

Derivative Valuations in Practice

SOFR Market Adoption Updates

As part of our ongoing efforts to help you monitor the potential replacement of LIBOR and/or OIS by newly designated alternative reference rates (ARR), we have summarized the latest market activity for the ARR for USD LIBOR, SOFR. Further details about these market changes are available in our <u>LIBOR</u> Replacement Watchlist.

SOFR-based Debt Issuances-to-date

SOFR debt issuances continue to increase and evolve. The maturities are beginning to extend and callable/puttable bonds have been issued. Expect the list of issuers to expand in coming months as more players gain comfort with SOFR.

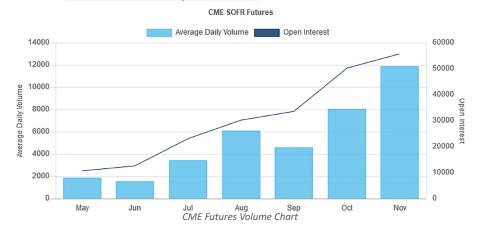
Total cash issuance is now over \$26B.

Issue Date		Amount Issued (Millions)	Tenor (years)	Spread (bps)	Frequency	CUSIP
06-Dec-2018	AFDB	\$ 100.00	2.0	32	Qtrly	00828EDE6
05-Dec-2018	EIB	\$ 1,000.00	2.8	32	Qtrly	298785HU3
19-Nov-2018	BNS	\$ 800.00	0.5	43	Qtrly	06417G3B2
15-Nov-2018	FHLBanks	\$ 1,500.00	0.5	4	Qtrly	3130AFFV4
15-Nov-2018	FHLBanks	\$ 2,500.00	1.0	6.5	Qtrly	3130AFFW2
09-Nov-2018	BMO	\$ 1,000.00	0.5	44	Qtrly	06370RNX3
08-Nov-2018	Freddie Mac	\$ 1,500.00	0.5	2.5	Qtrly	3134GSE68
02-Nov-2018	Credit Suisse AG	\$ 1,000.00	0.5	43	Qtrly	22549LRJ6
01-Nov-2018	Credit Suisse AG	\$ 1,700.00	0.5	43	Monthly	22549LRN7
31-Oct-2018	L-Bank	\$ 600.00	1.0	27	Monthly	AV1597203
30-Oct-2018	Fannie Mae	\$ 1,500.00	0.5	4	Qtrly	3135G0U50
30-Oct-2018	Fannie Mae	\$ 100.00	1.0	7	Qtrly	3135G0U68
30-Oct-2018	Fannie Mae	\$ 1,000.00	1.5	10	Qtrly	3135G0U76
24-Oct-2018	Toyota MCC	\$ 500.00	0.3		n/a	Comm. Paper
19-Oct-2018	JPMorgan Chase	\$ 2,500.00	2.0	55	Qtrly	48125LRR5
05-Oct-2018	Credit Suisse AG	\$ 2,000.00	1.0	38	Qtrly	22549LLZ6
05-Oct-2018	Credit Suisse AG	\$ 1,500.00	0.5	27	Qtrly	22549LVE2
04-Oct-2018	Triborough Bridge & Tunnel	\$ 107.28	13.5	50	Monthly	89602REZ4
25-Sep-2018	Wells Fargo	\$ 575.00	1.5	48	Monthly	94988J5S2
21-Sep-2018	Wells Fargo	\$ 1,000.00	1.0	35	Qtrly	94989RW79
07-Sep-2018	MetLife	\$ 12.00	2.0	57	Qtrly	59217GCQ0
07-Sep-2018	MetLife	\$ 271.00	2.0	57	Monthly	59217HBT3
22-Aug-2018	Barclays	\$ 525.00	0.3		n/a	Comm. Paper
21-Aug-2018	Credit Suisse AG	\$ 2,000.00	0.5	35	Qtrly	22549LMA0
21-Aug-2018	World Bank	\$ 100.00	2.0	22	Monthly	459058GK3
30-Jul-2018	Fannie Mae	\$ 125.00	0.5	8	Monthly	3136G4TF0
30-Jul-2018	Fannie Mae	\$ 100.00	1.0	12	Monthly	3136G4TG8
30-Jul-2018	Fannie Mae	\$ 785.00	1.5	16	Monthly	3136G4TH6

SOFR-based Debt Issuances-to-date. Sources:CME, Bloomberg

SOFR Futures Trading-to-date

3M SOFR futures now extend out to March 2021 and trading has surpassed 800K contracts. For more details, check out the latest SOFR futures recap from the CME.



SOFR Swap Trading-to-date

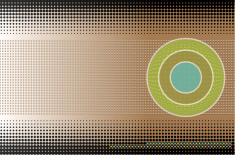
Over the course of November, the total notional of SOFR OIS swaps greatly exceeded SOFR basis swap notionals while there were actually more SOFR basis swaps traded than there were SOFR OIS swaps.

See ISDA Analysis for more details.





ISDA Analysis on SOFR Swaps. (For trades reported to DTCC and Bloomberg SDRs which are required to be disclosed under US regulatory guidelines)



About Principia

A practical solution

Principia SFP provides clients with a multicurve valuation and risk management

environment to forecast using appropriate tenor LIBOR forward curves and to select the relevant discounting curves for accurate, independent valuations.

Beyond valuations, the system is an end-to-end operational platform for derivatives portfolios allowing users to perform detailed impact analysis, risk management and the full operational implementation of OIS discounting into daily mark-to-market and hedge effectiveness processes. Principia also provides and automates delivery of extensive daily market data and curves as standard, for precise valuations, proven to closely match the interdealer market.

In a world moving towards central clearing, Principia users have the tools to implement industry best practices in the analysis, trading and risk management of vanilla and complex derivatives. With this single coherent platform, clients can streamline derivatives operations from trade capture and risk, through to accounting and central clearing.

About Principia Partners

Principia Partners LLC (Principia) provides a comprehensive single platform solution for the end-to-end management of structured finance and derivative investments. Global financial institutions and independent asset managers have used the award winning Principia Structured Finance Platform since 1995 to unify investment analysis, portfolio management, risk surveillance, accounting and operational control across the breadth of structured credit assets, fixed income investments and complex derivatives. In 2015, Principia launched its Analytic Service, pasVal, to make its award-winning pricing and analytics available to an even broader range of businesses.

To speak to us about Principia:

info@ppllc.com +1 (212) 480 2270

www.ppllc.com

