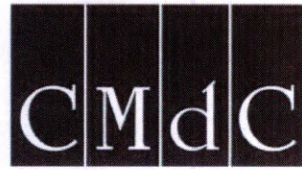


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Financial Advisors, Public Finance
Serving California and Hawaii



C.M. de CRINIS & CO., INC.

MEMORANDUM

DATE: September 20, 2018

TO: Mark Walker – Director of Finance
Jack Kulp – Deputy Director of Finance
May-Anne Alibin – Treasurer

FROM: Curt de Crinis

RE: Sale Results – Series 2018 GO Bonds

Sale Date: September 18th, 2018

Bids Received: Nine (9)

Winning Bid: Bank of America Merrill lynch

Winning TIC: 3.139%

Final TIC: 3.149% (after re amortization to assure level debt service)

Bonds as Bid: \$108,550,000

Final Bonds: \$106,315,000

Bond Term: 20 Years

Project Fund: \$100,929,003

Bonds Refunded: \$12,056,749 (Series 2006 B & C and six SRF Loans)

NPV Savings: \$450,458 (3.73% of refunded bonds)

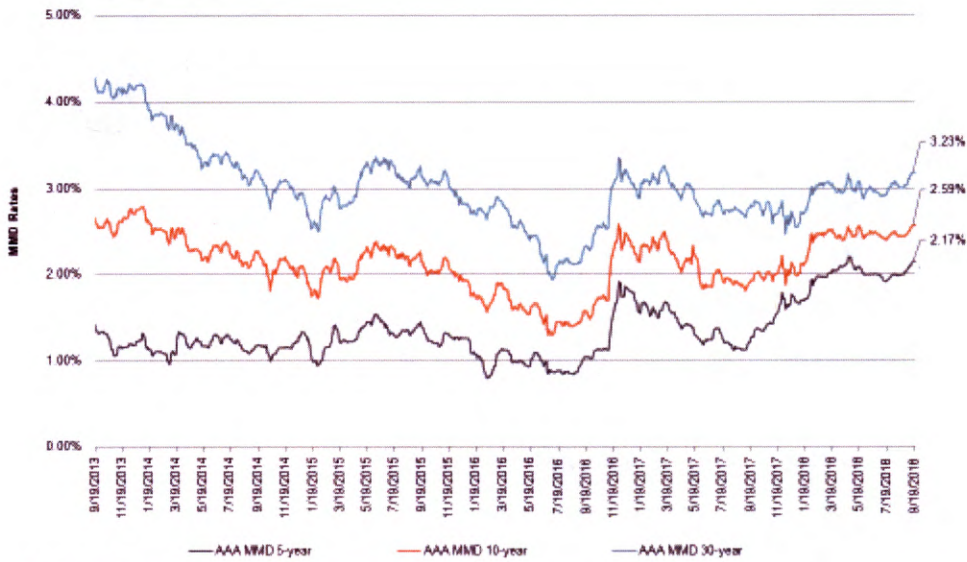
Market Conditions

Since the end of August bond market interest rates have been rising. The 10-year treasury has risen from 2.85% to 3.05% between August 31st and September 18th. Ten-year municipal AAA yields have risen from 2.44% and 2.58% during the same time. The graph below presents a history of where national AAA rated GO Bonds yields known as MMD have been since 2013.

RECEIVED AT BF MEETING ON 10-30-18
(BF-176) Submitted by Curt de Crinis

AAA MMD Rate History

September 2013 - Present



On September 18th MMD, the national municipal market index of GO Bonds, was unsettled and rates slightly higher for the day by about 3 basis points. Nevertheless, the County received 9 bids.

Bid Award*	Bidder Name	TIC
<input checked="" type="checkbox"/>	Bank of America Merrill Lynch	3.139106
<input type="checkbox"/>	Citigroup Global Markets Inc.	3.157217
<input type="checkbox"/>	J.P. Morgan Securities LLC	3.166540
<input type="checkbox"/>	Robert W. Baird & Co., Inc.	3.167493
<input type="checkbox"/>	Morgan Stanley & Co, LLC	3.169630
<input type="checkbox"/>	Raymond James & Associates, Inc.	3.184272
<input type="checkbox"/>	Wells Fargo Bank, National Association	3.185112
<input type="checkbox"/>	Mesirow Financial, Inc.	3.190954
<input type="checkbox"/>	TD Securities	3.231653

As a reference to underwriting activity nationally, from September 17th - 19th forty one (41) GO bonds were sold by competitive sale totaling \$593 million and fifteen (15) GO bonds were sold by negotiated sale totaling \$194 million. Maui's GO Bonds were well received, and yields were comparable to other very highly rated GO bonds sold on the same day. Yields across the country vary a bit depending on the state and the demand from state investors. The various state income tax rate is a greater factor now given the recent tax reform act of 2017 as investors are looking at after tax returns.

Maui's performance relative to two other very highly counties nationally is presented in the table below. These issues were also sold by competitive bid on 9/18/2018. There were no comparably rated general obligation bonds sold by negotiated sale. However, what is presented are two AAA rated revenue bonds sold by negotiated sale in Texas.

Issuer	Maui County	Maui County	St Mary Cnty MD	St Mary Cnty MD	Iredell Cnty NC	Iredell Cnty NC	Clifton Tex Ed	Clifton Tex Ed	Texas Water Brd	Texas Water Brd
Sale	Competitive	Competitive	Competitive	Competitive	Competitive	Competitive	Negotiated	Negotiated	Negotiated	Negotiated
Type	GO BONDS	GO BONDS	GO BONDS	GO BONDS	GO BONDS	GO BONDS	Revenue	Revenue	Revenue	Revenue
UW	BAML	BAML	Piper	Piper	Citi	Citi	Robert Baird	Robert Baird	Citigroup	Citigroup
Sale Date	9/18/2018	9/18/2018	9/18/2018	9/18/2018	9/18/2018	9/18/2018	9/18/2018	9/18/2018	9/18/2018	9/18/2018
Rating	Aa1/AA+/AA+	Aa1/AA+/AA+	Aa1/AA+	Aa1/AA+	Aa1/AA+	Aa1/AA+	AAA	AAA	AAA	AAA
Issue \$	\$106,315,000	\$106,315,000	\$30,000,000	\$30,000,000	\$43,980,000	\$43,980,000	\$165,680,000	\$165,680,000	\$1,672,210,000	\$1,672,210,000
	Coupons	Yields	Coupons	Yields	Coupons	Yields	Coupons	Yields	Coupons	Yields
2019	5.00%	1.76%	5.000%	1.80%	5.000%	1.79%			4.00%	1.85%
2020	5.00%	1.86%	5.000%	1.89%	5.000%	1.88%	3.000%	2.04%	3.00%	1.96%
2021	5.00%	1.96%	5.000%	2.00%	5.000%	2.00%	3.000%	2.16%	5.00%	2.09%
2022	5.00%	2.06%	5.000%	2.10%	5.000%	2.12%	4.000%	2.27%	5.00%	2.19%
2023	5.00%	2.17%	5.000%	2.19%	5.000%	2.21%	4.000%	2.42%	5.00%	2.29%
2024	5.00%	2.29%	2.500%	2.29%	5.000%	2.31%	5.000%	2.54%	5.00%	2.41%
2025	5.00%	2.39%	5.000%	2.38%	5.000%	2.40%	5.000%	2.66%	5.00%	2.52%
2026	5.00%	2.49%	5.000%	2.47%	5.000%	2.48%	5.000%	2.78%	5.00%	2.63%
2027	5.00%	2.57%	5.000%	2.54%	5.000%	2.53%	5.000%	2.86%	5.00%	2.73%
2028	5.00%	2.65%	5.000%	2.61%	5.000%	2.61%	5.000%	2.93%	5.00%	2.79%
2029	5.00%	2.71%	5.000%	2.69%	5.000%	2.67%	5.000%	3.01%	5.00%	2.86%
2030	5.00%	2.77%	3.000%	3.01%	3.125%	3.13%	5.000%	3.07%	5.00%	2.93%
2031	4.00%	2.83%	3.125%	3.18%	3.125%	3.20%	4.000%	3.43%	5.00%	3.00%
2032	3.00%	3.27%	4.000%	3.00%	3.250%	3.25%	4.000%	3.47%	5.00%	3.05%
2033	3.00%	3.32%	4.000%	3.10%	3.375%	3.32%	4.000%	3.52%	4.00%	3.43%
2034	3.25%	3.42%	3.375%	3.44%	3.375%	3.40%	4.000%	3.57%	4.00%	3.51%
2035	3.25%	3.52%	3.500%	3.50%	3.500%	3.55%	5.000%	3.35%	4.00%	3.59%
2036	3.25%	3.57%	3.500%	3.56%	3.500%	3.61%	5.000%	3.42%	4.00%	3.67%
2037	3.50%	3.62%	3.500%	3.62%	3.625%	3.67%	5.000%	3.47%	4.00%	3.72%
2038	3.50%	3.65%	3.625%	3.66%	3.625%	3.71%	5.000%	3.50%	3.75%	3.75%

The yields highlighted in blue are comparable as they have the same coupon. It can be concluded that Maui's bid was very competitive with the two counties in Maryland and North Carolina sold on September 18th and superior to two AAA rated revenue issues sold in Texas. Texas has no income tax so that may be reflected in the higher yields.

Relative comparison to the City and County of Honolulu and the State of Hawaii.

Maui's performance relative the City and County of Honolulu and the State of Hawaii cannot be directly compared given market conditions and interest rates can be different every day. However, performance in 2018 can be inferred based on the final pricing relative to the MMD index on the day of pricing. The MMD index is a national index of AAA rated GO Bonds referenced earlier in the memo. Maui, the City and County of Honolulu and the State of Hawaii have identical bond ratings from Moody's of Aa1. Maui and the State are also rated AA+ by S&P while Honolulu is not rated by S&P. Fitch rates Maui and Honolulu AA+ and the State AA.

The most recent comparable financing was by the City and County of Honolulu. The pricing (bond coupons, yields and underwriting fees) of the 2018 Maui bonds is very close to the City and County of Honolulu's \$468 million 2018A GO Bonds that sold on August 15th. If Honolulu's pricing is applied to Maui's 2018 Bonds the TIC (true interest cost) is within a few basis points, of where Maui was actually bid. In short Maui and Honolulu got essentially the same deal.

However, while the pricing may be very close between Maui and Honolulu, municipal market interest rates have risen approximately 12 to 16 basis points, depending on the

bond maturity, since the day the Honolulu bonds were sold. When this is taken into account, Maui appears to have outperformed the Honolulu GO bond issue. Maui's TIC does not reflect the increase in rates when compared to Honolulu. While it can be argued that Maui should price at lower rates due to the limited supply of Maui bonds it can also be argued that Honolulu and the State should have lower rates than Maui as they are both larger and more frequent bond issuers with more market liquidity.

The Honolulu bonds were sold by negotiated sale to Bank America Merrill Lynch who was also the successful bidder on the Maui bonds. Maui also outperformed the State on a relative basis by a greater margin. The State last sold GO Bonds on 1/30/2018. Overall Maui relatively outperformed the State by about 20 basis points in many maturities. The State GO Bonds were also sold by negotiated sale. Below is a comparison of the three issues and the spreads to MMD on the day of pricing. The only meaningful comparisons, where the bond coupons are the same, are highlighted in blue.

Maui County	Maui County	Maui County	Honolulu	Honolulu	Honolulu	State of HI	State of HI	State of HI
Competitive	Competitive	Competitive	Negotiated	Negotiated	Negotiated	Negotiated	Negotiated	Negotiated
GO BONDS	GO BONDS	GO BONDS	GO Bonds	GO Bonds	GO Bonds	GO Bonds	GO Bonds	GO Bonds
BAML	BAML	BAML	BAML	BAML	BAML	BAML	BAML	BAML
9/18/2018	9/18/2018	9/18/2018	8/15/2018	8/15/2018	8/15/2018	1/30/2018	43130	1/30/2018
Aa1/AA+/AA+	Aa1/AA+/AA+	Aa1/AA+/AA+	Aa1/AA+ F	Aa1/AA+ F	Aa1/AA+ F	AA1/AA+	AA1/AA+	AA1/AA+
\$106,315,000	\$106,315,000	\$106,315,000	\$468,740,000	\$468,740,000	\$468,740,000	1/30/2018	43130	\$43,130
Coupons	Yields	Spread to MMD	Coupons	Yields	Spread to MMD	Coupons	Yields	Spread to MMD
5.00%	1.76%	-16	0.00%	0.00%				
5.00%	1.86%	-2	4.00%	1.68%	5			
5.00%	1.96%	-2	3.00%	1.83%	7			
5.00%	2.06%	-1	4.00%	1.96%	9	5.00%	1.83%	12
5.00%	2.17%	1	2.50%	2.08%	10	5.00%	1.97%	17
5.00%	2.29%	3	4.00%	2.22%	13	5.00%	2.14%	22
5.00%	2.39%	4	5.00%	2.35%	15	5.00%	2.29%	24
5.00%	2.49%	5	5.00%	2.49%	18	5.00%	2.43%	26
5.00%	2.57%	6	5.00%	2.56%	19	5.00%	2.54%	27
5.00%	2.65%	7	5.00%	2.66%	23	5.00%	2.62%	28
5.00%	2.71%	6	5.00%	2.73%	24	5.00%	2.71%	30
5.00%	2.77%	6	5.00%	2.80%	24	5.00%	2.77%	30
4.00%	2.83%	7	5.00%	2.84%	22	5.00%	2.84%	30
3.00%	3.27%	47	5.00%	2.89%	22	5.00%	2.90%	30
3.00%	3.32%	47	5.00%	2.94%	22	5.00%	2.95%	30
3.25%	3.42%	52	3.25%	3.39%	62	5.00%	2.99%	30
3.25%	3.52%	57	5.00%	3.02%	21	3.25%	3.47%	75
3.25%	3.57%	57	4.00%	3.42%	57	3.75%	3.50%	75
3.50%	3.62%	56	5.00%	3.09%	21	4.00%	3.38%	60
3.50%	3.65%	55	3.50%	3.61%	71	5.00%	3.10%	29

Again, it is not possible to do a direct comparison and only general inferences can be made. However, if the 2018 Maui Bond sale had been negotiated an underwriter would likely have considered pricing the bonds off the similarly rated recent Honolulu issue *plus* an adjustment for changes in the market since August 15th. This would have resulted in higher yields and higher bond debt service. For example, a 10 basis point increase in TIC would have increased debt service by over \$1 million. It would appear that once again the competitive sale approach yield better results.