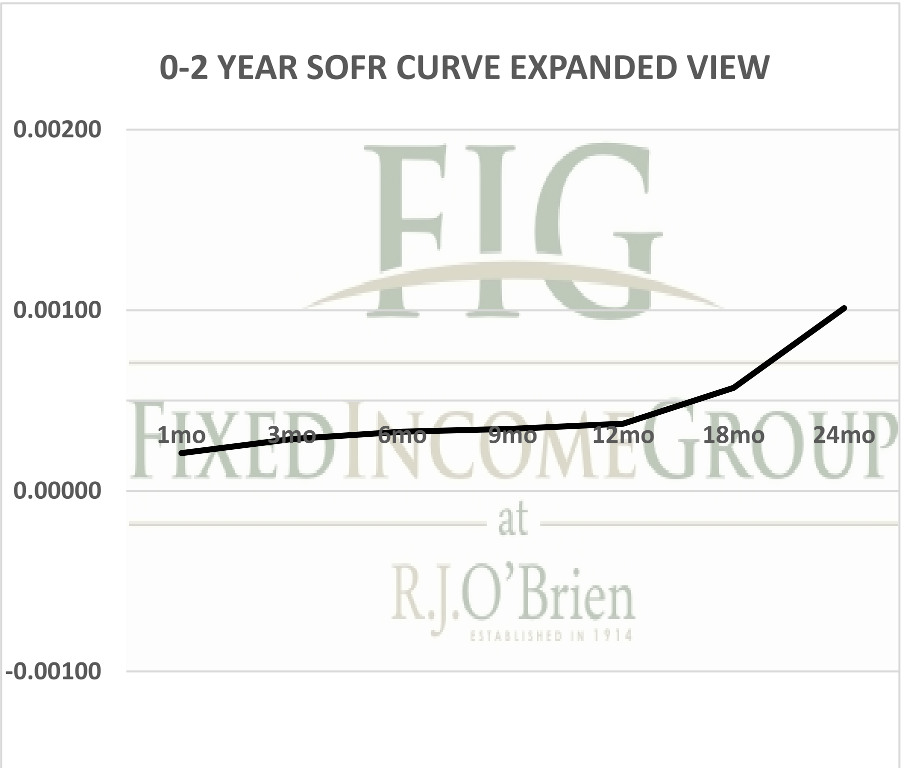
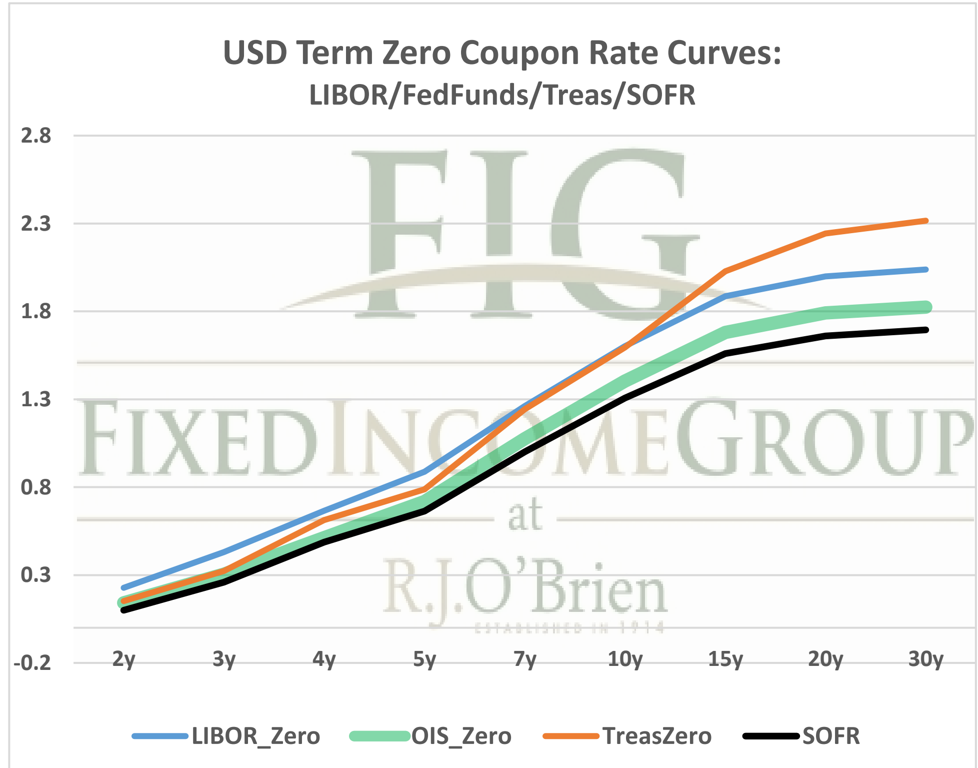
THE SOFR CURVE

Distributed by The Fixed Income Group at RJ O'Brien

Making the change from LIBOR to a new reference rate is not an insignificant exercise. It will take planning and changes to processes and systems. Sonia and SOFR appear likely to offer two options for users: compounded, setting in arrears (currently used in OIS markets) or a term rate setting in advance like LIBOR. You have questions, we have answers.





For more information on the Libor replacement contact:

Rocco Chierici
SVP the Fixed Income Group at RJO
312-373-5439

Corrine Baynes
VP the Fixed Income Group at RJO
800-367-3349

6/7/2021 6:33 ct

6/7/2021 6:33

Term SOFR from 1-day Returns

0.02088%	**0.02864%**	**0.03283%**	**0.03435%**	**0.03726%**	**0.05706%**	**0.10114%**
1.0000174	1.000073203	1.00016687	1.000260494	1.000377771	1.000868536	1.00205092
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
6/1/2021	6/1/2021	6/1/2021	6/1/2021	6/1/2021	6/1/2021	6/1/2021
6/30/2021	8/31/2021	11/30/2021	2/28/2022	5/31/2022	11/30/2022	5/31/2023
30	92	183	273	365	548	730

Term SOFR+Credit from 1-day Returns

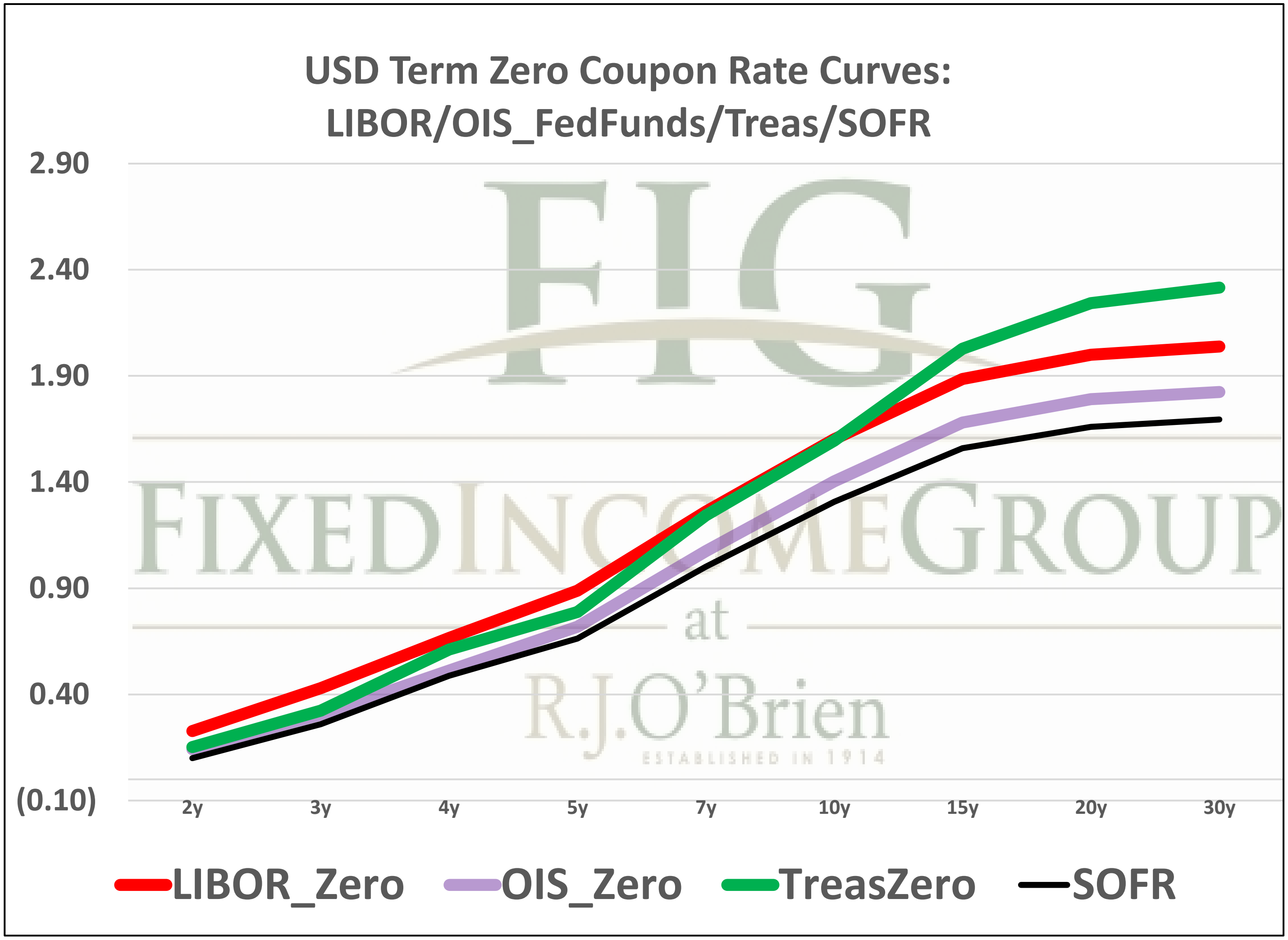
0.52204%	**0.52930%**	**0.53462%**	**0.53664%**	**0.54008%**	**0.56169%**	**0.60806%**
1.000435031	1.001352644	1.00271768	1.004069538	1.005475857	1.0085502	1.01233001
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
6/7/2021	6/7/2021	6/7/2021	6/7/2021	6/7/2021	6/7/2021	6/7/2021
7/6/2021	9/6/2021	12/6/2021	3/6/2022	6/6/2022	12/6/2022	6/6/2023
30	92	183	273	365	548	730

Term AMERIBOR from 1-day Returns

0.09972%	**0.10240%**	**0.10222%**	**0.10189%**	**0.10145%**		
1.00	**1.00**	**1.00**	**1.00**	**1.00**		
1mo	**3mo**	**6mo**	**9mo**	**12mo**		
6/1/2021	**6/1/2021**	**6/1/2021**	**6/1/2021**	**6/1/2021**		
6/30/2021	**8/31/2021**	**11/30/2021**	**2/28/2022**	**5/31/2022**		
30	**92**	**183**	**273**	**365**		

Term AMERIBOR+Credit from 1-day Returns

0.60100%	**0.60368%**	**0.60350%**	**0.60317%**	**0.60273%**		
1.00	1.00	1.00	1.00	1.00		
1mo	3mo	6mo	9mo	12mo		
6/1/2021	6/1/2021	6/1/2021	6/1/2021	6/1/2021		
6/30/2021	8/31/2021	11/30/2021	2/28/2022	5/31/2022		
30	92	183	273	365		


USD Term Zero Coupon Rate Curves:
LIBOR/OIS_FedFunds/Treas/SOFR
2.90
2.40
1.90
1.40
0.90
0.40
(0.10)
2y
3y
4y
5y
7y
10y
15y
20y
30y
LIBOR_Zero
OIS_Zero
TreasZero
SOFR
FIXED INCOME GROUP
at
R.J.O'Brien
ESTABLISHED IN 1914