were led by nursing (30.1 percent), student loans (27.2 percent), and education (21.9 percent).

As of end-June, \$29.6 billion of VRDO liquidity facilities were scheduled to expire in 2015, with an additional \$40.8 billion in 2016, for a total of \$70.4 billion of liquidity facilities on 3,415 CUSIPs within two years. VRDO liquidity facility renewals with the same liquidity provider on approximately 1,120 unique CUSIPs averaged 627.5 days from the original expiration date, a slight decline from the 627.5 days in 4Q'14. The median extension, however, continues to remain unchanged at 1 year (366 days). The average life of a liquidity facility of the entire universe of VRDOs is approximately 4.81 years, unchanged from 4Q'14; excluding self-liquidity deals, the average remaining tenor of liquidity facilities in the entire VRDO universe averaged 3.84 years, down slightly from the 3.92 years in 4Q'14.

The SIFMA Municipal Swap index, a seven-day high-grade market index comprised of tax-exempt VRDOs, ended December at 0.07 percent, averaging 0.08 percent in 2Q'15, 6 basis points higher than 1Q'15's average (0.02 percent).

Issuance of floating rate notes ("FRN") (both LIBOR- and SIFMA- indexed, among others) also rose in the second quarter, with issuance of \$2.3 billion, a 23.2 percent and 11.1 percent increase, respectively, q-o-q and y-o-y. Year to date, FRN issuance totaled \$4.3 billion. As of end-June, \$78.3 billion of FRNs were outstanding, an increase of 0.5 percent q-o-q and 5.1 percent y-o-y. While LIBOR remains a popular index for FRNs and represents approximately 57 percent of existing municipal FRNs (up from 56 percent end-December 2014), the SIFMA swap continues to become a more prevalent index in new deals among municipal FRNs and is growing in outstanding volumes, representing 35 percent of outstanding volumes end-June, up from 32 percent end-December 2014.

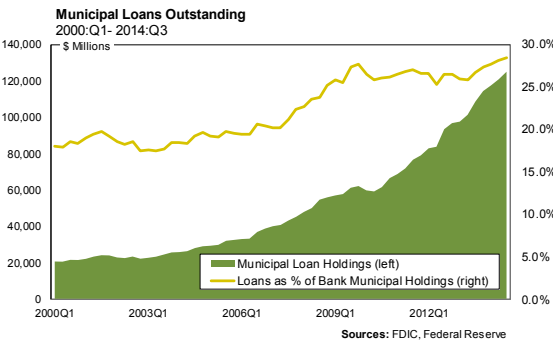
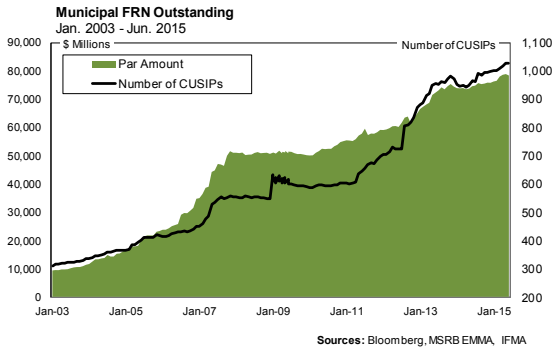
Auction rate securities (ARS) continue to decline, with approximately \$20.8 billion outstanding at the end of June 2015, a decline of 1.4 percent and 36.8 percent, respectively, q-o-q and y-o-y. Student loan ARS, which remains the largest category outstanding (representing \$7.7 billion, or 37.2 percent), continues to shrink the most rapidly by dollar amount y-o-y, trailed by pollution control ARS.

State & Government Update

In late May and early June, both Moody’s Investors Service and Fitch Ratings downgraded Illinois to A3 and A-, respectively. Although Standard and Poor’s did not downgrade the state (currently A-), it placed the state on its watchlist for a possible downgrade in early May. While the state remains investment grade by the three rating agencies, its largest city, Chicago, was downgraded to junk status by Moody’s Investor Services (from Baa2 to Ba1) in the second quarter, triggering termination events for its existing swaps contracts. Fitch Ratings also took similar action to Chicago (from A- to BBB+), although left the city at investment grade status.

On June 28, Puerto Rico’s governor reported in an interview with the *New York Times* that its \$72 billion in debt was unpayable. Although many municipal bond funds, both closed- and open-ended funds, had been paring back their exposure to Puerto Rico since 2012, approximately 50 percent of mutual bond funds had some exposure to Puerto Rico, down from 85 percent in 2012.

According to Nelson A. Rockefeller Institute of Government, states reported growth in preliminary tax collections data for the first fourth months of 2015.³ Preliminary data from 38 states show that preliminary personal income tax collection grew by 11.5 percent y-o-y.



³ Nelson A. Rockefeller Institute of Government, ["Windfall "April Surprises"."](#) June 23, 2015.

CHARTS & DATA

LONG-TERM MUNICIPAL STATE ISSUANCE, 2Q'15⁴\$ Millions⁵

	Total	Bond Type		Tax Type			Funding Type			
		G.O.	Revenue	AMT	Tax-Exempt	Taxable	New Financing	Refinancing	Refunding & New Refinancing	New Refunding
State										
Alabama	814.8	310.2	504.6	-	795.1	19.7	507.6	-	178.1	129.2
Alaska	366.8	250.8	116.0	25.3	341.5	-	25.3	-	142.4	199.1
Arizona	2,780.1	543.2	2,236.9	15.0	2,686.0	79.1	552.5	-	1,285.7	941.9
Arkansas	370.9	171.2	199.7	-	369.3	1.6	97.2	-	94.7	179.0
California	15,891.1	6,859.7	9,031.4	205.0	13,796.2	1,890.0	5,273.4	-	2,102.5	8,515.2
Colorado	1,142.0	597.6	544.4	-	899.5	242.5	648.4	-	32.8	460.8
Connecticut	2,084.2	1,360.7	723.5	21.5	2,061.9	0.7	1,361.6	-	41.3	681.2
District of Columbia	879.9	534.2	345.7	279.2	570.2	30.5	-	-	586.1	293.8
Delaware	51.1	-	51.1	-	51.1	-	51.1	-	-	-
Florida	6,987.2	1,169.5	5,817.7	583.3	6,334.5	69.3	2,914.1	-	876.2	3,196.9
Georgia	2,904.5	1,868.0	1,036.5	14.5	2,364.1	525.8	1,816.9	-	460.0	627.5
Guam	0.0									
Hawaii	0.0									
Idaho	489.6	343.5	146.1	16.0	473.3	0.2	203.2	-	21.2	265.2
Illinois	2,899.5	1,756.0	1,143.5	15.0	2,773.2	111.3	1,492.3	-	51.3	1,355.8
Indiana	1,603.3	90.9	1,512.4	-	1,579.9	23.4	448.8	-	194.1	960.5
Iowa	704.9	444.5	260.4	46.7	577.2	81.1	513.7	-	53.2	138.1
Kansas	939.2	635.6	303.6	67.6	853.8	17.7	503.9	-	300.3	135.0
Kentucky	722.7	44.6	678.1	-	722.7	-	322.3	-	199.8	200.5
Louisiana	749.9	492.2	257.7	102.0	647.2	0.7	518.7	-	21.4	209.9
Maine	334.4	159.4	175.0	-	317.8	16.6	208.5	-	70.4	55.6
Maryland	1,839.4	1,063.4	776.0	-	1,837.6	1.9	631.7	-	308.2	899.4
Massachusetts	2,948.3	2,219.5	728.8	184.8	2,736.7	26.9	1,332.9	-	1,185.9	429.5
Michigan	2,642.6	1,520.5	1,122.1	-	1,971.6	671.0	1,560.6	-	451.4	630.5
Minnesota	2,140.8	1,169.7	971.1	-	1,898.1	242.7	1,129.1	-	182.4	829.3
Mississippi	183.7	72.0	111.7	-	111.3	72.3	61.4	-	-	122.2
Missouri	1,727.8	392.7	1,335.1	-	1,705.2	22.6	649.5	-	91.6	986.7
Montana	63.0	35.6	27.4	-	63.0	-	39.1	-	-	24.0
Nebraska	865.0	218.1	646.9	0.8	860.7	3.5	260.0	-	300.9	304.2
Nevada	647.6	410.6	237.0	165.1	482.4	0.1	43.1	-	-	604.5
New Hampshire	322.0	118.7	203.3	-	318.7	3.3	120.5	-	117.0	84.5
New Jersey	1,863.6	928.2	935.4	180.0	1,622.7	60.9	973.9	6.6	72.3	810.8
New Mexico	723.5	214.5	509.0	-	598.4	125.1	276.7	-	324.5	122.4
New York	12,544.1	3,248.0	9,296.1	178.5	11,089.6	1,275.6	7,438.1	-	2,445.6	2,659.9
North Carolina	1,957.9	539.5	1,418.4	48.7	1,848.6	60.6	829.3	-	385.6	743.0
North Dakota	407.9	241.5	166.4	-	384.3	23.7	348.7	-	4.6	54.7
Ohio	2,819.1	1,172.9	1,646.2	227.4	2,252.7	339.0	1,597.4	-	152.4	1,069.3
Oklahoma	628.1	344.3	283.8	104.2	517.0	7.0	441.5	-	6.3	180.4
Oregon	1,014.5	820.3	194.2	-	932.8	81.7	611.7	-	150.8	252.0
Pennsylvania	6,486.4	2,652.0	3,834.4	38.3	6,222.0	226.1	1,397.8	-	3,260.0	1,828.6
Puerto Rico	0.0									
Rhode Island	337.9	71.4	266.5	41.4	296.6	-	53.1	-	77.6	207.2
South Carolina	1,026.1	311.3	714.8	-	980.3	45.9	437.0	-	113.4	475.7
South Dakota	155.8	39.8	116.0	-	75.9	79.9	141.1	-	6.9	7.8
Tennessee	2,134.9	640.9	1,494.0	25.4	1,970.2	139.3	357.6	-	982.0	795.3
Texas	12,967.6	8,350.5	4,617.1	-	12,386.5	581.0	3,007.7	-	3,470.1	6,489.9
Utah	912.4	137.8	774.6	-	880.4	32.0	683.0	-	-	229.4
Vermont	276.9	186.9	90.0	42.6	230.4	3.9	33.7	-	186.9	56.2
Virgin Islands	0.0									
Virginia	1,805.4	682.9	1,122.5	58.7	1,730.4	16.3	575.6	-	700.7	529.1
Washington	4,114.4	1,571.3	2,543.1	31.7	3,580.6	502.1	1,234.8	-	1,735.6	1,144.0
West Virginia	303.4	151.8	151.6	35.7	264.8	2.9	109.9	-	51.5	142.0
Wisconsin	1,871.7	1,261.5	610.2	4.5	1,718.2	149.0	988.1	-	317.1	566.5
Wyoming	0.0									
ALL	110,447.9	48,419.9	62,028.0	2,758.9	99,782.2	7,906.5	44,824.1	6.6	23,792.8	41,824.2
QoQ	6.2%	6.2%	6.1%	16.8%	5.2%	15.3%	61.6%	-	2.5%	-21.2%
YoY	32.7%	34.9%	31.1%	-4.2%	34.6%	27.7%	16.5%	-	60.7%	39.8%

⁴ Issuance totals do not include private placements.⁵ Due to securities falling into more than one category within subcategories, state breakouts are not identical to other non-state-specific breakdowns, particularly related to coupon types (e.g., zeros are higher by dollar amount when broken out by state but would instead be assigned to the convertible or fixed rate categories when not broken out by state). This is a quirk of the SDC database.

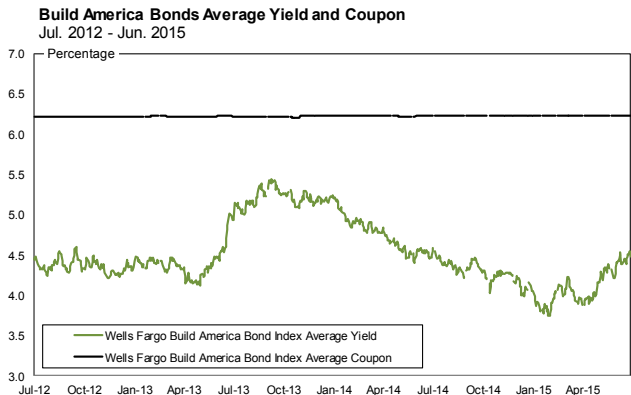
State	Total	Coupon Type						
		Convertible	Fixed Rate	Linked Rate	Variable Rate		Variable Rate	
					Long	No Put	Short (VRDO)	Zero
Alabama	814.8	-	814.8	-	-	-	-	-
Alaska	366.8	-	366.9	-	-	-	-	-
Arizona	2,780.1	-	2,780.1	-	-	-	-	-
Arkansas	370.9	-	370.9	-	-	-	-	-
California	15,891.1	-	15,278.1	181.0	11.1	-	67.4	353.6
Colorado	1,142.0	-	1,142.0	-	-	-	-	-
Connecticut	2,084.2	-	1,352.7	431.4	300.0	-	-	-
District of Columbia	879.9	-	879.9	-	-	-	-	-
Delaware	51.1	-	51.1	-	-	-	-	-
Florida	6,987.2	4.2	6,316.2	300.0	8.1	-	358.7	-
Georgia	2,904.5	-	2,887.1	-	17.4	-	-	-
Guam	0.0	-	-	-	-	-	-	-
Hawaii	0.0	-	-	-	-	-	-	-
Idaho	489.6	-	489.6	-	-	-	-	-
Illinois	2,899.5	-	2,783.3	102.0	-	-	-	14.1
Indiana	1,603.3	-	1,603.4	-	-	-	-	-
Iowa	704.9	-	705.0	-	-	-	-	-
Kansas	939.2	-	939.2	-	-	-	-	-
Kentucky	722.7	-	686.6	36.0	-	-	-	-
Louisiana	749.9	-	750.0	-	-	-	-	-
Maine	334.4	-	334.4	-	-	-	-	-
Maryland	1,839.4	-	1,648.7	48.2	-	-	142.5	-
Massachusetts	2,948.3	-	2,928.4	-	-	-	19.8	-
Michigan	2,642.6	-	2,482.4	154.2	-	-	6.0	-
Minnesota	2,140.8	-	2,140.8	-	-	-	-	-
Mississippi	183.7	-	183.6	-	-	-	-	-
Missouri	1,727.8	-	1,725.6	-	-	-	-	2.2
Montana	63.0	-	63.0	-	-	-	-	-
Nebraska	865.0	-	830.0	-	-	-	35.0	-
Nevada	647.6	-	647.6	-	-	-	-	-
New Hampshire	322.0	-	322.0	-	-	-	-	-
New Jersey	1,863.6	-	1,853.7	-	9.9	-	-	-
New Mexico	723.5	-	723.5	-	-	-	-	-
New York	12,544.1	-	11,558.8	83.0	-	-	901.9	-
North Carolina	1,957.9	-	1,957.8	-	-	-	-	-
North Dakota	407.9	-	390.3	-	-	-	17.7	-
Ohio	2,819.1	-	2,565.3	224.1	-	-	25.0	4.7
Oklahoma	628.1	-	475.5	48.4	104.2	-	-	-
Oregon	1,014.5	-	976.4	-	-	-	-	38.1
Pennsylvania	6,486.4	-	6,302.3	165.6	18.4	-	-	-
Puerto Rico	0.0	-	-	-	-	-	-	-
Rhode Island	337.9	-	337.9	-	-	-	-	-
South Carolina	1,026.1	-	1,026.1	-	-	-	-	-
South Dakota	155.8	-	125.8	-	-	-	30.0	-
Tennessee	2,134.9	-	2,114.9	-	20.0	-	-	-
Texas	12,967.6	-	12,540.9	160.0	214.8	-	-	51.9
Utah	912.4	-	496.9	415.5	-	-	-	-
Vermont	276.9	-	276.9	-	-	-	-	-
Virgin Islands	0.0	-	-	-	-	-	-	-
Virginia	1,805.4	-	1,790.4	-	-	-	15.0	-
Washington	4,114.4	-	4,114.4	-	-	-	-	-
West Virginia	303.4	-	303.4	-	-	-	-	-
Wisconsin	1,871.7	-	1,871.7	-	-	-	-	-
Wyoming	0.0	-	-	-	-	-	-	-
ALL	110,447.9	4.2	105,306.3	2,349.4	703.9	0.0	1,619.0	464.6
QoQ	6.2%		5.2%	23.2%	20.8%		79.4%	-17.2%
YoY	32.7%	-95.7%	35.0%	11.1%	12.0%		-27.4%	238.4%

LONG-TERM MUNICIPAL ISSUANCE BY GENERAL USE OF PROCEEDS

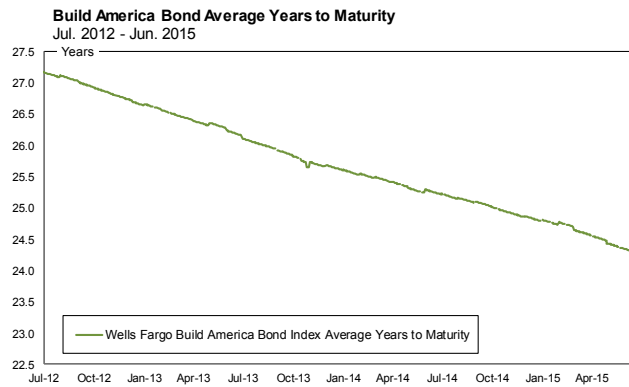
\$ Millions

Use of Proceeds	2Q'14	1Q'15	2Q'15	Q-o-Q	Y-o-Y
Agriculture	4.7				
Airports	2,617.6	1,834.6	1,549.7	-15.5%	-40.8%
Assisted Living	73.0	53.8	42.5	-21.0%	-41.8%
Bridges	408.7	808.0	510.0	-36.9%	24.8%
Childrens hospital	236.7	267.4	455.7	70.4%	92.5%
Civic & convention centers	261.0	438.9	244.9	-44.2%	-6.2%
Combined utilities	551.9	188.3	284.7	51.2%	-48.4%
Cont Care Retirement Community	727.6	788.8	817.5	3.6%	12.4%
Correctional facilities	484.4	267.9	468.1	74.7%	-3.4%
Economic development	2,614.0	1,827.2	3,511.5	92.2%	34.3%
Fire stations & equipment	38.5	87.7	94.2	7.4%	144.7%
Flood control	347.6	327.9	261.8	-20.2%	-24.7%
Gas	103.4	13.4	41.2	207.5%	-60.2%
General acute care hospital	3,820.6	6,757.7	7,680.1	13.6%	101.0%
General Medical	188.0	138.1	29.7	-78.5%	-84.2%
General purpose /public improvement	18,315.2	26,307.7	28,050.9	6.6%	53.2%
Government buildings	455.7	387.3	209.4	-45.9%	-54.0%
Higher education	6,679.0	13,286.4	11,219.5	-15.6%	68.0%
Hospital equipment loans					
Industrial development	124.3	240.9	290.6	20.6%	133.8%
Libraries & museums	280.1	47.7	129.6	171.7%	-53.7%
Mass transportation	4,719.7	4,086.2	2,327.4	-43.0%	-50.7%
Multi family housing	1,661.3	1,235.1	1,904.4	54.2%	14.6%
Nursing homes	4.8		151.5		3056.3%
Office buildings			113.3		
Other education	109.8	134.3	134.0	-0.2%	22.0%
Other recreation	139.6	69.3	46.1	-33.5%	-67.0%
Parking facilities	30.6	95.3	44.0	-53.8%	43.8%
Parks, Zoos & Beaches	393.8	309.6	262.8	-15.1%	-33.3%
Police stations & equipment	173.1	9.4	51.1	443.6%	-70.5%
Pollution control	548.1	90.0	19.1	-78.8%	-96.5%
Primary & secondary education	17,341.0	25,119.3	25,686.9	2.3%	48.1%
Public power	2,844.3	3,253.7	6,326.5	94.4%	122.4%
Sanitation	457.6	136.6	347.1	154.1%	-24.1%
Seaports /marine terminals	291.4	161.2	525.9	226.2%	80.5%
Single family housing	1,381.4	1,206.5	1,392.6	15.4%	0.8%
Single speciality hospital	304.3	63.9	78.5	22.8%	-74.2%
Solid waste	176.9	156.6	378.5	141.7%	114.0%
Stadiums & sports complexes		99.3	659.3	563.9%	
Student loans	558.4	437.2	917.1	109.8%	64.2%
Telecommunications	14.4	19.6	140.1	614.8%	872.9%
Theatres	55.7				-100.0%
Toll roads, highways & streets	6,914.2	3,919.6	3,823.1	-2.5%	-44.7%
Veterans (excloding housing)					
Water & sewer facilities	6,751.6	9,372.0	9,226.3	-1.6%	36.7%
ALL	83,204.0	104,044.4	110,447.2	6.2%	32.7%

BUILD AMERICA BONDS



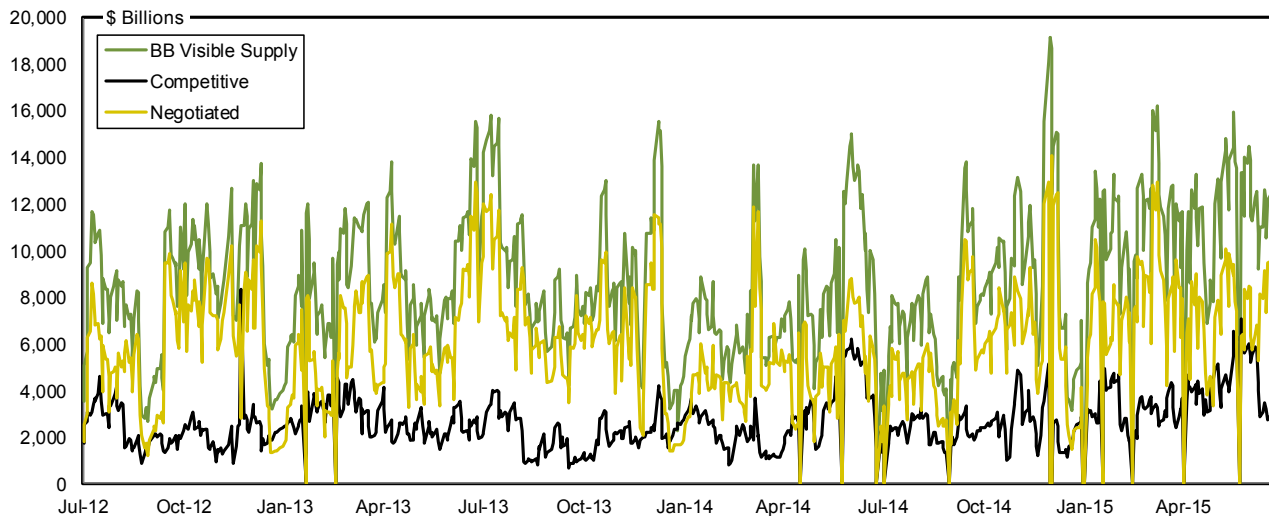
Source: Wells Fargo



Source: Wells Fargo

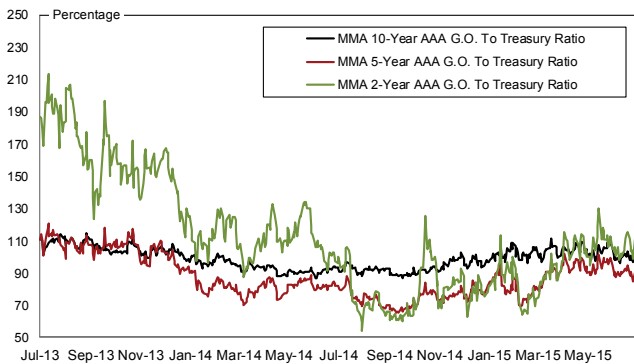
SUPPLY, YIELD CURVES, TOTAL RETURN, SPREADS & RATIOS

Bond Buyer 30-Day Visible Supply
Jul. 1, 2012 - Jun. 30, 2015



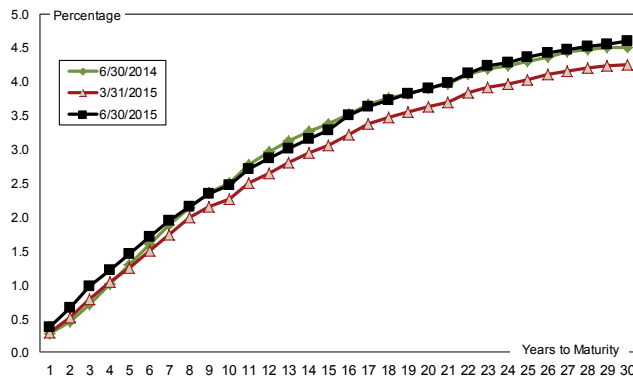
Source: Bond Buyer, Bloomberg

2-, 5-, and 10-Year AAA G.O. to Treasury Ratios
Jul. 2013 - Jun. 2015

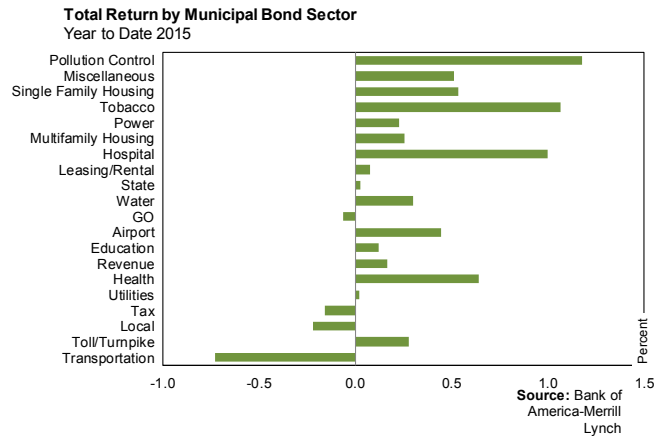
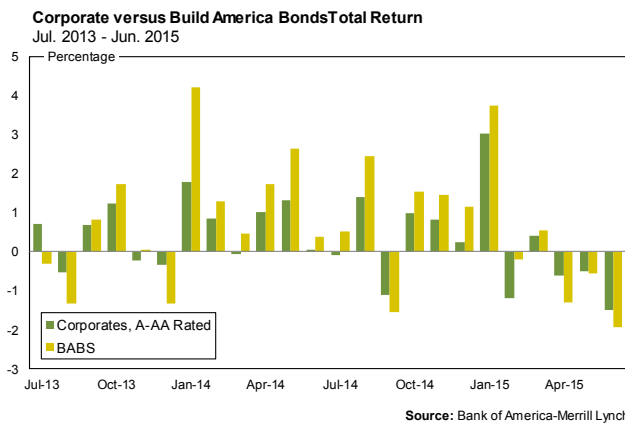
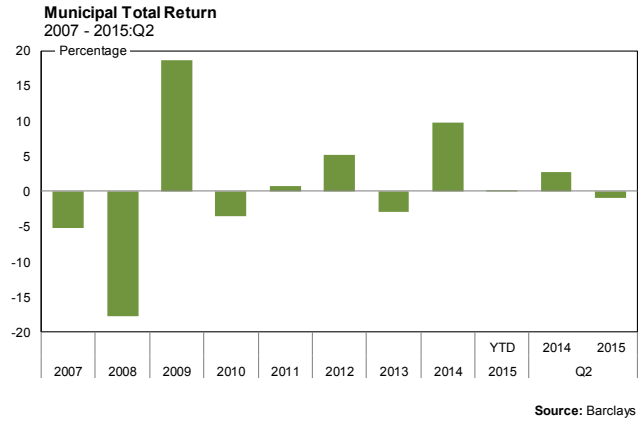
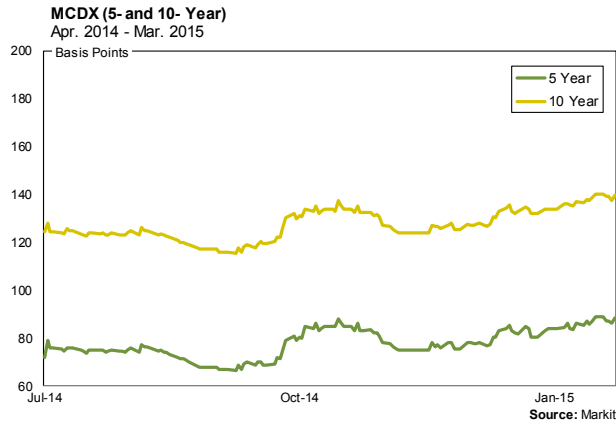


Source: Bloomberg

MMA Yield Curves



Source: MMA



TRADING SUMMARY

Total Number of Trades									
	# of Trades				Par Amount (Millions)				
	Customer Bought	Customer Sold	Inter-Dealer Trade	All Trades	Customer Bought	Customer Sold	Inter-Dealer Trade	All Trades	
2015:Q1	909,377	481,927	844,179	2,235,483	260,221	152,157	150,585	\$562,963	
2015:Q2	1,065,662	536,616	947,502	2,549,780	331,521	201,314	150,939	\$683,774	
%Change	17%	11%	12%	14%	27%	32%	0%	21%	

	# of Trades					Par Amount (Millions)				
	0 - 100,000	100,001 - 500,000	500,001 - 1,000,000	1,000,000+	All Trades	0 - 100,000	100,001 - 500,000	500,001 - 1,000,000	1,000,000+	All Trades
2015:Q1	84%	12%	2%	2%	2,235,483	13%	13%	7%	67%	\$562,963
2015:Q2	82%	12%	2%	3%	2,549,780	10%	11%	7%	72%	\$683,774

	Trades by Sector							Total (Millions)
	Education	Health	Utility	Various Purpose	Transportation	Tax-Revenue	Other	
2015:Q1	18%	10%	13%	13%	10%	9%	27%	\$562,963
2015:Q2	20%	10%	13%	11%	8%	9%	29%	\$683,774

	Trades by Maturity						Total (Millions)
	1 Year or Less	1+ Year to 5 Years	5+ Years to 10 Years	10+ Years to 20 Years	20+ Years		
2015:Q1	3%	11%	13%	29%	44%	\$562,963	
2015:Q2	4%	12%	14%	33%	37%	\$683,774	

	Trades by Source of Repayment					Total (Millions)
	Revenue	General Obligation	Double Barrel	Not Available		
2015:Q1	68%	31%	1%	0%	\$562,963	
2015:Q2	69%	28%	3%	0%	\$683,774	

	Trades by Coupon Type					Total (Millions)
	Fixed Rate	Variable Rate	Zero Coupon	Not Available		
2015:Q1	56%	38%	6%	0%	\$562,963	
2015:Q2	62%	35%	3%	0%	\$683,774	

Source: MSRB EMMA

MUNICIPAL CDS

Market Risk Activity of Single-Name Municipal CDS (\$ millions) ⁶

State	California	Connecticut	Florida	Illinois	Michigan	New Jersey	New York	Ohio	Texas	New York City	Massachusetts	TOTAL	Average Contract Size
Jan-14	167.0		288.0	320.7		99.0	93.0		9.8	61.5		1,039.0	24.2
Feb-14	60.5		50.0			3.3	23.1		0.5	10.0		147.4	4.6
Mar-14	41.0			71.0	6.0	6.0			0.8			124.8	5.4
Apr-14	159.0			60.5		24.0					15.0	298.5	7.7
May-14	777.5			434.0		977.5	620.5			321.5		3,131.0	16.3
Jun-14	699.5		598.5	26.0	108.5	16.0		164.0	163.0	610.0	44.0	2,429.5	12.4
Jul-14	138.5		160.0	4.0	4.0	49.0		25.0	150.0	186.6		717.1	12.8
Aug-14	1,745.0		230.0	95.0	55.0	265.3	202.3	251.2	390.0	450.0	308.0	3,991.7	14.4
Sep-14	85.0		50.0	10.0		0.4				10.0		155.4	19.4
Oct-14	61.6			94.6	7.0	44.2		12.0	1.4	30.0	10.0	260.8	5.1
Nov-14	25.0		75.0	30.1	65.0		1.1	10.0	30.0	55.8	85.0	377.0	4.8
Dec-14	25.0			39.7	10.0	10.0		5.0		45.0		134.7	7.5
Jan-15	37.2		5.0	27.4		14.7			20.0			104.3	3.4
Feb-15			10.0		10.0	10.0			10.0			40.0	2.5
Mar-15		10.0		43.7		0.3			0.3			54.3	2.0
1Q'15	37.2	10.0	15.0	71.2	10.0	25.0	0.0	0.0	30.3	0.0	0.0	198.7	2.7
Q-o-Q	-66.7%		-80.0%	-56.7%	-87.8%	-53.9%	-100.0%	-100.0%	-3.5%	-100.0%	-100.0%	-74.3%	
Y-o-Y	-86.1%		-95.6%	-81.8%	66.7%	-76.9%	-100.0%		174.2%	-100.0%		-84.8%	

Source: DTCC

CDS Yield Curves for Single Name States and New York City (bps)

	6M	1Y	2Y	3Y	4Y	5Y	7Y	10Y
CA California	37.6	38.1	53.3	64.2	68.6	73.5	103.0	124.3
CT Connecticut	35.9	38.5	72.1	91.3	105.4	115.0	128.7	175.5
DE Delaware	21.3	22.5	28.3	33.7	35.4	35.9	44.2	61.8
FL Florida	20.3	22.1	35.3	46.5	48.1	50.1	53.1	91.6
IL Illinois	86.5	90.1	125.3	172.1	208.2	222.4	262.4	289.3
MA Massachusetts	19.3	21.2	28.3	49.9	52.6	56.4	61.6	104.8
MD Maryland	21.7	21.2	28.3	37.9	41.2	44.6	49.4	72.4
MI Michigan	26.0	27.9	37.0	44.9	53.3	63.0	86.5	113.1
MN Minnesota	12.7	14.5	21.6	30.0	36.1	41.9	52.5	66.4
NC North Carolina	24.3	24.9	28.6	36.5	41.4	46.0	46.5	75.0
NJ New Jersey	50.7	51.2	79.3	109.0	135.6	150.7	155.7	211.4
NV Nevada	33.1	34.4	45.3	51.9	53.2	53.1	63.3	103.6
NY New York	15.9	17.3	26.8	39.0	41.0	44.0	48.5	79.5
OH Ohio	30.5	31.4	41.9	52.5	57.2	59.7	72.0	112.5
PA Pennsylvania	37.1	42.4	54.5	82.1	90.6	98.7	104.9	155.0
PR Puerto Rico	4,218.4	4,361.1	4,529.8	4,467.8	4,421.9	4,391.5	4,353.3	4,334.3
TX Texas	18.5	23.0	32.7	36.7	44.1	44.9	61.3	89.0
VA Virginia	18.2	23.6	28.3	32.3	34.2	35.3	41.1	56.9
WA Washington	17.0	18.2	22.1	25.7	32.6	39.0	56.4	80.4
WI Wisconsin	12.5	13.5	17.4	26.0	31.1	36.6	50.6	72.4
NYC New York City	32.3	32.9	55.5	61.8	67.4	69.3	83.1	120.2

⁶ "Market risk activity" (as defined by DTCC): The gross notional and contract counts include transaction types of new trades between two parties, a termination of an existing transaction, or the new leg of an assignment representing the trade between the step-in party and the remaining party. Excludes transactions which do not result in a change in the market risk position of the market participants, and are not market activity. For example, central counterparty clearing, and portfolio compression both terminate existing transactions and re-book new transactions or amend existing transactions. These transactions still maintain the same risk profile and consequently are not included as "market risk transfer activity."

OUTSTANDING MUNICIPAL DEBT

Outstanding by Type, Maturity, and Security Type⁷

\$ Millions

State	Total Outstanding	G.O.	Revenue	Due in 13 Months	Long-Term	2015:Q1 Total Outstanding	% Change
AK Alaska	10,480.9	2,684.9	7,796.1	838.1	9,642.8	10,696.5	-2.0%
AL Alabama	31,502.5	6,072.7	25,429.8	1,042.2	30,460.3	31,368.0	0.4%
AR Arkansas	13,827.0	6,006.9	7,820.1	559.1	13,267.9	13,851.8	-0.2%
AZ Arizona	53,472.9	12,212.8	41,260.1	4,122.7	49,350.3	52,025.2	2.8%
CA California	527,229.0	200,954.8	326,274.2	21,710.8	505,518.2	530,238.2	-0.6%
CO Colorado	53,597.0	11,995.2	41,601.9	2,151.3	51,445.7	54,476.1	-1.6%
CT Connecticut	46,261.3	25,142.0	21,119.3	3,829.3	42,432.0	45,196.5	2.4%
DC District of Columbia	29,506.3	3,606.5	25,899.8	986.8	28,519.5	29,217.0	1.0%
DE Delaware	7,123.0	2,594.5	4,528.5	502.0	6,621.0	7,215.2	-1.3%
FL Florida	139,622.4	15,621.2	124,001.2	7,462.8	132,159.6	140,580.8	-0.7%
GA Georgia	67,392.5	16,528.2	50,864.3	4,057.0	63,335.5	65,631.5	2.7%
GU Guam	2,490.6	405.0	2,085.7	48.8	2,441.8	2,492.4	-0.1%
HI Hawaii	16,058.9	9,900.4	6,158.4	973.6	15,085.2	16,177.4	-0.7%
IA Iowa	20,211.9	5,922.9	14,289.0	1,250.1	18,961.9	20,633.2	-2.0%
ID Idaho	6,587.9	1,859.9	4,728.1	810.5	5,777.4	6,373.5	3.4%
IL Illinois	151,665.6	78,736.4	72,929.2	6,781.6	144,884.0	152,039.5	-0.2%
IN Indiana	48,956.9	1,108.8	47,848.1	3,340.1	45,616.8	50,429.3	-2.9%
KS Kansas	22,430.9	10,106.0	12,324.9	1,557.8	20,873.1	21,847.6	2.7%
KY Kentucky	33,199.7	1,644.7	31,555.1	1,866.4	31,333.4	33,212.8	0.0%
LA Louisiana	34,140.4	7,072.2	27,068.2	1,040.8	33,099.6	34,203.6	-0.2%
MA Massachusetts	94,329.9	35,287.5	59,042.4	6,307.2	88,022.7	93,777.0	0.6%
MD Maryland	49,536.3	24,741.5	24,794.8	3,141.8	46,394.5	49,519.7	0.0%
ME Maine	7,729.3	1,780.8	5,948.5	586.9	7,142.3	7,674.4	0.7%
MI Michigan	75,972.4	24,424.7	51,547.7	3,973.8	71,998.5	77,371.5	-1.8%
MN Minnesota	48,042.7	24,264.0	23,778.7	3,008.2	45,034.5	47,315.0	1.5%
MO Missouri	46,059.4	9,248.0	36,811.5	1,896.9	44,162.6	46,500.0	-0.9%
MS Mississippi	16,599.2	6,344.6	10,254.6	895.4	15,703.8	16,769.6	-1.0%
MT Montana	4,062.9	1,296.0	2,766.9	289.0	3,773.9	4,130.5	-1.6%
NC North Carolina	50,896.1	12,199.1	38,697.0	2,543.8	48,352.3	50,926.4	-0.1%
ND North Dakota	4,563.7	1,569.9	2,993.8	263.7	4,300.0	4,643.8	-1.7%
NE Nebraska	17,797.2	5,362.5	12,434.8	879.6	16,917.6	17,720.1	0.4%
NH New Hampshire	8,908.6	2,337.5	6,571.2	495.0	8,413.6	8,807.7	1.1%
NJ New Jersey	116,924.2	26,066.0	90,858.2	11,397.9	105,526.3	117,831.8	-0.8%
NM New Mexico	13,748.0	3,439.5	10,308.5	1,147.2	12,600.9	13,999.6	-1.8%
NV Nevada	25,413.0	12,696.8	12,716.2	1,475.4	23,937.6	26,149.0	-2.8%
NY New York	370,342.2	77,376.8	292,965.3	20,496.5	349,845.7	370,296.3	0.0%
OH Ohio	103,560.5	29,059.9	74,500.6	5,569.7	97,990.8	103,229.3	0.3%
OK Oklahoma	18,631.9	3,901.8	14,730.1	1,822.2	16,809.7	18,666.4	-0.2%
OR Oregon	34,251.7	18,863.3	15,388.4	1,666.3	32,585.4	35,491.8	-3.5%
OT Other Territories	9,664.4	50.0	9,614.4	317.0	9,347.4	9,324.4	3.6%
PA Pennsylvania	125,267.1	44,725.6	80,541.4	6,595.0	118,672.1	124,432.0	0.7%
PR Puerto Rico	103,264.5	13,517.0	89,747.5	3,056.7	100,207.8	104,484.1	-1.2%
RI Rhode Island	11,101.0	1,804.3	9,296.6	558.3	10,542.6	13,122.1	-15.4%
SC South Carolina	34,954.5	8,281.5	26,673.0	1,718.1	33,236.4	34,692.4	0.8%
SD South Dakota	4,865.3	941.8	3,923.5	222.4	4,643.0	4,752.1	2.4%
TN Tennessee	36,933.4	13,814.3	23,119.1	1,995.3	34,938.1	36,750.9	0.5%
TT Trust Territories	264.8	84.7	180.2		264.8	267.6	-1.0%
TX Texas	310,635.4	158,034.9	152,600.5	16,769.7	293,865.7	308,334.4	0.7%
UT Utah	20,757.1	6,434.1	14,323.0	1,585.2	19,171.9	20,806.8	-0.2%
VA Virginia	59,502.2	13,100.0	46,402.2	3,080.7	56,421.5	59,789.2	-0.5%
VI Virgin Islands	2,362.1	-	2,362.1	69.5	2,292.6	2,364.9	-0.1%
VT Vermont	4,927.5	680.9	4,246.6	145.2	4,782.3	4,731.8	4.1%
WA Washington	79,095.0	38,104.9	40,990.1	4,421.9	74,673.1	77,703.8	1.8%
WI Wisconsin	43,036.9	20,973.7	22,063.1	3,536.5	39,500.4	43,595.6	-1.3%
WV West Virginia	10,350.7	782.6	9,568.1	309.8	10,040.9	10,471.5	-1.2%
WY Wyoming	2,744.4	153.7	2,590.7	197.6	2,546.8	2,812.5	-2.4%
TOTAL (6/30/2015)	3,282,853.4	1,061,920.2	2,220,933.2	177,367.1	3,105,486.3	3,287,161.8	-0.1%
TOTAL (3/31/2015)	3,287,161.8	1,055,033.5	2,232,128.3	172,644.2	3,114,517.6		
% Change	-0.1%	0.7%	-0.5%	2.7%	-0.3%		

⁷ Outstanding includes both short- and long-term municipal debt, including certain preferred fund shares (e.g., VRDPS). "Due in 13 months" looks at original maturity and will not include securities with short puts unless original maturity is within 13 months. Outstanding does not include refunded (inclusive of prerefunded) debt and derivatives. See additional tables for prerefunded and derivatives debt. The chart replaces "Outstanding by Insurance" from prior municipal reports. For comparability against Federal Reserve's Flow of Funds, aggregate prerefunded with outstanding but not derivatives; differences between the two aggregates afterward are due to underlying database differences (Fed: Mergent; these tables: Bloomberg). Those CUSIPs unverified by Bloomberg are not included in the total; this affects approximately \$100 million outstanding.

Outstanding and by Tax Status, Coupon, Use of Proceeds, Industry⁸

\$ Millions

State	Total Outstanding	Tax-Exempt	AMT	Taxable	Fixed	Zero	FRN	Other	Industry	Total Outstanding
AK Alaska	10,480.9	8,745.0	563.9	1,172.1	8,094.0	165.4	394.7	1,826.9	Airport	84,696.1
AL Alabama	31,502.5	24,127.1	1,132.5	6,242.9	24,241.9	1,019.9	382.9	5,858.0	Development	108,115.6
AR Arkansas	13,827.0	8,779.5	358.3	4,689.2	12,311.4	259.3	528.2	728.1	Education	687,294.4
AZ Arizona	53,472.9	46,860.2	1,264.2	5,348.6	48,290.3	32.6	673.6	4,476.4	GO	661,288.7
CA California	527,229.0	419,328.3	18,744.3	89,156.4	383,099.4	67,954.6	10,220.1	65,955.0	Healthcare	257,933.3
CO Colorado	53,597.0	39,423.0	2,868.6	11,305.4	43,301.3	3,207.2	777.0	6,311.4	Housing	129,310.4
CT Connecticut	46,261.3	35,560.8	1,226.9	9,473.5	38,582.7	457.2	2,339.2	4,882.2	Other	647,079.5
DC District of Columbia	29,506.3	22,772.0	3,318.9	3,415.4	19,613.9	5,627.0	394.1	3,871.3	Public Facilities	13,837.0
DE Delaware	7,123.0	5,283.0	321.3	1,518.7	5,651.8	21.9	-	1,449.3	Student Loan	31,768.9
FL Florida	139,622.4	115,628.8	11,547.6	12,446.1	116,910.1	3,182.1	1,920.6	17,609.6	Transportation	231,248.4
GA Georgia	67,392.5	53,206.0	3,399.7	10,786.8	53,982.2	143.7	1,708.5	11,558.1	Utilities	430,281.1
GU Guam	2,490.6	2,237.3	196.2	57.1	2,375.2	115.5	-	-	TOTAL	3,282,853.4
HI Hawaii	16,058.9	12,662.3	1,086.7	2,309.8	15,567.0	35.3	114.7	341.8		
IA Iowa	20,211.9	12,976.1	580.9	6,655.0	17,455.8	555.5	11.5	2,189.1		
ID Idaho	6,587.9	4,849.9	511.0	1,227.0	5,359.0	103.6	434.4	690.9		
IL Illinois	151,665.6	99,042.4	5,333.7	47,289.5	120,655.4	15,684.7	1,645.4	13,680.1		
IN Indiana	48,956.9	34,985.9	4,119.9	9,851.1	37,533.3	1,061.1	890.2	9,472.3		
KS Kansas	22,430.9	14,917.9	453.3	7,059.7	20,957.3	146.9	257.2	1,069.5		
KY Kentucky	33,199.7	22,040.1	1,850.2	9,309.4	26,419.2	493.3	1,938.6	4,348.7		
LA Louisiana	34,140.4	26,211.1	2,006.2	5,923.2	27,492.8	267.0	1,680.1	4,700.7		
MA Massachusetts	94,329.9	78,062.2	3,858.3	12,409.5	77,890.0	1,133.9	2,890.6	12,415.4		
MD Maryland	49,536.3	41,157.4	1,899.9	6,478.9	43,193.4	161.1	547.6	5,634.3		
ME Maine	7,729.3	5,619.5	580.4	1,529.4	7,017.9	-	15.0	696.4		
MI Michigan	75,972.4	56,351.9	3,204.1	16,416.4	54,677.0	7,861.8	3,006.3	10,427.3		
MN Minnesota	48,042.7	33,758.5	1,876.2	12,408.1	41,490.2	820.8	740.8	4,990.9		
MO Missouri	46,059.4	30,310.5	1,099.3	14,649.6	34,230.5	879.3	3,271.1	7,678.5		
MS Mississippi	16,599.2	11,028.0	351.8	5,219.4	11,886.2	3.0	192.5	4,517.5		
MT Montana	4,062.9	2,198.1	284.4	1,580.4	2,848.8	10.2	345.9	858.1		
NC North Carolina	50,896.1	42,854.0	1,406.7	6,635.4	40,254.8	265.7	2,597.7	7,777.9		
ND North Dakota	4,563.7	3,034.1	282.6	1,247.0	4,127.1	-	62.7	373.9		
NE Nebraska	17,797.2	12,479.4	483.7	4,834.1	16,058.4	-	253.2	1,485.7		
NH New Hampshire	8,908.6	5,739.3	663.4	2,505.9	6,308.6	87.9	762.2	1,750.0		
NJ New Jersey	116,924.2	86,872.6	6,461.9	23,589.8	91,013.7	14,579.7	2,321.4	9,009.4		
NM New Mexico	13,748.0	11,062.1	507.3	2,178.6	11,251.2	9.9	1,223.8	1,263.1		
NV Nevada	25,413.0	20,253.3	2,183.9	2,975.8	20,861.8	934.6	-	3,616.6		
NY New York	370,342.2	298,268.4	19,642.9	52,430.9	298,900.6	14,778.3	4,484.5	52,178.7		
OH Ohio	103,560.5	74,092.7	2,610.1	26,857.7	76,186.0	8,721.0	624.5	18,029.1		
OK Oklahoma	18,631.9	13,315.6	1,034.4	4,282.0	16,506.3	95.8	943.3	1,086.6		
OR Oregon	34,251.7	21,753.7	1,274.9	11,223.0	29,077.3	3,000.5	148.8	2,025.2		
OT Other Territories	9,664.4	2,131.2	7,408.0	125.2	850.9	-	-	8,813.5		
PA Pennsylvania	125,267.1	93,426.3	5,935.3	25,905.6	98,401.3	6,192.6	5,238.4	15,434.8		
PR Puerto Rico	103,264.5	84,813.2	374.4	18,076.9	58,230.1	37,398.5	2,384.4	5,251.5		
RI Rhode Island	11,101.0	8,766.8	913.0	1,421.2	8,109.9	1,754.4	444.8	791.8		
SC South Carolina	34,954.5	28,747.4	831.9	5,375.2	28,633.7	2,434.2	1,709.6	2,177.0		
SD South Dakota	4,865.3	2,912.6	359.7	1,593.0	4,224.1	8.5	61.5	571.2		
TN Tennessee	36,933.4	28,380.8	1,246.6	7,306.1	30,363.3	680.6	815.5	5,074.0		
TT Trust Territories	264.8	224.7	40.2	-	124.8	-	-	140.0		
TX Texas	310,635.4	235,948.3	15,275.2	59,412.0	248,609.3	17,792.5	12,394.4	31,839.2		
UT Utah	20,757.1	14,148.5	331.4	6,277.2	16,318.4	83.1	1,420.3	2,935.2		
VA Virginia	59,502.2	46,898.2	2,788.2	9,815.9	52,769.3	1,835.6	471.3	4,426.0		
VI Virgin Islands	2,362.1	2,192.7	46.8	122.6	2,313.9	48.1	-	-		
VT Vermont	4,927.5	2,998.0	526.7	1,402.8	3,076.9	-	1,343.7	506.9		
WA Washington	79,095.0	60,841.0	3,648.7	14,605.3	71,758.6	2,238.2	485.9	4,612.4		
WI Wisconsin	43,036.9	27,936.5	1,549.8	13,550.6	37,623.0	403.8	787.0	4,222.9		
WV West Virginia	10,350.7	5,771.3	764.1	3,815.3	6,564.1	2,091.9	50.2	1,644.5		
WY Wyoming	2,744.4	1,756.6	678.6	309.2	1,704.2	1.0	-	1,039.2		
TOTAL (6/30/2015)	3,282,853.4	2,505,741.8	153,309.0	623,802.6	2,581,349.4	226,840.2	78,349.5	396,314.3		
TOTAL (3/31/2015)	3,287,161.8	2,510,522.7	153,631.5	623,007.6	2,510,522.7	229,057.1	77,973.6	-		
% Change	-0.1%	-0.2%	-0.2%	0.1%	2.8%	-1.0%	0.5%	-		

⁸ Outstanding does not include refunded (inclusive of prerefunded) debt and derivatives. See additional tables for prerefunded and derivatives debt. The chart replaces "Outstanding by Insurance" from prior municipal reports. For comparability against Federal Reserve's Flow of Funds aggregate prerefunded with outstanding but not derivatives; differences between the two aggregates afterward are due to underlying database differences (Fed: Mergent; these tables: Bloomberg) as well as the growth of the municipal direct loan market, which is largely not CUSIP-based. Fixed rate debt does not include those multimodal bonds that are currently in long-term fixed rate mode.

Addendum Tables –Build America Bonds, Prerefunded, Derivatives, and Rating⁹
\$ Millions

State	Total Outstanding	BAB Only	VRDO Only	ARS Only	Prerefunded Only	Derivatives Only	AAA	AA	A	BBB	HY	NonRated
AK Alaska	10,480.9	357.7	1,511.8		417.8	232.4	1,311.8	5,578.1	2,401.1	98.2	471.8	620.0
AL Alabama	31,502.5	588.6	2,531.8	798.7	3,128.9	735.6	925.8	14,762.5	8,808.8	1,103.2	784.9	5,117.4
AR Arkansas	13,827.0	31.1	353.9		641.8	1.8	414.0	8,293.1	2,534.5	380.1	22.0	2,183.3
AZ Arizona	53,472.9	1,978.0	2,079.9	129.7	5,354.6	1,471.4	3,425.2	31,081.6	11,183.3	3,415.7	1,001.6	3,365.5
CA California	527,229.0	37,489.0	25,457.8	1,939.2	29,074.3	19,856.6	8,726.8	223,541.8	203,539.6	21,789.9	19,284.4	50,346.5
CO Colorado	53,597.0	4,043.6	3,863.6	104.0	4,948.0	2,262.0	3,316.9	26,489.1	12,431.6	6,107.7	467.3	4,784.5
CT Connecticut	46,261.3	1,892.1	2,528.5	412.9	1,916.5	690.6	9,323.5	27,467.5	6,432.6	720.4	282.2	2,035.1
DC District of Columbia	29,506.3	1,891.2	1,452.4	281.5	764.1	1,179.1	302.8	11,492.1	8,916.1	2,508.4	3,499.3	2,787.6
DE Delaware	7,123.0	519.3	514.9	2,290.9	557.8	223.6	2,494.9	2,844.7	1,022.1	469.3	75.0	217.1
FL Florida	139,622.4	5,519.3	6,419.8	515.9	9,701.2	7,164.2	2,729.6	56,373.1	59,628.8	4,215.3	715.6	15,960.0
GA Georgia	67,392.5	3,695.1	3,707.4	122.6	4,442.3	1,408.7	15,309.7	19,089.9	21,892.6	2,493.1	254.0	8,353.1
GU Guam	2,490.6	-	-	-	86.0	-	-	-	539.7	932.8	608.8	409.4
HI Hawaii	16,058.9	1,237.0	28.4	-	2,152.5	414.3	180.6	12,349.2	2,492.5	531.6	101.1	403.9
IA Iowa	20,211.9	640.5	1,868.3	88.4	574.5	109.3	1,710.4	7,955.6	5,291.9	278.0	2,312.4	2,663.6
ID Idaho	6,587.9	152.4	356.2	-	838.8	173.2	729.5	2,308.0	2,114.0	140.1	120.0	1,176.3
IL Illinois	151,665.6	10,120.8	9,606.5	101.4	7,147.3	6,491.9	5,985.4	45,472.7	65,652.3	16,410.2	775.8	17,369.3
IN Indiana	48,956.9	1,874.4	3,549.0	220.0	3,610.3	1,848.2	2,185.5	21,496.1	15,019.9	3,122.4	396.9	6,736.2
KS Kansas	22,430.9	1,532.3	629.7	121.9	1,281.7	179.9	1,803.5	12,486.3	5,601.5	205.6	128.1	2,205.9
KY Kentucky	33,199.7	2,123.9	2,126.4	254.8	2,134.9	435.1	1,500.6	14,072.6	13,166.7	2,518.6	104.4	1,836.8
LA Louisiana	34,140.4	642.1	3,504.8	265.3	3,535.9	535.2	2,528.2	13,182.3	11,227.8	4,917.0	188.2	2,097.0
MA Massachusetts	94,329.9	4,831.6	6,678.4	1,954.0	7,618.9	4,278.4	13,212.8	62,690.2	10,693.1	1,967.1	321.4	5,445.3
MD Maryland	49,536.3	3,381.5	2,452.4	13.4	5,717.0	614.0	20,242.4	17,937.2	4,976.7	2,077.1	452.3	3,850.7
ME Maine	7,729.3	88.1	476.9	-	455.4	117.1	98.2	4,534.1	2,505.8	178.2	62.5	350.5
MI Michigan	75,972.4	2,080.2	4,269.2	72.5	2,915.7	2,508.6	6,630.3	33,581.1	14,778.5	2,855.5	9,505.3	8,621.7
MN Minnesota	48,042.7	1,151.6	2,651.9	163.3	1,898.4	671.0	5,833.3	31,009.2	5,990.9	1,014.3	264.4	3,930.5
MO Missouri	46,059.4	2,886.3	2,576.1	965.6	3,982.7	941.5	4,211.1	22,958.8	10,343.9	1,752.8	150.8	6,642.0
MS Mississippi	16,599.2	764.9	3,459.4	-	1,387.9	202.6	399.1	10,867.6	2,275.1	1,225.8	44.3	1,872.2
MT Montana	4,062.9	29.2	160.6	-	167.7	6.7	345.9	1,687.9	1,239.8	21.1	-	768.2
NC North Carolina	50,896.1	1,597.0	4,832.5	45.6	4,279.5	1,145.2	13,443.2	23,271.8	9,465.0	2,607.8	47.7	2,060.6
ND North Dakota	4,563.7	27.8	274.4	-	97.4	49.3	165.2	2,620.5	959.4	334.3	10.6	473.6
NE Nebraska	17,797.2	946.4	741.4	-	1,950.5	500.0	379.1	8,765.3	4,751.1	823.2	38.3	3,040.3
NH New Hampshire	8,908.6	354.9	1,063.8	153.7	538.7	214.4	201.6	5,507.3	2,233.0	431.3	111.4	424.0
NJ New Jersey	116,924.2	6,575.1	3,579.0	1,286.0	5,526.0	5,987.2	7,592.7	22,468.9	70,034.7	5,353.7	4,350.6	7,123.6
NM New Mexico	13,748.0	249.1	465.1	-	917.1	354.8	1,127.1	10,376.9	1,101.9	670.8	77.4	393.9
NV Nevada	25,413.0	2,153.9	2,197.0	258.0	1,544.0	1,208.7	240.7	13,936.3	7,765.4	493.6	317.4	2,659.7
NY New York	370,342.2	20,577.3	36,612.5	3,859.3	10,795.1	11,183.3	18,348.5	237,124.6	66,530.0	11,629.5	8,760.2	27,949.5
OH Ohio	103,560.5	6,895.1	5,851.0	455.2	6,133.5	1,902.1	7,322.4	45,549.2	22,020.8	4,587.7	12,636.6	11,443.8
OK Oklahoma	18,631.9	684.4	491.6	194.8	853.8	430.6	2,082.6	8,560.8	4,896.1	647.6	185.5	2,259.3
OR Oregon	34,251.7	965.6	1,323.5	235.0	3,557.9	162.5	894.1	27,170.5	4,610.8	590.2	30.9	955.2
OT Other Territories	9,664.4	-	-	-	-	5,954.2	941.8	6,896.7	48.9	370.1	-	1,406.9
PA Pennsylvania	125,267.1	4,877.5	8,356.4	22.5	6,625.2	4,198.4	3,018.4	50,411.9	56,224.9	6,900.1	1,713.1	6,998.7
PR Puerto Rico	103,264.5	1,013.0	15.2	-	1,535.9	2,135.0	180.3	170.4	4,369.9	420.6	83,895.1	14,228.3
RI Rhode Island	11,101.0	-	535.3	263.9	636.2	211.9	842.1	4,602.1	2,468.1	1,130.7	1,757.0	301.1
SC South Carolina	34,954.5	948.1	816.1	387.0	3,469.4	700.0	1,454.7	13,734.5	13,928.6	1,473.8	323.0	4,040.0
SD South Dakota	4,865.3	314.7	388.4	10.0	200.6	148.6	246.1	2,716.8	1,485.6	27.3	-	389.6
TN Tennessee	36,933.4	1,803.7	2,721.6	274.4	3,079.1	692.0	1,216.8	22,180.7	8,696.3	1,629.5	-	3,210.2
TT Trust Territories	264.8	-	-	-	-	-	-	-	-	-	40.2	224.7
TX Texas	310,635.4	16,518.1	13,722.4	1,929.9	28,230.8	7,710.0	117,353.8	96,588.3	50,414.0	17,115.6	2,133.9	27,029.9
UT Utah	20,757.1	2,884.6	1,471.6	391.1	2,343.4	884.7	7,471.2	9,122.2	2,431.0	119.0	89.2	1,524.4
VA Virginia	59,502.2	3,710.9	2,416.5	15.1	6,409.5	1,025.2	15,364.1	32,820.3	3,572.3	2,394.9	2,094.4	3,256.2
VI Virgin Islands	2,362.1	37.3	-	-	-	-	-	-	26.2	2,039.1	141.4	155.4
VT Vermont	4,927.5	125.1	333.7	40.9	226.4	15.5	40.8	3,201.1	1,224.9	187.0	31.2	242.4
WA Washington	79,095.0	6,053.5	2,636.9	-	10,459.0	2,290.3	1,587.0	63,850.7	10,305.1	904.8	127.3	2,320.1
WI Wisconsin	43,036.9	1,717.4	2,234.1	35.7	3,027.0	1,183.1	1,761.9	28,523.4	7,493.3	1,149.3	219.6	3,889.4
WV West Virginia	10,350.7	88.2	862.1	103.1	86.3	42.7	348.4	1,867.7	3,763.9	766.3	2,606.4	998.0
WY Wyoming	2,744.4	133.8	902.5	-	8.3	19.6	239.5	1,109.5	1,146.6	194.4	-	54.4
TOTAL (6/30/2015)	3,282,853.4	172,794.2	189,660.5	20,673.7	208,983.2	105,102.1	319,741.7	1,484,750.6	874,669.2	148,441.2	164,133.0	291,117.8
TOTAL (3/31/2015)	3,287,161.8	173,388.7	195,446.0	21,081.6	187,714.6	109,173.0	315,231.5	1,466,737.2	885,762.9	160,270.0	165,749.8	293,410.3
% Change	-0.1%	-0.3%	-3.0%	-1.9%	11.3%	-3.7%	1.4%	1.2%	-1.3%	-7.4%	-1.0%	-0.8%

⁹ Rating based on the lowest long-term rating assigned to the bond by Fitch Ratings, Moody's Investor Services, or Standard and Poor's; split-rated debt are therefore included in the HY category.

A DESCRIPTION OF THE TERMINOLOGY IN THE MUNICIPAL BOND CREDIT REPORT

Long-Term Municipal Issue: municipal securities with a maturity of 13 months or longer at the time the municipal security is issued.¹⁰

General Obligation (G.O.) Bonds: bonds issued by state or local units of government. The bonds are secured by the full faith, credit and taxing power of the municipal bond issuer. Such bonds constitute debts by the issuer and often require approval by election prior to issuance. In the event of default, bondholders of G.O. bonds have the right to compel a tax levy or legislative appropriation to cover debt service.

Revenue Bonds: bonds payable from a specific source of revenue and to which the full faith and credit of an issuer and its taxing power are not pledged. Revenue bonds are payable from identified sources of revenue and do not permit the bondholders to compel taxation or legislative appropriation of funds not pledged for payment of debt service. Pledged revenues may be derived from sources such as the operation of the financed project, grants or a dedicated specialized tax. Generally, no voter approval is required prior to issuance of such obligations.

Ratings: are evaluations of the credit quality of bonds and other debt financial instruments made by rating agencies. Ratings are intended to measure the probability of the timely repayment of principal and interest on municipal securities. Ratings are typically assigned upon initial bond issuance. Ratings are periodically reviewed and may be amended to reflect changes in the issue or issuer's credit position. The ratings may be affected by the credit worthiness of the issuer itself or from a credit enhancement feature of the security such as guarantor, letter of credit provider, and bond insurer. Some rating agencies provide both long-term and short-term ratings on variable rate demand obligations. The ratings described herein are "long-term" ratings – that is, ratings applied to municipal bond issues with original maturity of 13 months or longer.

State Rating: indicates the G.O. credit rating a rating agency may apply to a state. The rating on a specific municipal bond issue or issuer located with the state may differ from the state rating.

Rating Agency: is a company that provides ratings that indicate the relative credit quality or liquidity characteristics of municipal securities as well as other debt securities. Moody's Investors Service ("Moody's") and Standard and Poor's are the largest agencies in terms of municipal securities rated, followed by Fitch Ratings.

Moody's Ratings¹¹

Moody's describes its municipal credit ratings as "opinions of the investment quality of issuers and issues in the U.S. municipal and tax-exempt markets. These ratings incorporate a rating agency's assessment of the probability of default and loss severity of issuers and issues."

Moody's ratings are based upon the analysis of four primary factors relating to municipal finance: economy, debt, finances and administrative/management strategies. The rating classifications are defined as:

Aaa: obligations rated Aaa are judged to be of the highest quality, with minimal credit risk.

Aa: obligations rated Aa are judged to be of high quality and are subject to very low credit risk.

A: obligations rated A are considered upper-medium grade and are subject to low credit risk.

Baa: obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess certain speculative characteristics.

Ba: obligations rated Ba are judged to have speculative elements and are subject to substantial credit

¹⁰ Authors' own definition.

¹¹ Moodys.com, "Ratings Definitions."

risk.

B: obligations rated B are considered speculative and are subject to high credit risk.

Caa: obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.

Ca: obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.

C: obligations rated C are the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.¹²

Standard and Poor's Ratings¹³

Standard and Poor's describes a municipal issue credit rating as "a current opinion of the credit worthiness with respect to a specific financial obligation(s) or a specific program. It takes into consideration the credit worthiness of credit enhancement on the obligation."

Long-term issue credit ratings are based on:

- Likelihood of payment—capacity and willingness to meet the financial commitment in accordance with the terms of the obligation;
- Nature of and provisions of the obligation; and
- Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

AAA: extremely strong capacity to meet its financial commitments – the highest rating category.

AA: very strong capacity to meet financial commitments.

A: strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in the higher rated categories.

BBB: adequate capacity to meet its financial commitments though adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to meet financial commitments.

Rating "BB", "B", "CCC", and "CC" are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'CC' the highest.

BB: less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions which could lead to inadequate capacity to meet its financial commitments.

B: an obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the capacity to meet its financial commitment. Adverse business, financial, or economic conditions will likely impair the capacity or willingness to meet financial obligations.

CCC: currently vulnerable, and is dependent upon favorable business, financial, and economic conditions to meet financial commitments.

CC: highly vulnerable and is dependent upon favorable business, financial and economic conditions.

Fitch Ratings

Fitch Ratings provides an opinion on the ability of an entity or a securities issue to meet financial commitments such as interest, preferred dividends, or repayment of principal, on a timely basis.

Credit ratings are used by investors as indications of the likelihood of repayment in accordance

¹²The lowest rating is a "D" at both Moody's and Standard and Poor's.

¹³Standardandpoors.com "Long-Term Issue Credit Ratings," May 17, 2002.

with the terms on which they invested. Thus, the use of credit ratings defines their function: "investment grade" ratings (long-term 'AAA' - 'BBB' categories) indicate a relatively low probability of default, while those in the "speculative" or "non-investment grade" categories (international long-term 'BB' - 'D') may signal a higher probability of default or that a default has already occurred. Entities or issues carrying the same rating are of similar but not necessarily identical credit quality since the rating categories do not fully reflect small differences in the degrees of credit risk.

The ratings are based on information obtained directly from issuers, other obligors, underwriters, their experts, and other sources Fitch believes to be reliable. Fitch does not audit or verify the truth or accuracy of such information. Ratings may be changed or withdrawn as a result of changes in, or the unavailability of, information or for any other reasons.

Credit ratings do not directly address any risk other than credit risk. In particular, these ratings do not deal with the risk of loss due to changes in interest rates and other market considerations.

Note: "Not rated" refers to municipal bonds that were not rated by one of the major rating agencies listed above.

General Use of Proceeds: Refers to the type of project the proceeds or funds received from bond issuance are used. In the Municipal Bond Credit Report, the use of proceed classifications are general government use, education, water, sewer and gas, health care and a miscellaneous category, "other."¹⁴

Municipal G.O. to Treasury Ratio: is a common measure of credit risk of municipal bonds relative to risk-free securities, Treasuries. It is a measure comparable to the "spread to Treasury" measure in the taxable markets. Typically the municipal yield is typically less than 100 percent of the Treasury yield due to the tax-free nature of municipal securities.

Credit Enhancement: is the use of the credit of an entity other than the issuer to provide additional security in a bond. The term is usually used in the context of bond insurance, bank letters of credit state school guarantees and credit programs of federal and state governments and federal agencies but also may apply more broadly to the use of any form of guaranty secondary source of payment or similar additional credit-improving instruments.

Bond Insurance: is a guaranty by a bond insurer of the payment of principal and interest on municipal bonds as they become due should the issuer fail to make required payments. Bond insurance typically is acquired in conjunction with a new issue of municipal securities, although insurance also is available for outstanding bonds traded in the secondary market.

Letter of Credit: a commitment, usually made by a commercial bank, to honor demands for payment of a debt upon compliance with conditions and/or the occurrence of certain events specified under the terms of the commitment. In municipal financings, bank letters of credit are sometimes used as additional sources of security with the bank issuing the letter of credit committing to in the event the issuer is unable to do so.

¹⁴Authors' own definition.

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