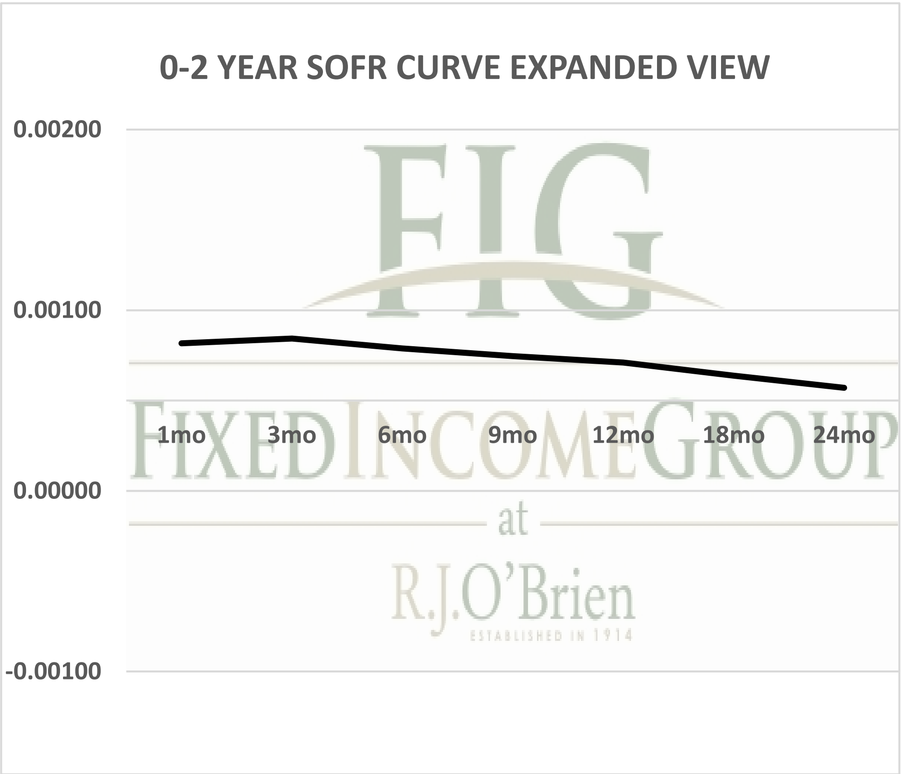
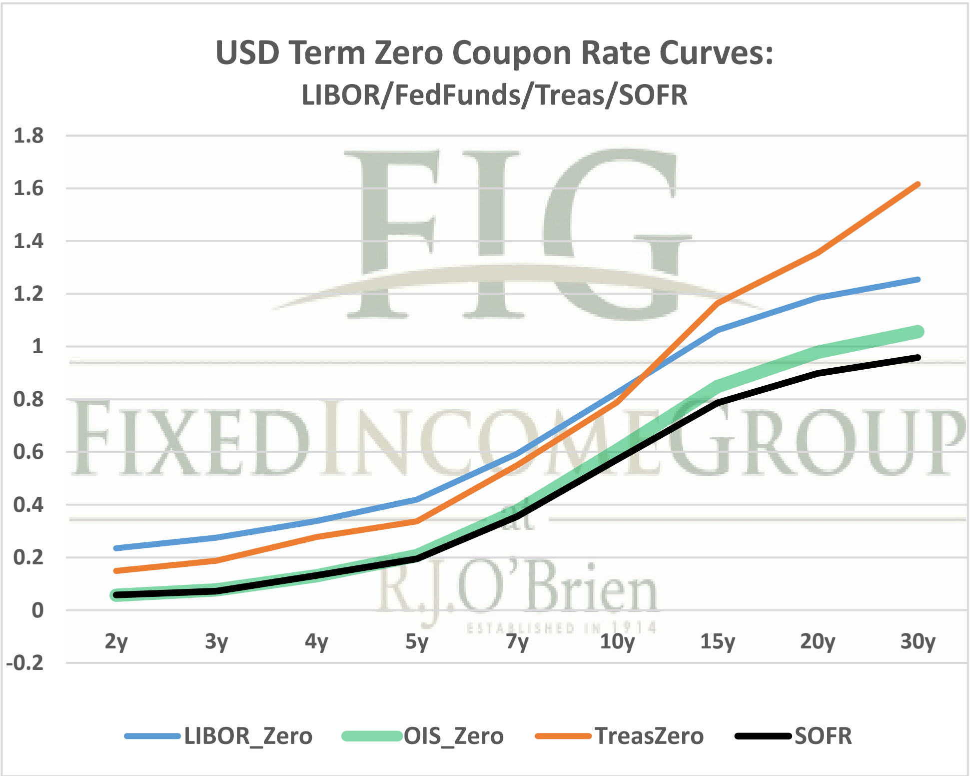
THE SOFR CURVE

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:

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Term SOFR from 1-day Returns

0.08173%	**0.08432%**	**0.07887%**	**0.07452%**	**0.07105%**	**0.06382%**	**0.05704%**
1.000070382	1.000215483	1.00039874	1.000565139	1.000720419	1.000969689	1.00115671
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020
11/19/2020	1/19/2021	4/19/2021	7/19/2021	10/19/2021	4/19/2022	10/19/2022
31	92	182	273	365	547	730

Term SOFR+Credit from 1-day Returns

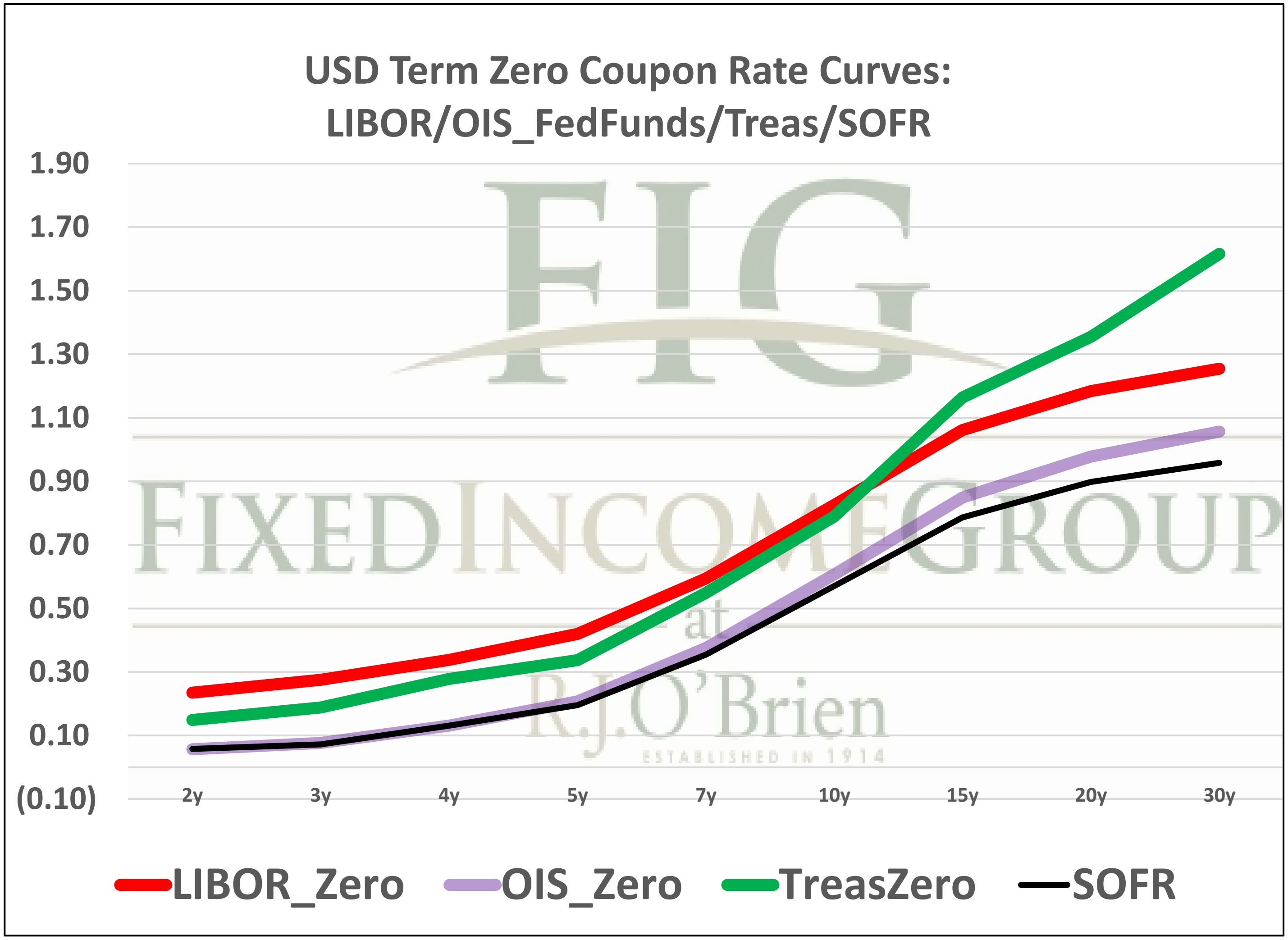
0.65968%	**0.66063%**	**0.65559%**	**0.65188%**	**0.64898%**	**0.64281%**	**0.63704%**
1.000568056	1.001688268	1.00331439	1.004943394	1.006579934	1.009767154	1.01291784
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020
11/19/2020	1/19/2021	4/19/2021	7/19/2021	10/19/2021	4/19/2022	10/19/2022
31	92	182	273	365	547	730

Term AMERIBOR from 1-day Returns

0.09080%	**0.08689%**	**0.07899%**	**0.07559%**	**0.07388%**		
1.00	**1.00**	**1.00**	**1.00**	**1.00**		
1mo	**3mo**	**6mo**	**9mo**	**12mo**		
10/20/2020	**10/20/2020**	**10/20/2020**	**10/20/2020**	**10/20/2020**		
11/19/2020	**1/19/2021**	**4/19/2021**	**7/19/2021**	**10/19/2021**		
31	**92**	**182**	**273**	**365**		

Term AMERIBOR+Credit from 1-day Returns

0.66685%	**0.66293%**	**0.65503%**	**0.65163%**	**0.64992%**		
1.00	1.00	1.00	1.00	1.00		
1mo	3mo	6mo	9mo	12mo		
10/20/2020	10/20/2020	10/20/2020	10/20/2020	10/20/2020		
11/19/2020	1/19/2021	4/19/2021	7/19/2021	10/19/2021		
31	92	182	273	365		


USD Term Zero Coupon Rate Curves:
LIBOR/OIS_FedFunds/Treas/SOFR
1.90
1.70
1.50
1.30
1.10
0.90
0.70
0.50
0.30
0.10
(0.10)
2y
3y
4y
5y
7y
10y
15y
20y
30y
LIBOR_Zero
OIS_Zero
TreasZero
SOFR
FIG
FIXED INCOME GROUP
at
R.J.O'Brien
ESTABLISHED IN 1914