

YIELD ANALYSIS

November 27, 2018

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U.S. Treasury Yields Mus			nicipal Bond Yields ¹		U.S. Agency Yields - Active Bonds				
Coupon Maturity YTM	Maturity	YTM	Tax-Equiv. ²	Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
0.000% 11/07/19 2.67%	11/26/19	1.95%	2.78%	FNMA	1.000%	10/24/19	\$98.44	2.75%	-3
2.750% 11/30/20 2.84%	11/26/20	2.06%	2.94%	FHLB	2.860%	10/15/20	\$99.96	2.87%	-6
2.875% 11/15/21 2.87%	11/26/21	2.12%	3.03%	FFCB	2.850%	09/20/21	\$99.88	2.90%	-13
2.000% 10/31/22 2.89%	11/26/22	2.19%	3.13%	FHLB	2.280%	10/26/22	\$97.10	3.06%	-7
2.875% 10/31/23 2.90%	11/26/23	2.25%	3.22%	FHLMC	2.000%	10/17/23	\$94.61	3.19%	-3
3.125% 11/15/28 3.07%	11/26/28	2.65%	3.79%	FFCB	4.000%	10/23/28	\$104.48	3.43%	-36
3.375% 11/15/48 3.33%	11/26/48	3.35%	4.78%	FFCB	3.580%	04/11/47	\$94.28	3.90%	-89
			Curren	: Yield Curves					
U.S. Treasuries	High-Grade Municipal Bonds				U.S. Agencies				
5.00%		5.00%				5.00% -			
3.75% -		3.75% -			_	3.75% -			—
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2.50% -		2.50% -	***			2.50% -			
1.25% -		1.25% -				1.25% -			
0.00% - 2018 2026 2034	2042	0.00% + 2018	2026	2034 2042	2	0.00% 2019 2025	2031	2037	2043
Corporate Bond Yields				Bullet & Callable Agency Bond Yields ³					
Description	Price	YTM	To Treasury (bp)	Description		Call Date	Price	YTM	YTW
JPM (A2/A-) 4.25% 10/15/2020	\$101.45	3.44%	+61	FFCB 1.16%		N/A	\$98.50	2.67%	2.67%
C (Baa1/BBB+) 3.88% 10/25/2023	\$100.47	3.77%	+87	FHLB 2.84%		09/25/19	\$99.73	2.97%	2.97%
BAC (A3/A-) 3.88% 8/1/2025	\$98.54 \$101.05	4.13% 3.82%	+123 +75	FFCB 3.34% FFCB 3.7% 1		10/04/19 10/04/23	\$99.85 \$99.37	3.37% 3.77%	3.37% 3.78%
MS (A3/BBB+) 4.2% 5/11/2028	φ101.03	3.04/0	7/3	FFCD 5.7% I	U/±/4U40	10/04/23	क्रिग.७/	3.77%	3.70/0
6.00%				6.00%					
4.00% -			•	4.00% -					_
2.00% -	•		·		•	+			•
2.00%				2.00% -					
0.00% 2020 2022	2024	2026	2028	0.00%		1 1		, ,	
2020 2022	2024	2020	2020	2019	2021	2023	2025	2027	2029

2019

2021

2023

2025

2027

2029