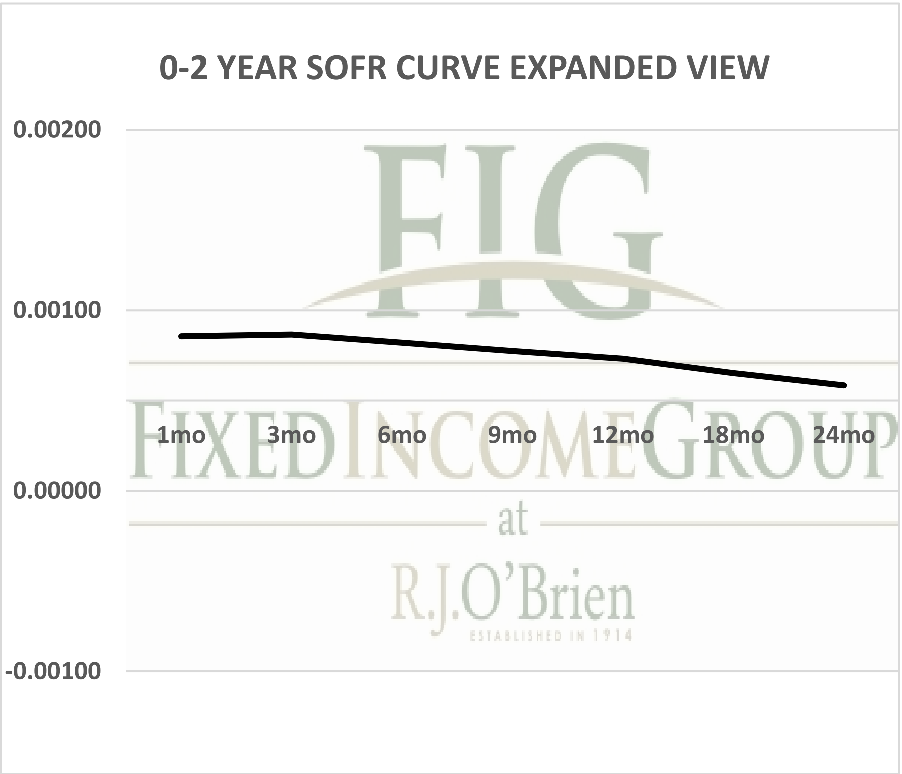
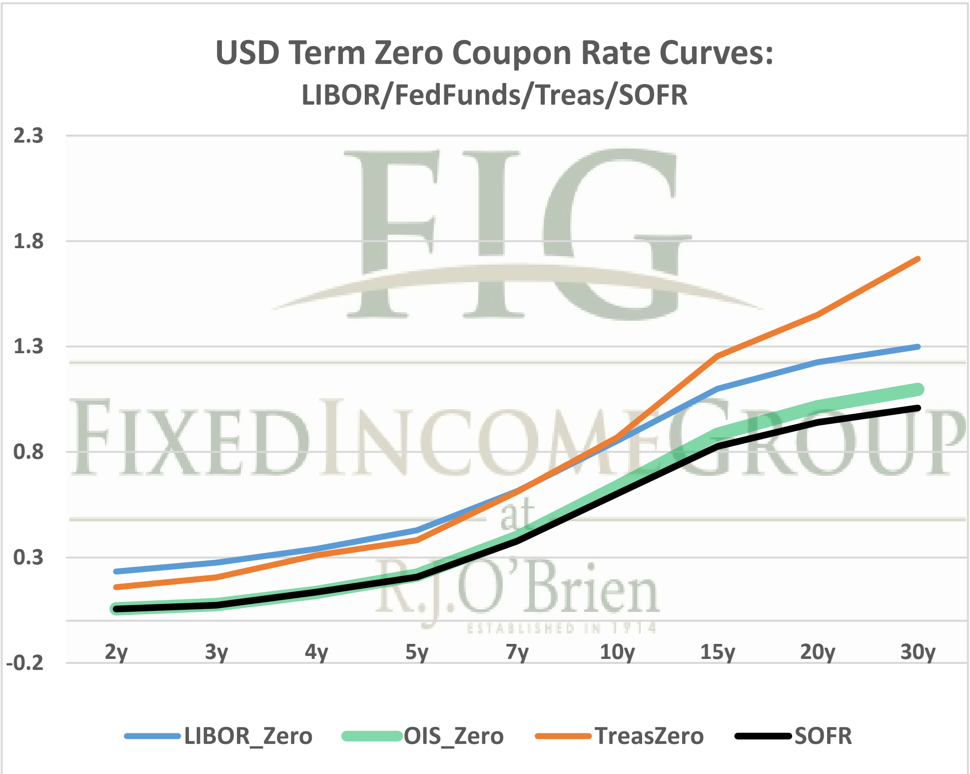
THE SOFR CURVE

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

0.08552%	**0.08653%**	**0.08194%**	**0.07734%**	**0.07308%**	**0.06521%**	**0.05840%**
1.000073643	1.000221124	1.00041427	1.000586461	1.000740904	1.00099088	1.00118421
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020
11/25/2020	1/25/2021	4/25/2021	7/25/2021	10/25/2021	4/25/2022	10/25/2022
31	92	182	273	365	547	730

Term SOFR+Credit from 1-day Returns

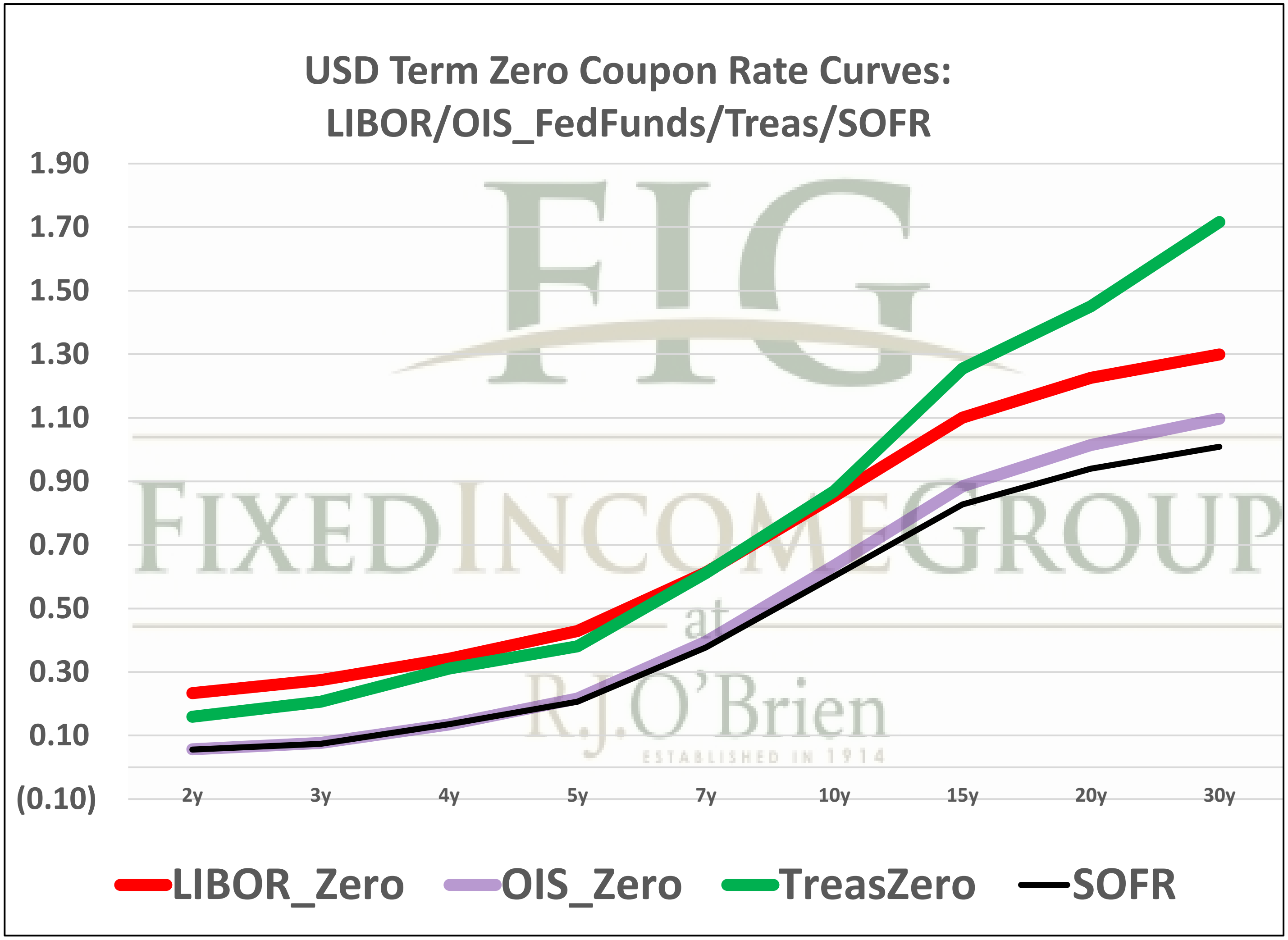
0.66327%	**0.66432%**	**0.66074%**	**0.65723%**	**0.65373%**	**0.64713%**	**0.64147%**
1.000571148	1.001697704	1.0033404	1.004984004	1.006628099	1.00983278	1.01300767
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020
11/25/2020	1/25/2021	4/25/2021	7/25/2021	10/25/2021	4/25/2022	10/25/2022
31	92	182	273	365	547	730

Term AMERIBOR from 1-day Returns

0.09482%	**0.08889%**	**0.08294%**	**0.07990%**	**0.07838%**		
1.00	**1.00**	**1.00**	**1.00**	**1.00**		
1mo	**3mo**	**6mo**	**9mo**	**12mo**		
10/26/2020	**10/26/2020**	**10/26/2020**	**10/26/2020**	**10/26/2020**		
11/25/2020	**1/25/2021**	**4/25/2021**	**7/25/2021**	**10/25/2021**		
31	**92**	**182**	**273**	**365**		

Term AMERIBOR+Credit from 1-day Returns

0.67423%	**0.66830%**	**0.66235%**	**0.65931%**	**0.65779%**		
1.00	1.00	1.00	1.00	1.00		
1mo	3mo	6mo	9mo	12mo		
10/26/2020	10/26/2020	10/26/2020	10/26/2020	10/26/2020		
11/25/2020	1/25/2021	4/25/2021	7/25/2021	10/25/2021		
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