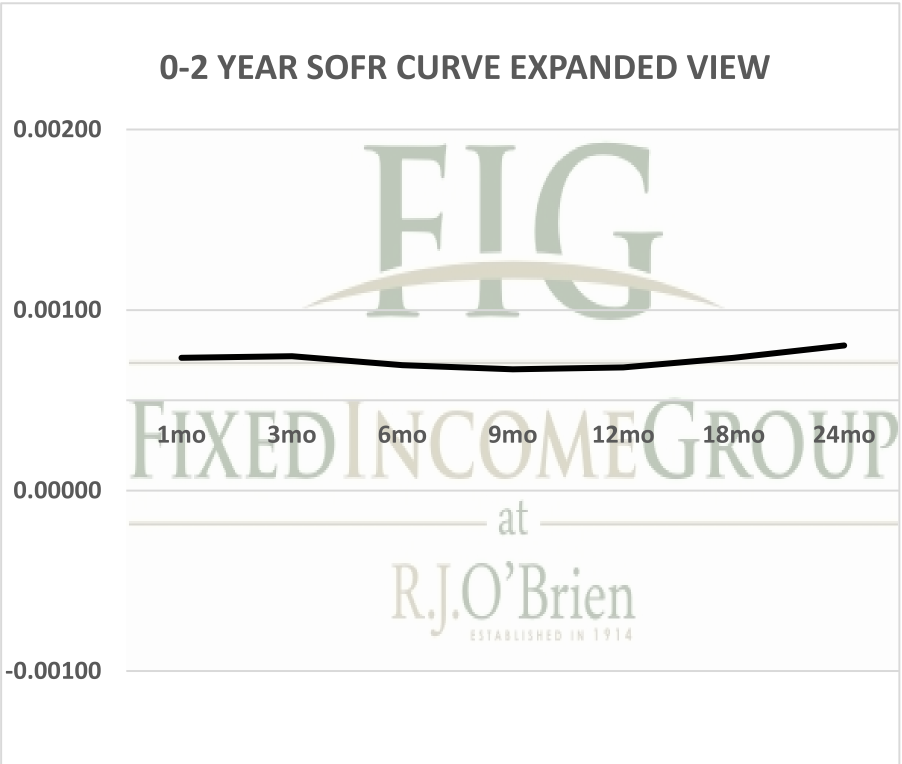
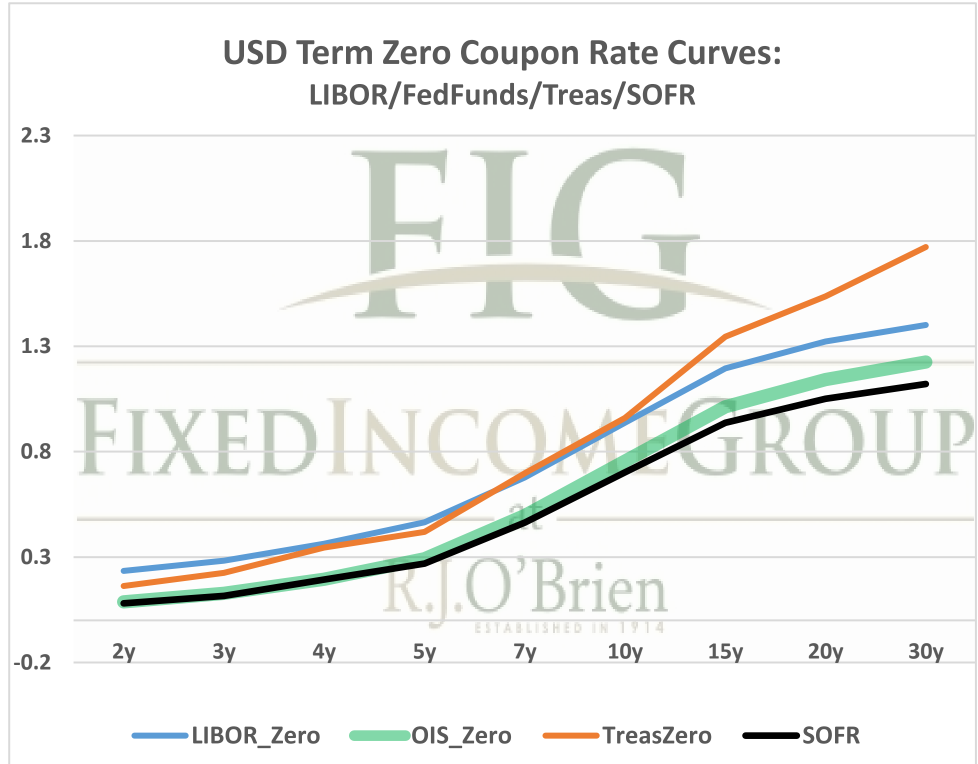
THE SOFR CURVE

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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12/3/2020 6:27 ct

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Term SOFR from 1-day Returns

0.07354%	**0.07442%**	**0.06942%**	**0.06715%**	**0.06814%**	**0.07343%**	**0.08036%**
1.000063322	1.000186057	1.00035094	1.00051109	1.000690868	1.001115731	1.00162944
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020
1/2/2021	3/2/2021	6/2/2021	9/2/2021	12/2/2021	6/2/2022	12/2/2022
31	90	182	274	365	547	730

Term SOFR+Credit from 1-day Returns

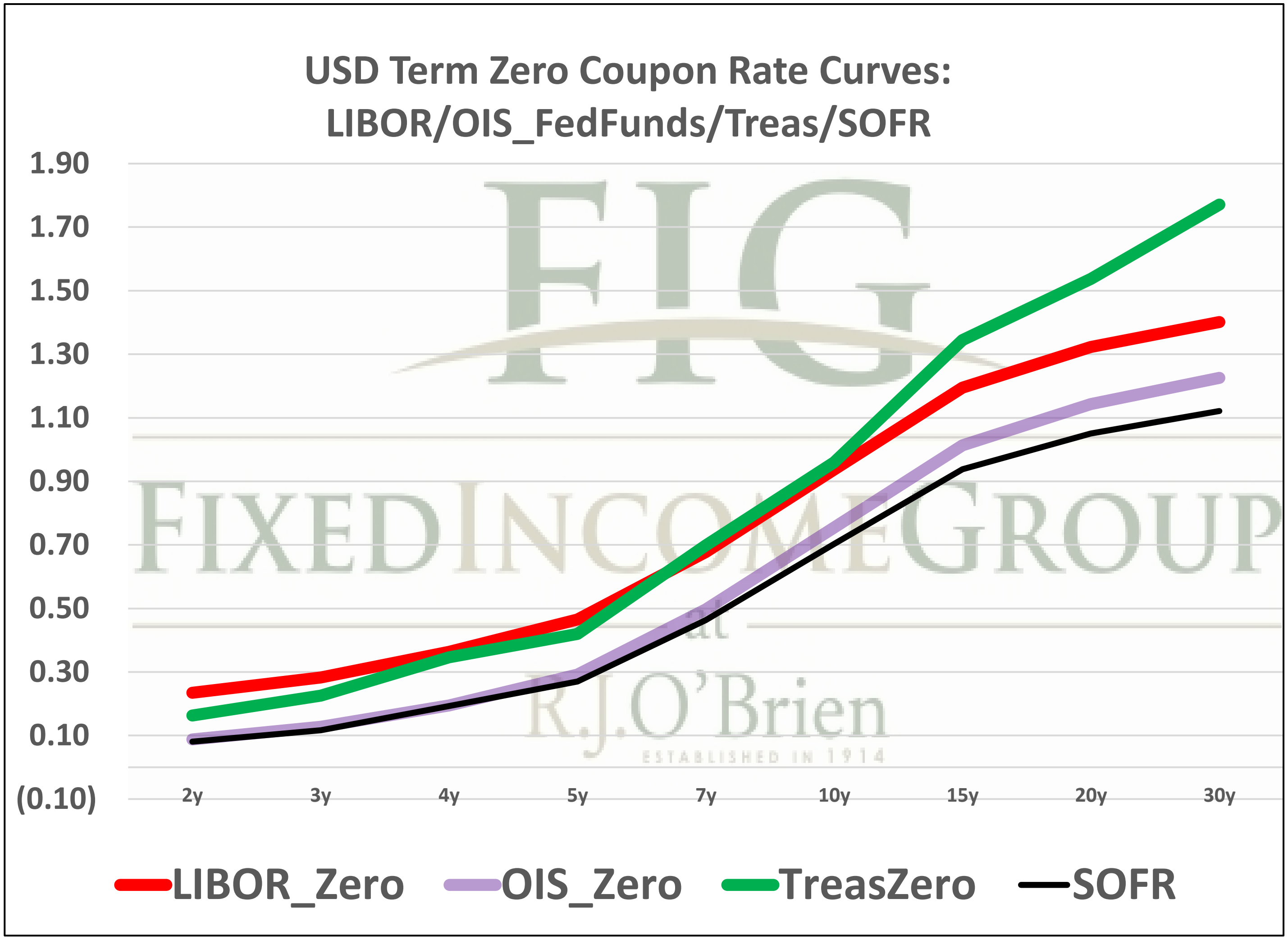
0.57783%	**0.57875%**	**0.57345%**	**0.57173%**	**0.57328%**	**0.57954%**	**0.58738%**
1.00049758	1.001446864	1.00289912	1.004351516	1.005812441	1.008805825	1.01191081
1mo	**3mo**	**6mo**	**9mo**	**12mo**	**18mo**	**24mo**
12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020
1/2/2021	3/2/2021	6/2/2021	9/2/2021	12/2/2021	6/2/2022	12/2/2022
31	90	182	274	365	547	730

Term AMERIBOR from 1-day Returns

0.08035%	**0.07886%**	**0.07621%**	**0.07456%**	**0.07317%**		
1.00	**1.00**	**1.00**	**1.00**	**1.00**		
1mo	**3mo**	**6mo**	**9mo**	**12mo**		
12/3/2020	**12/3/2020**	**12/3/2020**	**12/3/2020**	**12/3/2020**		
1/2/2021	**3/2/2021**	**6/2/2021**	**9/2/2021**	**12/2/2021**		
31	**90**	**182**	**274**	**365**		

Term AMERIBOR+Credit from 1-day Returns

0.58415%	**0.58266%**	**0.58000%**	**0.57836%**	**0.57697%**		
1.00	1.00	1.00	1.00	1.00		
1mo	3mo	6mo	9mo	12mo		
12/3/2020	12/3/2020	12/3/2020	12/3/2020	12/3/2020		
1/2/2021	3/2/2021	6/2/2021	9/2/2021	12/2/2021		
31	90	182	274	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