

UNDERWRITERS AND FINANCIAL ADVISORS

# UNITED STATES MUNICIPALS REVIEW

First Nine Months 2023

An LSEG Business

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# United States Municipal Review

First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

## Global Deals Intelligence

### MUNICIPAL BOND ISSUANCE FALLS 9% TO FIVE-YEAR LOW

US municipal bond issuance totaled US\$265.0 billion during the first nine months of 2023, a 15% decline compared to a year ago and the slowest opening period for municipal bonds in five years. By number of issues, nearly 5,400 municipal bonds were brought to market during the first nine months of 2023, a 16% decrease compared to year ago levels. Third quarter 2023 municipal bond proceeds decreased 6% compared to the second quarter of 2023.

### TAXABLE MUNICIPAL BONDS DECLINE 42% FROM 2022 LEVELS

Taxable municipal bond offerings totaled US\$24.0 billion during the first nine months of 2023, a decrease of 42% compared to levels seen during the first nine months of 2022 and marking the slowest opening period for taxable bonds since 2018. Taxable offerings accounted for 9% of first nine-month 2023 municipal bond issuance, down from the first nine months of 2022, when taxable bonds accounted for 14% of total US municipal bond issuance.

### GREEN BOND ISSUANCE DOWN 7%; NUMBER OF OFFERINGS HIT FIVE-YEAR LOW

Green bond issuance in the US municipal bond market totaled US\$11.8 billion during the first nine months of 2023, down 7% compared to the first nine months of 2022, and marking the slowest first nine months for green municipal bond issuance in two years. By number of issues, 55 green bonds were sold during the first nine months of 2023, a 30% decrease compared to first nine-month 2022 levels and a five-year low. Green bond offerings from issuers in California, New York and Ohio accounted for 76% of first nine-month 2023 issuance.

### REFUNDINGS INCREASE 5%; NEW MONEY OFFERINGS FALL 13%

Refunding activity within the municipal bond market totaled US\$62.6 billion during the first nine months of 2023, a 5% increase compared to 2022 levels and the strongest first nine-month period for refunding issuance since 2021. New money offerings totaled US\$202.4 billion during the first nine months of 2023, a 13% decrease compared to a year ago and the slowest opening period for new money municipal bonds since 2020.

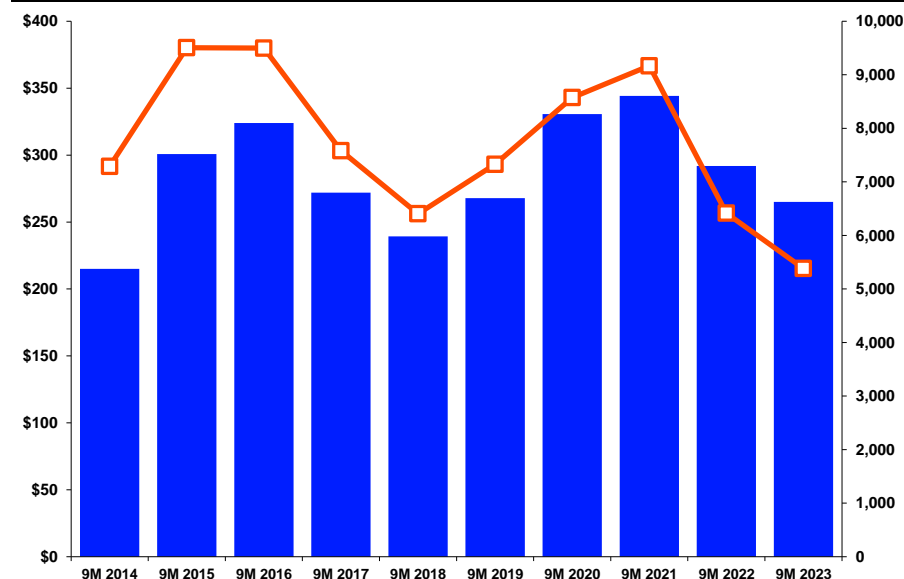
### TEXAS, CALIFORNIA AND NEW YORK LEAD MUNI MARKET

Bond issuers in Texas, California and New York accounted for a combined 44% of the US municipal bond market during the first nine months of 2023, up from 39% during the first nine months of 2022. Within the top 20 states for new municipal bonds, issuers in Oregon, Missouri and New Jersey registered strong percentage gains compared to a year ago, while Virginia, Massachusetts and Florida issuers registered average declines of 38% compared to the first nine months of 2022.

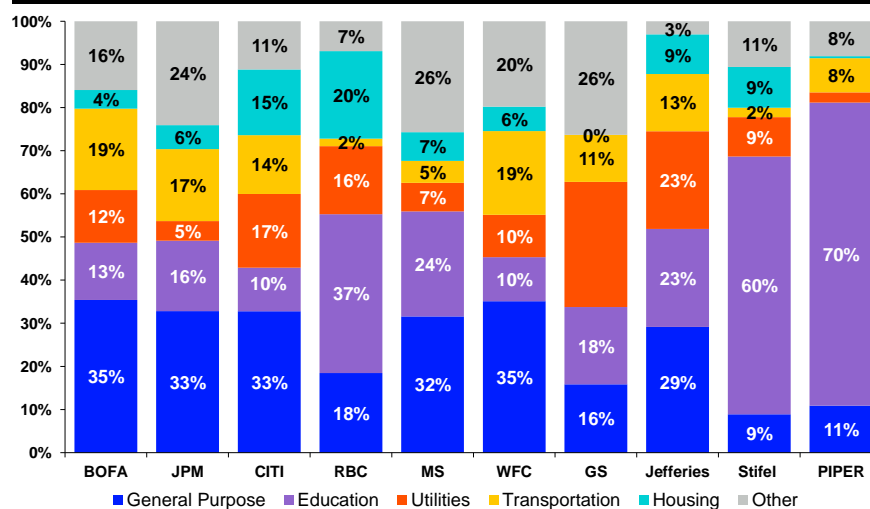
### ENVIRONMENTAL FACILITIES, ELECTRIC POWER AND HOUSING REGISTER GAINS

Municipal bonds with Environmental Facilities, Electric Power and Housing use of proceeds registered year-over-year gains compared to the first nine months of 2022, with an average par amount increase of 25%. New issuance with Healthcare, Transportation and General Purpose use of proceeds fell an average of 33%, by par amount, and 27% by number of issues, compared to the first nine months of 2022.

## United States Municipals Issuance



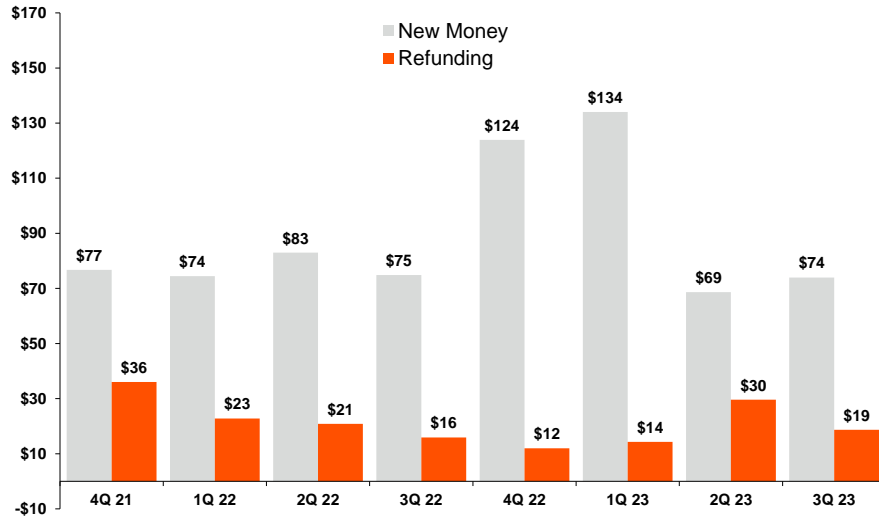
## Top 10 Bookrunners by Proceeds - Use of Proceeds Composition



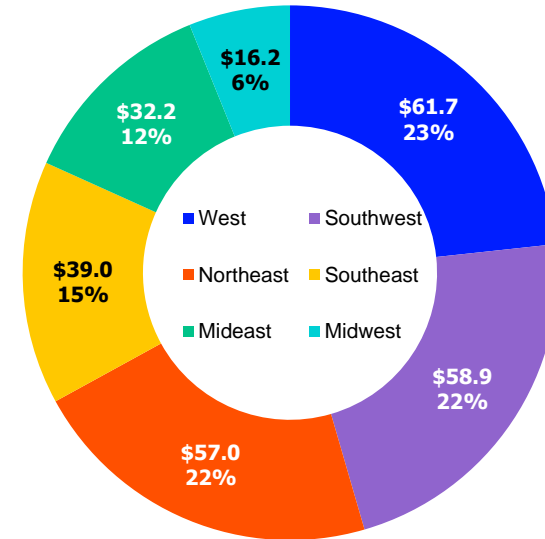
# US Municipal Insights

First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

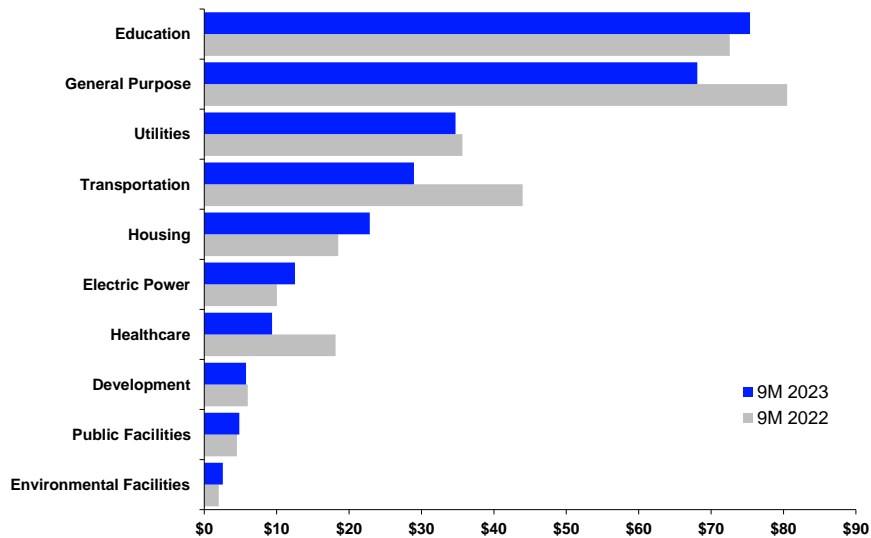
## New Money vs. Refunding (US\$bil)



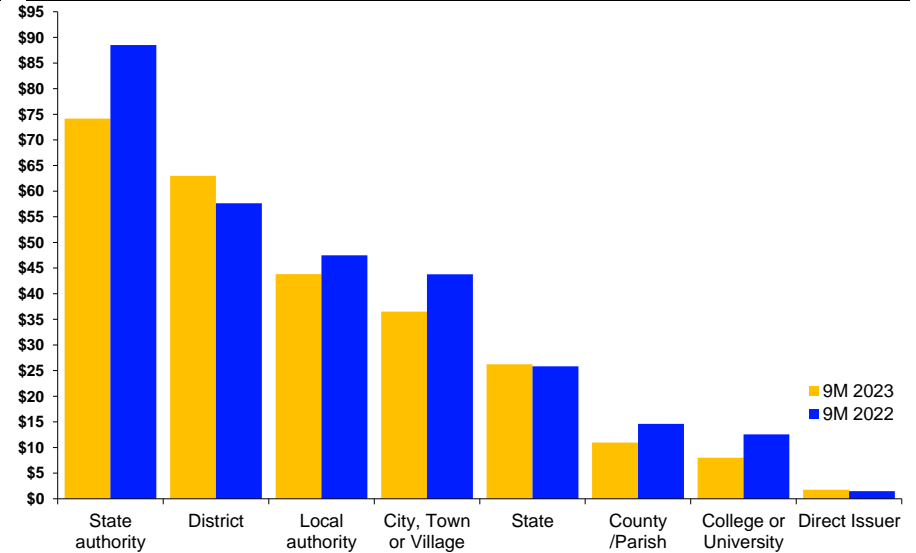
## Regional Composition of Proceeds (US\$bil)



## Use of Proceeds (US\$bil)



## Issuer Type Composition (US\$bil)



# US Underwriters

First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

Bookrunners (AT01)							Long & Short Term (AT16)							Issuers (AT15)						
YoY Change (\$)							YoY Change (\$)							YoY Change (\$)						
-9%							-8%							-9%						
QoQ Change (\$)							QoQ Change (\$)							QoQ Change (\$)						
-6%							-7%							-6%						
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals	Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals	Issuer	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals
BofA Securities Inc	1	1	32,192	12.2	-0.7	241	BofA Securities Inc	1	1	35,024	12.2	-0.7	279	California	1	4	6,938	2.6	1.0	3
RBC Capital Markets	2	4	24,122	9.1	2.1	311	RBC Capital Markets	2	5	24,148	8.4	1.8	314	NYS Dorm Authority	2	2	4,721	1.8	-0.1	14
J P Morgan Securities LLC	3	2	19,540	7.4	-3.7	189	J P Morgan Securities LLC	3	2	23,844	8.3	-3.1	266	NYC Transitional Finance Auth	3	1	4,526	1.7	-0.4	8
Jefferies LLC	4	8	18,460	7.0	2.4	120	Jefferies LLC	4	6	21,350	7.5	2.6	304	New York City-New York	4	6	4,388	1.7	0.4	6
Morgan Stanley	5	5	18,011	6.8	0.0	152	Morgan Stanley	5	4	18,263	6.4	-0.3	158	Main Street Natural Gas Inc	5	21	4,194	1.6	1.0	7
Citi	6	3	16,213	6.1	-1.2	118	Citi	6	3	17,013	5.9	-1.6	120	Triborough Bridge & Tunnel Auth	6	3	3,817	1.4	-0.4	7
Wells Fargo & Co	7	6	16,079	6.1	1.2	123	Wells Fargo & Co	7	7	16,640	5.8	1.0	129	California Comm Choice Fin Auth	7	49	3,797	1.4	1.1	8
Goldman Sachs & Co LLC	8	7	15,090	5.7	0.9	57	Goldman Sachs & Co LLC	8	8	15,090	5.3	0.8	57	Texas Natural Gas Sec Fin Corp	8	-	3,522	1.3	1.3	1
Stifel Nicolaus & Co Inc	9	9	12,116	4.6	0.1	443	Stifel Nicolaus & Co Inc	9	9	12,316	4.3	0.0	454	Washington	9	9	3,190	1.2	0.1	14
Raymond James	10	11	10,768	4.1	0.3	341	Raymond James	10	11	11,108	3.9	0.3	356	Regents of the University of California	10	5	2,875	1.1	-0.3	6
Piper Sandler & Co	11	10	9,343	3.5	-0.5	283	Piper Sandler & Co	11	10	10,714	3.7	-0.4	522	Illinois	11	15	2,511	1.0	0.2	2
Barclays	12	12	9,174	3.5	-0.2	70	Barclays	12	12	9,324	3.3	-0.3	72	NYC Municipal Water Fin Auth	12	28	2,186	0.8	0.3	4
Siebert Williams Shank & Co	13	14	8,939	3.4	0.8	56	Siebert Williams Shank & Co	13	14	8,939	3.1	0.6	56	Port Authority of New York & New Jersey	13	29	2,177	0.8	0.3	5
Robert W Baird & Co Inc	14	13	7,829	3.0	0.2	554	Robert W Baird & Co Inc	14	13	8,276	2.9	0.3	573	San Francisco City/Co Public Util Comm	14	378	2,027	0.8	0.7	7
Ramirez & Co Inc	15	15	6,413	2.4	0.2	41	Ramirez & Co Inc	15	15	6,436	2.3	0.2	42	Wisconsin	15	63	1,742	0.7	0.4	7
Industry Total			265,047	100.0		5,383	Industry Total			286,398	100.0		6,784	Industry Total			265,047	100.0		5,383

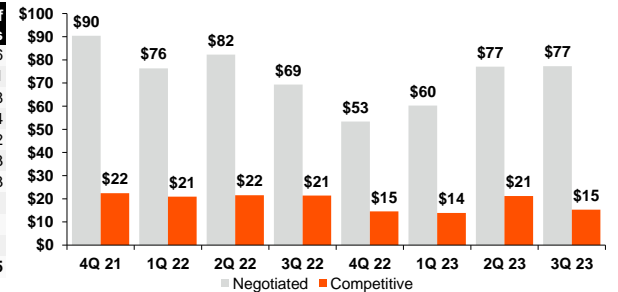
  

Negotiated (AT03)							Competitive (AT04)							Co-Manager (AT12)						
YoY Change (\$)							YoY Change (\$)							YoY Change (\$)						
-6%							-21%							-8%						
QoQ Change (\$)							QoQ Change (\$)							QoQ Change (\$)						
0%							-28%							1%						
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals	Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals	Co-Manager	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals
BofA Securities Inc	1	2	23,574	11.0	0.4	157	BofA Securities Inc	1	1	8,618	17.1	-3.8	84	Ramirez & Co Inc	1	1	9,142	3.5	0.4	455
RBC Capital Markets	2	3	23,082	10.8	2.1	264	Morgan Stanley	2	3	5,521	11.0	2.1	63	Raymond James	2	4	8,727	3.3	0.4	370
J P Morgan Securities LLC	3	1	15,177	7.1	-3.6	127	Jefferies LLC	3	7	4,393	8.7	4.1	46	Siebert Williams Shank & Co	3	2	7,801	2.9	-0.1	191
Goldman Sachs & Co LLC	4	6	15,090	7.0	1.1	57	Robert W Baird & Co Inc	4	5	4,375	8.7	1.2	386	Stifel Nicolaus & Co Inc	4	8	7,407	2.8	0.3	353
Jefferies LLC	5	9	14,068	6.6	2.0	74	J P Morgan Securities LLC	5	2	4,363	8.7	-4.1	62	Morgan Stanley	5	10	7,250	2.7	0.3	330
Citi	6	4	12,860	6.0	-1.1	80	Citi	6	4	3,353	6.7	-1.5	38	RBC Capital Markets	6	9	7,003	2.6	0.1	220
Wells Fargo & Co	7	8	12,856	6.0	1.3	84	Wells Fargo & Co	7	6	3,223	6.4	0.8	39	J P Morgan Securities LLC	7	7	6,890	2.6	0.0	212
Morgan Stanley	8	5	12,490	5.8	-0.4	89	Mesirow Financial Inc	8	11	1,358	2.7	0.6	34	BofA Securities Inc	8	6	6,453	2.4	-0.3	201
Stifel Nicolaus & Co Inc	9	7	11,958	5.6	0.0	423	Hilltop Securities	9	13	1,331	2.6	0.8	84	Loop Capital Markets	9	3	5,892	2.2	-0.8	233
Raymond James	10	12	9,542	4.5	0.3	230	Raymond James	10	9	1,226	2.4	0.0	111	Piper Sandler & Co	10	13	5,512	2.1	0.0	132
Barclays	11	10	9,174	4.3	-0.1	70	Piper Sandler & Co	11	8	1,062	2.1	-0.8	77	Citi	11	11	5,144	1.9	-0.4	182
Siebert Williams Shank & Co	12	13	8,939	4.2	0.8	56	TD Securities (USA) LLC	12	22	1,044	2.1	1.2	124	Jefferies LLC	12	15	5,089	1.9	0.0	157
Piper Sandler & Co	13	11	8,281	3.9	-0.3	206	RBC Capital Markets	13	20	1,040	2.1	1.0	47	Wells Fargo & Co	13	12	5,044	1.9	-0.3	190
Ramirez & Co Inc	14	14	6,413	3.0	0.2	41	Samco Capital Markets	14	16	1,005	2.0	0.6	111	Academy Securities Inc	14	5	4,834	1.8	-1.0	148
Loop Capital Markets	15	16	4,837	2.3	0.7	40	Fidelity Capital Markets	15	21	949	1.9	0.8	80	Cabrera Capital Markets Inc	15	19	4,510	1.7	0.5	164
Industry Total			214,617	100.0		3,004	Industry Total			50,431	100.0		2,379	Industry Total			175,303	100.0		1,996

US Taxable Municipal Debt (AT62)							Minority Owned Firms (AT41)							Bid Type Composition (US\$bil)						
YoY Change (\$)							YoY Change (\$)							YoY Change (\$)						
-60%							-6%							QoQ Change (\$)						
QoQ Change (\$)							QoQ Change (\$)							0%						
-18%							0%													
Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals	Bookrunner	Rank 2023	Rank 2022	Proce eds	Market Share	Mkt. Sh.	# of Deals							
Citi	1	3	1,435	15.9	7.0	11	Siebert Williams Shank & Co	1	1	8,939	6.7	1.3	56							
RBC Capital Markets	2	2	1,426	15.8	5.5	27	Ramirez & Co Inc	2	2	6,413	4.8	0.2	41							
JP Morgan	3	9	734	8.1	1.9	14	Loop Capital Markets	3	3	5,071	3.8	1.2	58							
Wells Fargo & Co	4	5	627	6.9	-0.9	10	Cabrera Capital Markets Inc	4	5	640	0.5	0.2	4							
Goldman Sachs & Co	5	6	616	6.8	-0.7	11	Estrada Hinojosa & Company Inc	5	4	226	0.2	-0.2	12							
BofA Securities Inc	6	1	556	6.1	-8.4	14	Bancroft Capital	6	-	116	0.1	0.1	13							
Morgan Stanley	7	11	409	4.5	2.0	8	Stern Brothers & Co	7	7	30	0.0	-0.1	3							
Robert W Baird & Co Inc	8	13	396	4.4	2.8	26														
Loop Capital Markets	9	10	337	3.7	-0.1	6														
Raymond James Financial Inc	10	8	237	2.6	-4.4	16														
Industry Total			9,053	100.0		360	Industry Total			132,758	100.0		1,375							

\*Indicates a Tie



# Composite Amount US\$10mln & Under

First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

## Bookrunner Composite Amount Under \$10mln (AT02)

	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Robert W Baird & Co Inc	1	1	1,588	16.4	5.1	328
Stifel Nicolaus & Co Inc	2	2	924	9.6	-0.3	168
Raymond James	3	4	709	7.3	0.8	129
Piper Sandler & Co	4	3	630	6.5	-1.8	134
Samco Capital Markets	5	8	461	4.8	0.7	85
FMSbonds Inc	6	9	424	4.4	1.2	76
TD Securities (USA) LLC	7	39	369	3.8	3.4	100
D A Davidson & Co	8	5	368	3.8	-1.2	111
RBC Capital Markets	9	12	334	3.5	0.6	53
Northland Securities	10	6	311	3.2	-1.6	90
BOK Financial Securities Inc	11	10	309	3.2	0.0	128
Roosevelt & Cross Inc	12	7	289	3.0	-1.5	105
Hilltop Securities	13	16	247	2.6	0.5	52
Baker Group LP	14	13	226	2.3	-0.4	72
Fidelity Capital Markets	15	17	204	2.1	0.6	41
<b>Industry Total</b>			<b>9,669</b>	<b>100.0</b>		<b>2,331</b>

## Co-Manager Composite Amount Under \$10mln (AT12a)

	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Cantor Fitzgerald LP	1	3	194	2.0	0.6	36
Stifel Nicolaus & Co Inc	2	1	175	1.8	0.3	87
BOK Financial Securities Inc	3	4	104	1.1	-0.2	18
Fidelity Capital Markets	4	44	93	1.0	0.8	114
FMSbonds Inc	5	27	90	0.9	0.5	213
Sierra Pacific Securities	6	13	76	0.8	0.1	278
Carty & Company Inc	7*	31	75	0.8	0.5	276
CINCaP Investment Group	7*	9	75	0.8	0.0	125
R Seelaus & Company Inc	9	8	75	0.8	0.0	124
Raymond James	10	37	72	0.8	0.5	38
Edward D Jones & Co LP	11	15	72	0.7	0.1	218
Intercoastal Capital Markets	12	11	71	0.7	0.0	115
Celadon Financial Group	13	19	71	0.7	0.2	256
Crews & Associates Inc	14	10	65	0.7	-0.1	248
CL King & Associates	15	20	62	0.6	0.1	255
<b>Industry Total</b>			<b>2,890</b>	<b>100.0</b>		<b>581</b>

## Financial Advisor Composite Amt Under \$10mln (AT07a)

	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
PFM Financial Advisors LLC	1	1	731	10.2	0.4	123
Ehlers & Associates	2	2	539	7.5	0.1	141
Robert W Baird & Co Inc	3	4	533	7.4	1.4	116
Baker Tilly Municipal Advisors	4	6	470	6.6	2.5	96
Hilltop Securities	5	3	464	6.5	-0.5	92
Masterson Advisors LLC	6	8	332	4.6	1.4	62
Stephen H McDonald & Associates Inc	7	9	206	2.9	-0.2	117
Specialized Public Finance Inc	8	10	200	2.8	0.2	44
Phoenix Advisors LLC	9	7	172	2.4	-0.9	36
Piper Sandler & Co	10	5	167	2.3	-2.2	33
PMA Securities Inc	11	19	165	2.3	0.9	35
Samco Capital Markets	12	13	164	2.3	0.4	28
Urban Futures Inc	13	21	157	2.2	0.9	31
Stephen L Smith Corp	14	20	142	2.0	0.7	102
Speer Financial Inc	15	12	133	1.9	0.0	45
<b>Industry Total</b>			<b>7,175</b>	<b>100.0</b>		<b>1,726</b>

## Negotiated Composite Amt Under \$10mln (AT21)

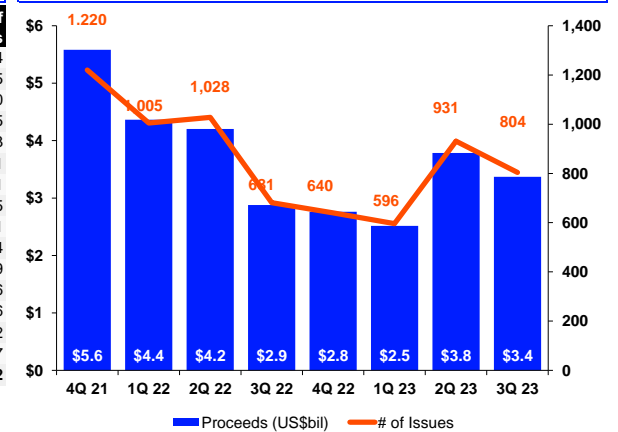
	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Stifel Nicolaus & Co Inc	1	1	812	19.6	2.2	149
Raymond James	2	4	390	9.4	1.3	64
FMSbonds Inc	3	5	389	9.4	3.7	71
Robert W Baird & Co Inc	4	8	374	9.0	4.6	74
D A Davidson & Co	5	2	353	8.5	-1.5	104
Piper Sandler & Co	6	3	348	8.4	-1.0	83
RBC Capital Markets	7	7	207	5.0	0.2	31
LJ Hart & Company	8	6	203	4.9	0.1	72
Northland Securities	9	11	121	2.9	1.0	36
Hilltop Securities	10	15	77	1.9	0.5	13
PNC Financial Services Group Inc	11	13	63	1.5	-0.3	8
Bernardi Securities Inc	12	14	60	1.4	-0.1	18
The Frazer Lanier Company Inc	13	18	53	1.3	0.0	13
Mesirow Financial Inc	14	36	52	1.2	0.8	10
Colliers Securities	15	9	46	1.1	-1.6	11
<b>Industry Total</b>			<b>4,146</b>	<b>100.0</b>		<b>919</b>

\*Indicates a Tie

## Competitive Composite Amt Under \$10mln (AT20)

	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Robert W Baird & Co Inc	1	1	1,214	22.0	4.1	254
Samco Capital Markets	2	5	416	7.5	0.8	75
TD Securities (USA) LLC	3	24	369	6.7	5.9	100
Raymond James	4	7	319	5.8	0.7	65
BOK Financial Securities Inc	5	6	291	5.3	-0.2	123
Piper Sandler & Co	6	3	282	5.1	-2.2	51
Roosevelt & Cross Inc	7	4	277	5.0	-2.0	101
Baker Group LP	8	9	206	3.7	-1.1	65
Fidelity Capital Markets	9	10	204	3.7	0.7	41
Northland Securities	10	2	190	3.4	-4.2	54
Hilltop Securities	11	12	170	3.1	0.3	39
FHNC Financial Capital Markets	12	8	152	2.8	-2.2	26
Janney Montgomery Scott LLC	13	15	128	2.3	0.9	16
RBC Capital Markets	14	19	126	2.3	1.3	22
Huntington Bancshares Inc	15	13	118	2.1	-0.6	27
<b>Industry Total</b>			<b>5,523</b>	<b>100.0</b>		<b>1,412</b>

## Municipal Issuance - Composite Amount US\$10mil & Under



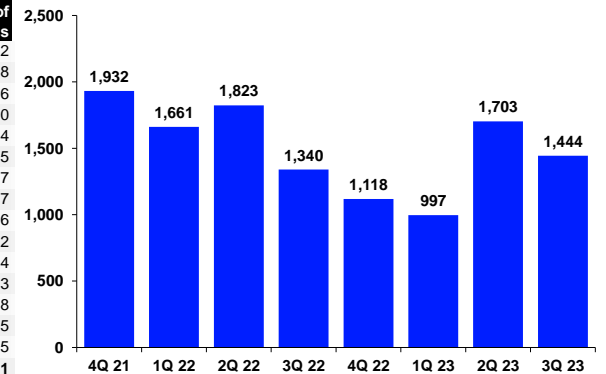
# US Financial Advisors

First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

Financial Advisors (AT07)							Financial Advisors Long & Short Term (AT18)							Financial Advisors Number of Issues (AT07d)						
YoY Change (\$)							YoY Change (\$)							YoY Change (\$)						
-9%							-7%							-14%						
QoQ Change (\$)							QoQ Change (\$)							QoQ Change (\$)						
-3%							-5%							-15%						
Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals	Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals	Financial Advisor	Rank 2023	Rank 2022	# of Deals	Market Share	Mkt. Sh.	Proceeds US\$mil
PFM Financial Advisors LLC	1	1	42,055	18.5	3.2	491	PFM Financial Advisors LLC	1	1	43,128	17.4	2.7	502	PFM Financial Advisors LLC	1	1	491	11.9	1.0	42,055
Public Resources Advisory Group	2	2	26,064	11.4	0.0	100	Public Resources Advisory Group	2	2	26,079	10.5	-0.2	102	Hilltop Securities	2	2	325	7.8	-0.6	16,417
Hilltop Securities	3	3	16,417	7.2	-0.9	325	Hilltop Securities	3	3	17,564	7.1	-0.8	466	Robert W Baird & Co Inc	3	4	194	4.7	0.6	2,610
Estrada Hinojosa & Company Inc	4	8	8,139	3.6	1.3	49	Estrada Hinojosa & Company Inc	4	8	8,151	3.3	1.1	50	Ehlers & Associates	4	3	189	4.6	-0.1	1,945
Frasca & Associates	5	4	8,084	3.6	-2.2	30	Frasca & Associates	5	4	8,084	3.3	-2.5	30	Baker Tilly Municipal Advisors	5	5	177	4.3	0.6	4,180
Acacia Financial Group Inc	6	6	6,468	2.8	0.1	63	Acacia Financial Group Inc	6	6	7,137	2.9	0.3	96	Stephen H McDonald & Associates Inc	6	7	123	3.0	-0.2	429
RBC Capital Markets	7	19	5,422	2.4	1.1	62	RBC Capital Markets	7	14	6,347	2.6	1.1	64	Specialized Public Finance Inc	7	10	116	2.8	0.5	3,732
Piper Sandler & Co	8	7	5,047	2.2	-0.3	114	Piper Sandler & Co	8	7	5,194	2.1	-0.3	117	Piper Sandler & Co	8	6	114	2.8	-0.5	5,047
Municipal Capital Markets Group Inc	9	10	5,037	2.2	0.6	11	Municipal Capital Markets Group Inc	9	13	5,037	2.0	0.5	11	Stephen L Smith Corp	9*	13	107	2.6	0.8	246
Caine Mitter & Associates Inc	10	16	4,824	2.1	0.7	73	Caine Mitter & Associates Inc	10	19	4,844	2.0	0.6	74	Masterson Advisors LLC	9*	12	107	2.6	0.6	2,139
CSG Advisors Incorporated	11	11	4,668	2.1	0.5	88	CSG Advisors Incorporated	11	16	4,668	1.9	0.4	88	Public Resources Advisory Group	11	8	100	2.4	-0.2	26,064
KNN Public Finance	12	13	4,300	1.9	0.3	37	KNN Public Finance	12	11	4,592	1.9	0.3	40	Fiscal Advisors & Marketing Inc	12	9	96	2.3	-0.3	491
Baker Tilly Municipal Advisors	13	15	4,180	1.8	0.4	177	Kaufman Hall & Associates Inc	13	5	4,524	1.8	-0.9	32	Phoenix Advisors LLC	13	11	89	2.2	0.1	2,138
Columbia Capital Management	14	28	4,175	1.8	1.0	23	Montague DeRose & Associates LLC	14	9	4,436	1.8	-0.1	25	CSG Advisors Incorporated	14	19*	88	2.1	0.6	4,668
Kaufman Hall & Associates Inc	15	5	4,174	1.8	-1.1	30	Baker Tilly Municipal Advisors	15	17	4,277	1.7	0.3	183	Samco Capital Markets	15	15	86	2.1	0.5	3,352
<b>Industry Total</b>			<b>227,938</b>	<b>100.0</b>		<b>4,144</b>	<b>Industry Total</b>			<b>247,615</b>	<b>100.0</b>		<b>5,381</b>	<b>Industry Total</b>			<b>4,144</b>	<b>100.0</b>		<b>227,938</b>

Financial Advisors Negotiated (AT07b)							Financial Advisors Competitive (AT07c)							Financial Advisor - Number of Issues						
YoY Change (\$)							YoY Change (\$)							YoY Change (\$)						
-4%							-22%							YoY Change (\$)						
QoQ Change (\$)							QoQ Change (\$)							QoQ Change (\$)						
5%							-29%							-29%						
Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals	Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals	Financial Advisor	Rank 2023	Rank 2022	# of Deals	Market Share	Mkt. Sh.	Proceeds US\$mil
PFM Financial Advisors LLC	1	1	35,875	20.0	4.0	309	PFM Financial Advisors LLC	1	1	6,180	12.8	-0.5	182				1,932			
Public Resources Advisory Group	2	2	21,743	12.1	1.0	62	Public Resources Advisory Group	2	2	4,321	8.9	-3.3	38				1,661			
Hilltop Securities	3	3	12,618	7.0	-1.5	195	Piper Sandler & Co	3	4	4,271	8.8	2.3	86				1,823			
Estrada Hinojosa & Company Inc	4	6	7,964	4.4	1.3	42	Hilltop Securities	4	3	3,799	7.8	1.0	130				1,340			
Frasca & Associates	5	4	7,810	4.4	-2.9	26	Baker Tilly Municipal Advisors	5	8	2,115	4.4	1.1	134				1,118			
Acacia Financial Group Inc	6	9	6,031	3.4	1.2	43	Robert W Baird & Co Inc	6	6	1,943	4.0	0.2	185				997			
Municipal Capital Markets Group Inc	7	8	5,037	2.8	0.6	11	Ehlers & Associates	7	10	1,940	4.0	0.9	187				1,703			
RBC Capital Markets	8	13	4,872	2.7	1.1	46	Davenport & Company LLC	8	9	1,805	3.7	0.5	27				1,444			
Caine Mitter & Associates Inc	9	11	4,824	2.7	0.8	73	Specialized Public Finance Inc	9	15	1,681	3.5	1.9	76							
CSG Advisors Incorporated	10	10	4,668	2.6	0.5	88	Montague DeRose & Associates LLC	10	11	1,575	3.3	0.5	12							
Kaufman Hall & Associates Inc	11	5	4,174	2.3	-1.5	30	Phoenix Advisors LLC	11	14	1,182	2.4	0.6	74							
KNN Public Finance	12	14	4,105	2.3	0.7	35	Masterson Advisors LLC	12	26	1,108	2.3	1.5	93							
Columbia Capital Management	13	24	3,983	2.2	1.3	17	Samco Capital Markets	13	43	939	1.9	1.5	48							
Stifel Nicolaus & Co Inc	14	12	3,147	1.8	0.0	33	First Tryon Securities LLC	14	12	842	1.7	-0.2	15							
BOK Financial Securities Inc	15	23	3,088	1.7	0.8	26	PMA Securities Inc	15	19	680	1.4	0.1	45							
<b>Industry Total</b>			<b>179,472</b>	<b>100.0</b>		<b>1,813</b>	<b>Industry Total</b>			<b>48,466</b>	<b>100.0</b>		<b>2,331</b>							

\*Indicates a Tie





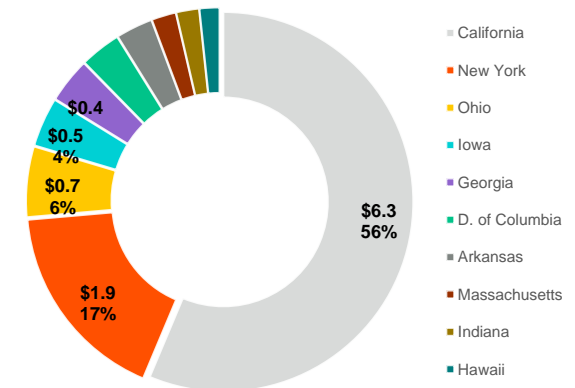
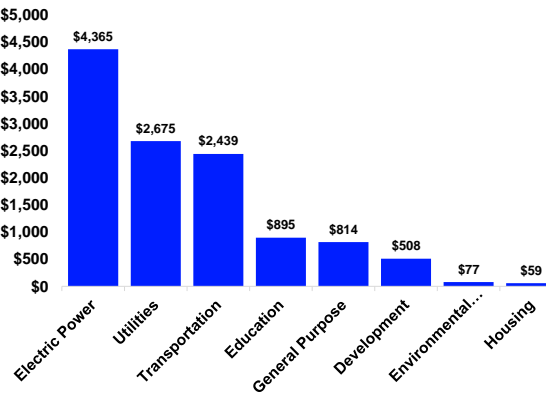
# US Green Bonds

First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

Bookrunner Green Bonds (AT70)							Co-Manager Green Bonds (AT71)							Financial Advisor Green Bonds (AT72)						
YoY Change (\$)							YoY Change (\$)							YoY Change (\$)						
-7%							-19%							2%						
QoQ Change (\$)							-10%							-25%						
Bookrunner	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals	Co-Manager	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals	Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Goldman Sachs & Co LLC	1	3	3,554	30.0	13.6	11	Stifel Nicolaus & Co Inc	1	17	576	4.9	3.6	6	PFM Financial Advisors LLC	1	1	4,166	37.6	14.1	17
Morgan Stanley	2	4	1,928	16.3	1.4	6	J P Morgan Securities LLC	2	8	570	4.8	1.5	12	Municipal Capital Markets Group Inc	2	-	1,957	17.6	17.6	3
BofA Securities Inc	3	1	1,691	14.3	-6.6	8	Citi	3	7	505	4.3	0.5	12	Backstrom McCarley Berry & Co	3	11	974	8.8	5.4	4
RBC Capital Markets	4	14	1,278	10.8	10.2	6	Ramirez & Co Inc	4	1	460	3.9	-4.5	11	Public Resources Advisory Group	4	4	807	7.3	-0.3	5
Ramirez & Co Inc	5	11	1,085	9.2	8.3	7	Siebert Williams Shank & Co	5	3	424	3.6	-2.3	9	Hilltop Securities	5	-	673	6.1	6.1	3
Citi	6	6	852	7.2	2.9	4	UBS Financial Services Inc	6	22	334	2.8	2.2	7	Montague DeRose & Associates LLC	6	14	592	5.3	3.1	3
Jefferies LLC	7	-	555	4.7	4.7	3	BofA Securities Inc	7	14	328	2.8	0.7	8	Frasca & Associates	7	2	576	5.2	-7.3	3
Wells Fargo & Co	8	10	365	3.1	2.0	3	Morgan Stanley	8	11	327	2.8	0.4	10	KNN Public Finance	8	3	366	3.3	-4.7	2
Loop Capital Markets	9	19	311	2.6	2.3	2	Goldman Sachs & Co LLC	9	18	293	2.5	1.4	8	Sycamore Advisors LLC	9	10	319	2.9	-1.3	4
J P Morgan Securities LLC	10	2	94	0.8	-20.0	2	Jefferies LLC	10	5	278	2.4	-2.6	8	Phoenix Capital Partners LLP	10	-	196	1.8	1.8	1
TD Securities (USA) LLC	11	-	29	0.2	0.2	1	Raymond James	11	15	266	2.3	0.4	6	Stifel Nicolaus & Co Inc	11	8	154	1.4	-3.0	1
Stifel Nicolaus & Co Inc	12	5	27	0.2	-9.0	2	Loop Capital Markets	12	10	243	2.1	-0.5	8	Robert W Baird & Co Inc	12	13	62	0.6	-1.9	1
Raymond James	13	17	26	0.2	-0.1	2	Wells Fargo & Co	13	16	242	2.1	0.8	5	Rockfleet Financial Services Inc	13*	-	50	0.5	0.5	1
Crews & Associates Inc	14	15	23	0.2	-0.3	1	Barclays	14	12	220	1.9	-0.5	9	TKG & Associates LLP	13*	-	50	0.5	0.5	1
Robert W Baird & Co Inc	15	9	8	0.1	-1.1	1	RBC Capital Markets	15	2	218	1.8	-6.3	4	Baker Tilly Municipal Advisors	15	22	50	0.5	0.2	2
<b>Industry Total</b>			<b>11,831</b>	<b>100.0</b>		<b>55</b>	<b>Industry Total</b>			<b>7,460</b>	<b>100.0</b>		<b>33</b>	<b>Industry Total</b>			<b>11,095</b>	<b>100.0</b>		<b>47</b>

Issuer Green Bonds (AT73)							Use of Proceeds Composition (US\$mil) Green Bonds							Top 10 States (US\$mil) Green Bonds						
YoY Change (\$)																				
-7%																				
QoQ Change (\$)																				
Issuer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals														
California Comm Choice Fin Auth	1	2	3,747	31.7	24.4	7	\$5,000													
Triborough Bridge & Tunnel Auth	2	4	1,365	11.5	5.6	4	\$4,500													
San Francisco City/Co Public Util Comm	3	-	1,183	10.0	10.0	3	\$4,000													
California Infrstr & Eco Dev Bank	4	-	545	4.6	4.6	1	\$3,500													
Iowa Finance Authority	5	21	472	4.0	2.4	3	\$3,000													
Long Island Power Authority	6	-	400	3.4	3.4	1	\$2,500													
Washington Metro Area Transit Au	7	-	392	3.3	3.3	1	\$2,000													
San Diego USD	8	9	366	3.1	-0.8	2	\$1,500													
Arkansas Development Fin Auth	9	14	330	2.8	0.5	2	\$1,000													
Ohio Water Development Authority	10	-	300	2.5	2.5	1	\$500													
Ohio State University	11	-	266	2.2	2.2	1														
Atlanta City-Georgia	12	-	256	2.2	2.2	1														
Los Angeles Dept of Airports	13	1	248	2.1	-8.5	1														
Massachusetts Wtr Resources Auth	14	-	234	2.0	2.0	1														
Indiana Finance Authority	15	16*	219	1.9	-0.1	2														
<b>Industry Total</b>			<b>11,831</b>	<b>100.0</b>		<b>55</b>														

\*Indicates a Tie



# US Private Deals & Credit Enhancers

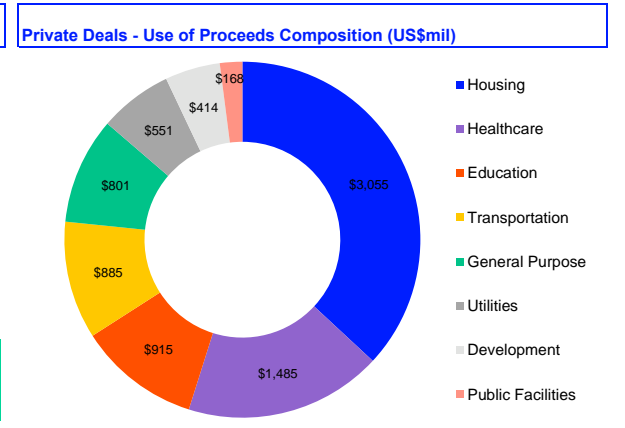
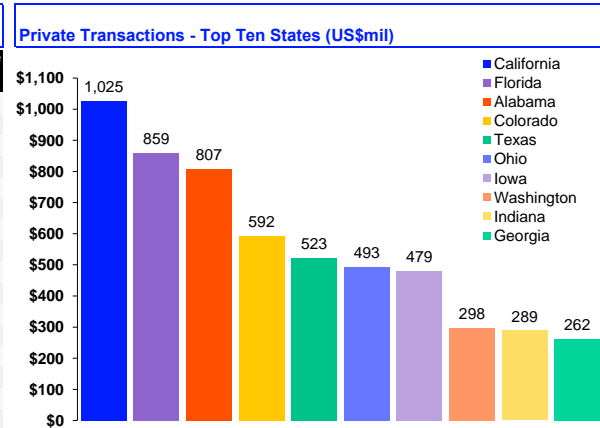
First Nine Months 2023 | Underwriters, Financial Advisors & Credit Enhancers

Private Placement Agent / Purchaser (AT24)						
YoY Change (\$) -57% QoQ Change (\$) -58%						
Placement Agent or Purchaser	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Citi	1	4	2,405	28.8	21.3	46
Piper Sandler & Co	2	2	851	10.2	0.1	98
BoFA Securities Inc	3	1	690	8.3	-5.0	9
Stifel Nicolaus & Co Inc	4	5	449	5.4	-1.5	38
J P Morgan Securities LLC	5	8	281	3.4	-0.9	4
Truist Financial Corp	6	6	271	3.2	-1.9	9
RBC Capital Markets	7	14	271	3.2	1.7	10
Jefferies LLC	8	54*	223	2.7	2.5	2
TD Securities (USA) LLC	9	9	186	2.2	-1.3	8
Iowa Finance Authority	10	-	185	2.2	2.2	5
Bank of New York Mellon Corp	11	7	141	1.7	-2.8	11
Arkansas Development Fin Auth	12	-	139	1.7	1.7	2
Morgan Stanley	13	24	133	1.6	0.9	1
Robert W Baird & Co Inc	14	10	132	1.6	-1.4	36
Deutsche Bank	15	-	121	1.4	1.4	4
<b>Industry Total</b>			<b>8,358</b>	<b>100.0</b>		<b>391</b>

Private Issuers (AT44)						
YoY Change (\$) -57% QoQ Change (\$) -58%						
Issuer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Mobile Airport Authority	1	-	800	9.6	9.6	1
Ohio	2	152*	300	3.6	3.4	1
California Municipal Fin Auth	3	5	295	3.5	0.4	8
Nevada Housing Division	4	59	197	2.4	2.0	4
New Hope Cultural Ed Facs Fin Corp	5	200*	196	2.3	2.2	5
Colorado Hsg & Fin Auth (CHFA)	6	15	174	2.1	1.1	7
San Jose City-California	7	-	166	2.0	2.0	3
Washington Econ Dev Fin Auth	8	-	160	1.9	1.9	1
California Housing Finance Agcy	9	66	156	1.9	1.5	4
Florida Insurance Assistance Interlocal Agy	10	-	150	1.8	1.8	1
Georgia Priv College & Univ Auth	11	-	143	1.7	1.7	1
Fairfax Co Industrial Dev Auth	12	-	133	1.6	1.6	1
Clinton City-Iowa	13	-	130	1.6	1.6	2
Washington St Hsg Fin Commission	14	17	128	1.5	0.5	3
Beaver Water Dt	15	-	126	1.5	1.5	1
<b>Industry Total</b>			<b>8,358</b>	<b>100.0</b>		<b>391</b>

Private Financial Advisor (AT25)						
YoY Change (\$) -75% QoQ Change (\$) -84%						
Financial Advisor	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
PFM Financial Advisors LLC	1	2	611	27.0	18.9	19
Kaufman Hall & Associates Inc	2	1	378	16.7	-17.2	7
Raymond James	3	-	150	6.6	6.6	1
MuniCap Inc	4	61	127	5.6	5.5	6
Davenport & Company LLC	5	-	95	4.2	4.2	4
Baker Tilly Municipal Advisors	6	15	82	3.6	2.5	3
Hendrickson Company	7	16	81	3.6	2.6	4
Hilltop Securities	8	7	67	3.0	-1.0	3
Piper Sandler & Co	9	3	58	2.5	-5.4	4
Caine Mitter & Associates Inc	10*	8	52	2.3	-0.5	4
Government Consultants Inc	10*	5	52	2.3	-2.4	3
Crowe LLP	12	14	47	2.1	1.0	3
CSG Advisors Incorporated	13	10	46	2.0	0.0	2
Blue Rose Capital Advisors	14	-	43	1.9	1.9	1
DEC Associates Inc	15	31	43	1.9	1.6	1
<b>Industry Total</b>			<b>2,267</b>	<b>100.0</b>		<b>97</b>

Public & Private Issuers (AT46)						
YoY Change (\$) -12% QoQ Change (\$) -7%						
Issuer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
California	1	4	6,938	2.5	1.0	3
NYS Dorm Authority	2	2	4,721	1.7	-0.1	14
NYC Transitional Finance Auth	3	1	4,526	1.7	-0.3	8
New York City-New York	4	6	4,388	1.6	0.4	6
Main Street Natural Gas Inc	5	23	4,194	1.5	0.9	7
Triborough Bridge & Tunnel Auth	6	3	3,817	1.4	-0.3	7
California Comm Choice Fin Auth	7	52	3,797	1.4	1.1	8
Texas Natural Gas Sec Fin Corp	8	-	3,522	1.3	1.3	1
Washington	9	9	3,190	1.2	0.2	14
Regents of the University of California	10	5	2,875	1.1	-0.2	6
Illinois	11	16	2,511	0.9	0.1	2
NYC Municipal Water Fin Auth	12	18	2,186	0.8	0.1	4
Port Authority of New York & New Jersey	13	32	2,177	0.8	0.4	5
San Francisco City/Co Public Util Comm	14	400	2,027	0.7	0.7	7
Wisconsin	15	68	1,742	0.6	0.4	7
<b>Industry Total</b>			<b>273,406</b>	<b>100.0</b>		<b>5,774</b>



Bond Insurers (AT10)						
YoY Change (\$) 17.3%						
Insurer	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
AGM formerly FSA Inc	1	1	14,289	62.6	13.1	464
Build America Mutual (BAM)	2	2	8,525	37.4	-1.4	531
<b>Industry Total</b>			<b>22,814</b>	<b>100.0</b>		<b>995</b>

\*Indicates a Tie

Credit Enhancers (AT80)						
YoY Change (\$) -9%						
Credit Enhancers Types	Rank 2023	Rank 2022	Proceeds US\$mil	Market Share	Mkt. Sh.	# of Deals
Guaranteed	1	1	27,400	49.9	3.7	736
Bond insurance	2	2	22,814	41.5	-6.3	995
LOC Domestic Bank	3	5	1,982	3.6	3.6	17
Standby Purch Agreement	4	4	659	1.2	0.0	4
LOC Foreign Bank	5	3	584	1.1	-0.7	6
Mortgage backed	6	6	334	0.6	-0.1	16
Guaranteed investment contract	7	0	25	0.0	0.0	3
<b>Industry Total</b>			<b>54,919</b>	<b>100.0</b>		<b>1,755</b>

Top Issuers by Insured Amount					
Top Issuers by Insured Amt	2023	US\$mil	Share	US\$mil	Deals
Chicago City-Illinois	1	1,163.3	5.1	1,200.8	5
NYS Dorm Authority	2	1,075.2	4.7	1,075.2	1
Houston City-Texas	3	756.1	3.3	756.1	2
Lower Colorado River Authority (LCRA)	4	734.4	3.2	837.6	2
Nashville-Davidson Co Sports Auth	5	646.0	2.8	646.0	2
Philadelphia City-Pennsylvania	6	564.8	2.5	564.8	1
Wayne Co Airport Auth	7	369.8	1.6	369.8	2
Irvine Facilities Financing Auth	8	350.6	1.5	446.7	2
Greater Texoma Utility Authority	9	343.8	1.5	343.8	2
Pasco Co-Florida	10	325.9	1.4	325.9	1
<b>Top 10 Total</b>		<b>6,329.9</b>	<b>27.6</b>	<b>6,566.7</b>	<b>20</b>



# United States Municipals Criteria

FIRST NINE MONTHS 2023 | U.S. Underwriters, Financial Advisors & Credit Enhancers

If you would like to participate in the submission process, receive quarterly press releases, or have questions about our full league table criteria please contact:

## AMERICAS

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Rankings and volume totals include all municipal new issues underwritten during the period from July 1, 2023 to September 30, 2023, of which Refinitiv was made aware. All current data and previous year's data are as of 9:00am EDT on October 2, 2023. Except where indicated, the rankings quoted above do not include short-term, preliminary, private placement or rank-ineligible issues. Bookrunners receive full credit or true allocation credit if joint, on each issue of which they provide underwriting services. Co-managers receive equal credit for each issue on which they provide co-manager services. Financial advisors receive full credit, equal if joint, on each deal on which they provide advisory services.

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