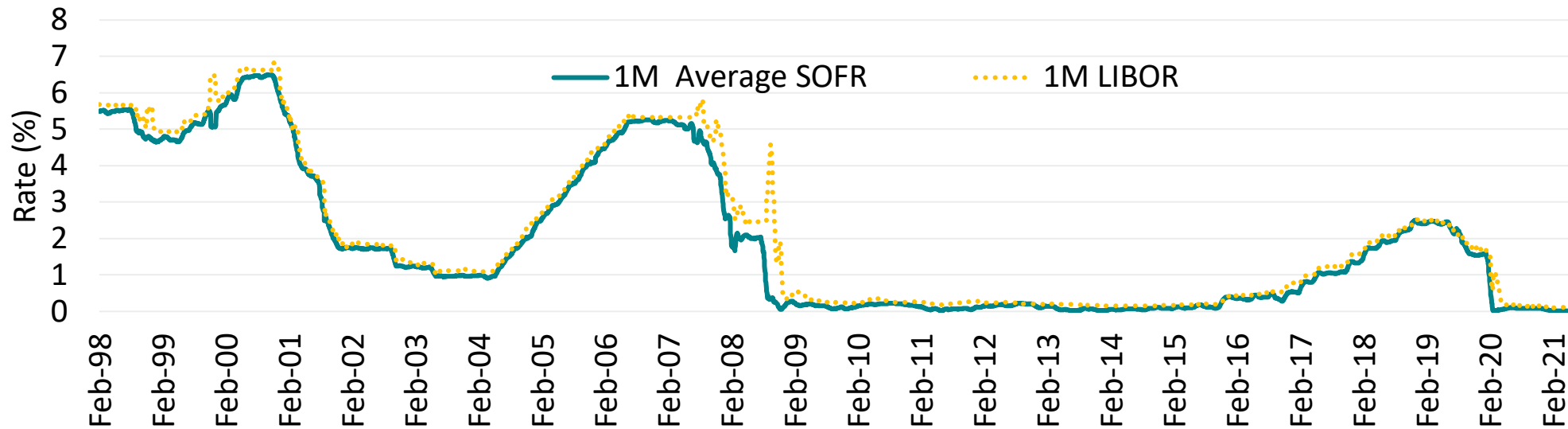


What Exactly Happened to LIBOR, Why & What's Replacing It?

- What happened to LIBOR?
 - As of 12.31.21, USD LIBOR may no longer be used for new loan/CLO origination by banks
 - USD LIBOR still is being quoted for *pre-existing loans/CLOS/other contracts only* until 6.30.2023. At that point, USD LIBOR quotations will end and any pre-existing contract must fall back to a replacement rate.
- Why?
 - LIBOR was a discredited rate that was slowly dying because i) there were very few interbank lending transactions that underpinned the actual LIBOR rate and ii) banks were beginning to refuse to provide estimated quotations to ICE Benchmark Administration, the administrator that compiled the rate
- What's replacing USD LIBOR?
 - In large part, SOFR – the Secured Overnight Financing Rate – a risk-free rate developed off overnight US Treasury repo transactions
 - However, traditional banking products – like middle market and bilateral loans – might also use a credit sensitive rate like BSBY, AXI or Ameribor

Economics: LIBOR & SOFR Generally Trend Together, May Separate in Market Disruptions

SOFR & LIBOR Trend Together; Both Affected by Fed Interest Rate Policy;
May Separate in Market Disruptions

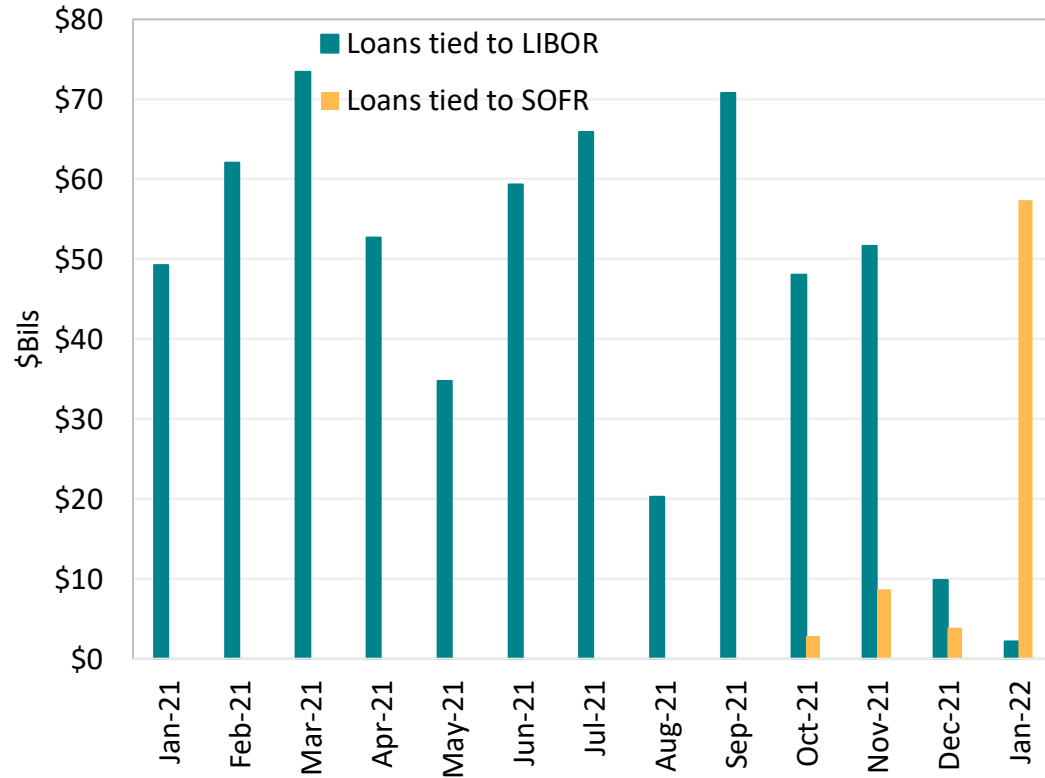


- LIBOR and SOFR both respond to interest rate policy
- Between 1998 and 2021, the difference between LIBOR & SOFR was between 5 and 30 bps 70% of the time
- However, the difference is not constant and LIBOR can widen materially in periods of market disruption (like 2008 or March 2020)

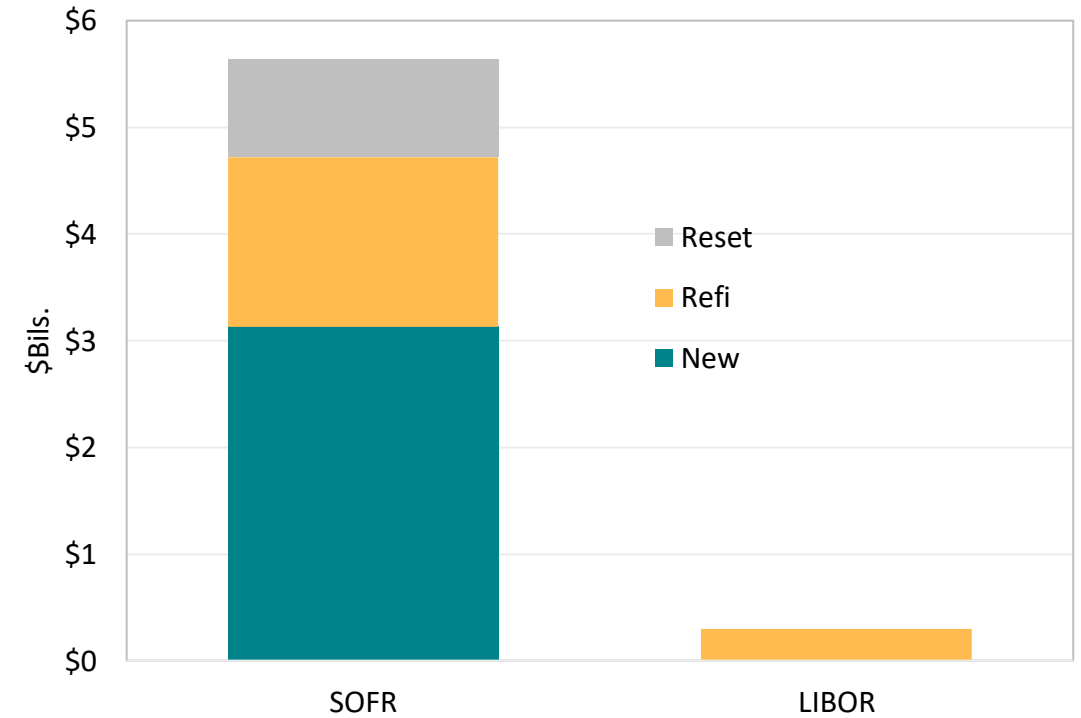
Source: LSTA, Wells Fargo, Bloomberg, FRBNY

2022: Feel the SOFR

Leveraged Loan Market Pivots to SOFR in Jan 2022



2022 CLOs Emerge...and Embrace SOFR



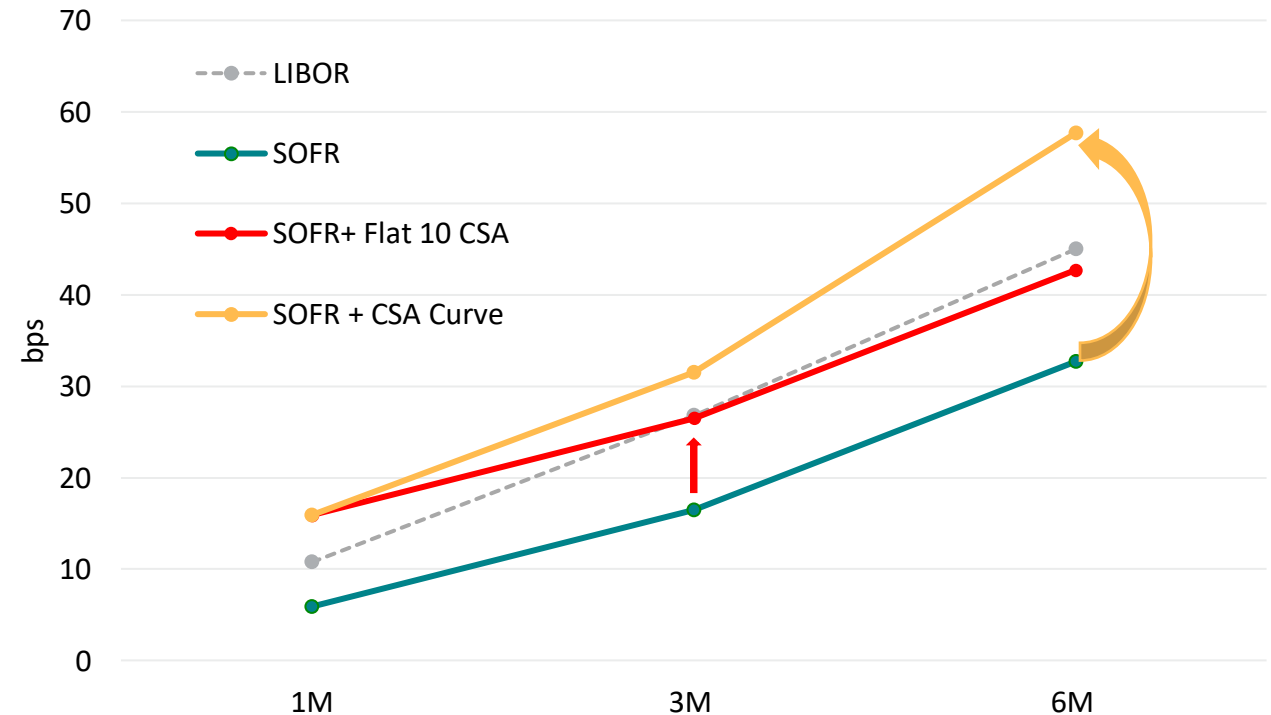
- After booking high volumes of LIBOR deals in 4Q2021, loan and CLO market pivots hard to SOFR in January 2022

Source: S&P/LCD

Economics: Why the SOFR CSA Curve? Other Approaches?

- The SOFR curve is lower and flatter (green curve)
- The LIBOR curve is higher and steeper (e.g., 3M LIBOR tends to be higher than 1M LIBOR (grey dotted curve))
- A flat CSA shifts the SOFR curve up (red curve)
- To steepen the SOFR curve like LIBOR, many SOFR loans include a “Credit Spread Adjustment (CSA)” Curve of 10 bps for 1M/15 bps for 3M/25 bps for 6M (yellow curve)
- Other transactions might pull the CSA into a wider margin itself
- Some transactions use no yield adjustment at all
- Still others might use an “Adjusted SOFR”, which would be SOFR+a fixed spread adjustment
- There are strengths and weaknesses of each approach

LIBOR vs SOFR Curves: Flat CSA Shifts SOFR Curve, CSA Curve Steepens SOFR Curve



Source: CME, WSJ, LSTA Calculations

Now That We Survived 12.31.21...Where to Now?

- Why are there some LIBOR loans still?
 - Loans underwritten in 2021 and sold in 2022
 - Some private credit transactions may continue on LIBOR for a period of time
 - Incrementals/fungible add-ons that are contemplated under pre-existing contracts remain a gray area
- Are you ready for all new SOFR loans?
 - Do you have your CME Term SOFR License?
 - Are your systems able to handle CSAs, CSA Curves?
 - Look at the LSTA Term SOFR Concept Credit Agreement to understand SOFR loan doc structure - <https://www.lsta.org/content/term-sofr-concept-document/>
 - Look at LSTA LIBOR Transition Checklist to see forms that SOFR and CSAs can take - <https://www.lsta.org/news-resources/advisory-libor-transition-checklist/>
- Prepare for many loans (and CLOs) to fall back from LIBOR to SOFR before June 2023
 - Do you have a remediation plan in place?
 - LSTA is working on a universal fallback amendment, which may streamline Early Opt In transitions
 - Be prepared to watch for – and quickly vote on! – 51% negative consent transition amendments