

CRYPTO DERIVATIVES

Analytics Report

22ND JUNE 2023



At a Glance

KEY INSIGHTS

Signs of the entry of traditional finance institutions to the crypto-space have lifted the pessimistic sentiment that has clouded BTC and ETH derivatives over the past few months. However, despite both BTC and ETH spot prices sharing in the rally, the former's derivatives markets have priced for nearly 5% higher implied volatility across the term structure. In addition, we do not see the same steepness in ETH's future's term structure, nor do we see the same high funding rate paid by long positions

FUTURES IMPLIED YIELD TERM STRUCTURE



VOLATILITY SURFACE METRICS

Tenor ▲	ATM			Skew			Butterfly		
	ATM	YTD	24hr Change	25 Delta	YTD	24hr Change	25 Delta	YTD	24hr Change
1d	56.32% ▼	25.95% ▲	4.05% ▲	3.47% ▲	5.09% ▲	0.96% ▲	2.57% ▲	2.22% ▲	-0.08% ▼
1W	51.09% ▼	19.89% ▲	2.19% ▲	2.55% ▼	6.49% ▲	0.87% ▲	2.74% ▼	0.62% ▲	-0.10% ▼
2W	49.32% ▼	14.02% ▲	2.64% ▲	1.70% ▲	6.90% ▲	0.07% ▲	2.73% ▲	0.59% ▲	-0.22% ▼
1M	48.97% ▼	6.78% ▲	3.40% ▲	0.74% ▲	9.11% ▲	0.38% ▲	3.05% ▲	0.53% ▲	-0.12% ▼
3M	48.95% ▼	-5.45% ▼	0.23% ▲	1.40% ▲	10.46% ▲	0.59% ▲	3.54% ▲	1.34% ▲	0.25% ▲
6M	49.09% ▼	-10.61% ▼	-1.48% ▼	2.49% ▼	7.86% ▲	0.55% ▲	3.69% ▲	1.67% ▲	0.39% ▲

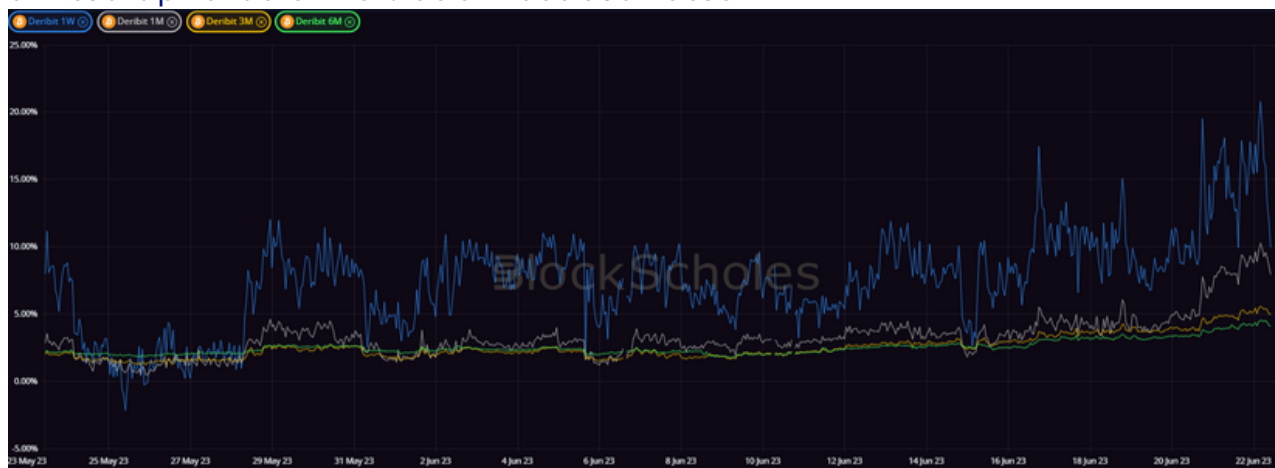
Tenor ▲	ATM			Skew			Butterfly		
	ATM	YTD	24hr Change	25 Delta	YTD	24hr Change	25 Delta	YTD	24hr Change
1d	52.59% ▲	10.87% ▲	5.97% ▲	5.97% ▲	7.32% ▲	5.94% ▲	3.88% ▲	3.43% ▲	0.39% ▲
1W	46.75% ▼	4.34% ▲	6.12% ▲	1.17% ▼	4.90% ▲	6.52% ▲	3.63% ▼	0.82% ▲	0.59% ▲
2W	45.27% ▲	-0.40% ▼	4.43% ▲	0.50% ▲	7.60% ▲	3.76% ▲	3.62% ▼	0.44% ▲	0.40% ▲
1M	44.90% ▼	-10.83% ▼	2.98% ▲	-0.44% ▼	8.85% ▲	1.99% ▲	3.30% ▲	0.04% ▲	0.33% ▲
3M	46.44% ▼	-20.20% ▼	-1.21% ▼	0.44% ▼	10.06% ▲	1.81% ▲	3.02% ▲	0.74% ▲	0.43% ▲
6M	47.56% ▼	-18.82% ▼	-1.06% ▼	1.54% ▼	11.97% ▲	1.14% ▲	3.45% ▲	1.32% ▲	0.40% ▲

*All data in tables recorded at a 10:03 UTC snapshot unless otherwise stated.

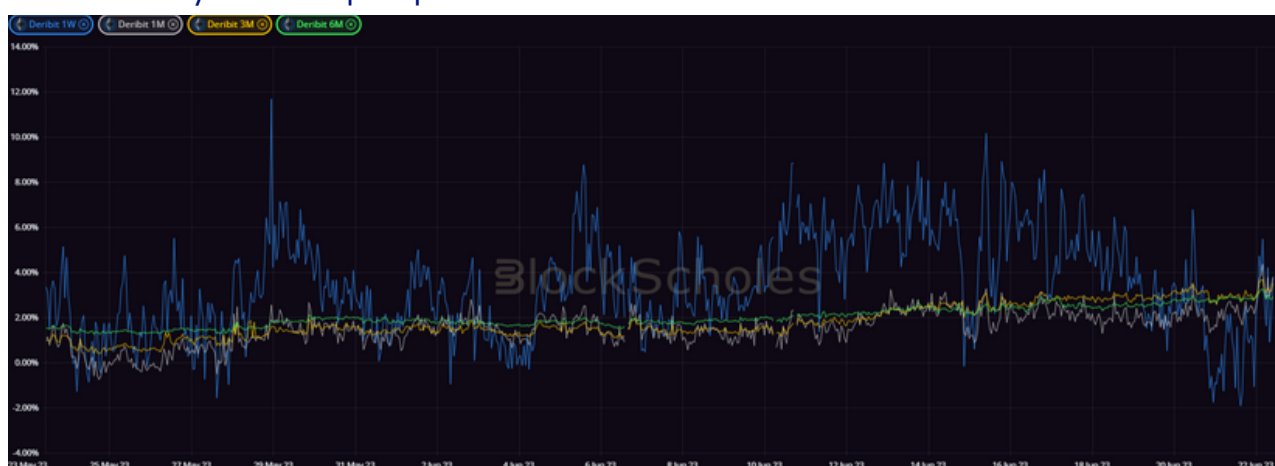
Futures

Price (24hr Change) ▲	Last Traded (\$) ▲	Contract ▲	Last Traded (\$) ▼	Price (24hr Change) ▼
4.07% ▲	30,142.50 ▲	23JUN23	1,907.75 ▼	5.17% ▲
4.11% ▲	30,205 ▼	30JUN23	1,908.50	5.15% ▲
4.19% ▲	30,365 ▼	28JUL23	1,913.25	5.27% ▲
4.22% ▲	30,527.50 ▼	29SEP23	1,924.50 ▼	5.26% ▲
4.31% ▲	30,765 ▲	29DEC23	1,935.25	5.05% ▲
4.08% ▲	31,000 ▼	29MAR24	1,950.25	5.12% ▲

BTC ANNUALISED YIELDS - show that short tenor futures' prices have drifted upwards of 15% at annualised rates



ETH ANNUALISED YIELDS - remain much lower than BTC's during the bullish rally in the spot prices of both assets

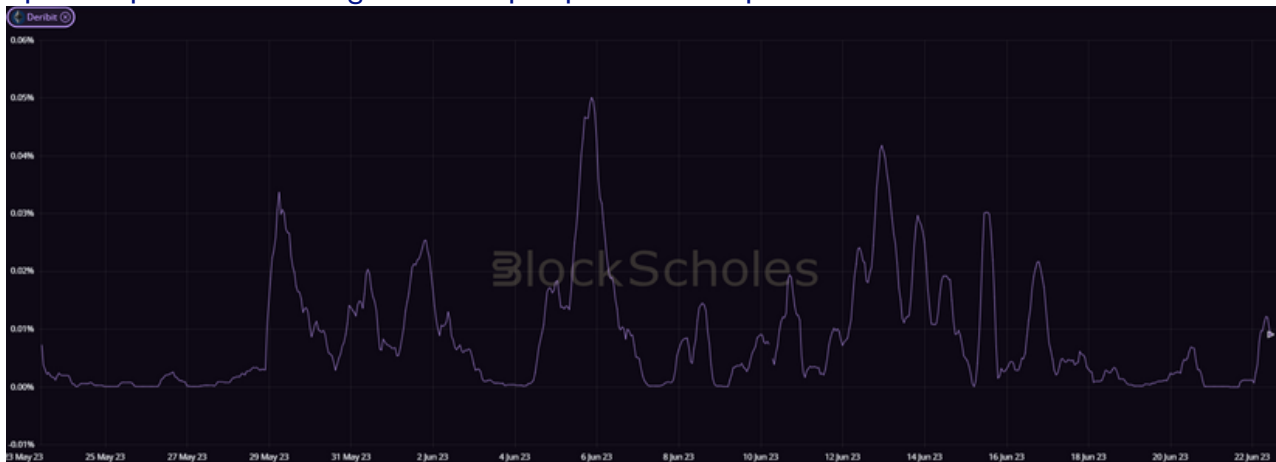


Perpetual Swap Funding Rate

BTC FUNDING RATE - have recently priced long exposure through the perpetual swap contract at the highest levels in the last month



ETH FUNDING RATE - does not express the same outsized demand for spot exposure through ETH's perpetual swap contract



BTC Options

Tenor ▲	ATM			Skew			Butterfly		
	ATM	YTD	24hr Change	25 Delta	YTD	24hr Change	25 Delta	YTD	24hr Change
1d	56.32% ▼	25.95% ▲	4.05% ▲	3.47% ▲	5.09% ▲	0.96% ▲	2.57% ▲	2.22% ▲	-0.08% ▼
1W	51.09% ▼	19.89% ▲	2.19% ▲	2.55% ▼	6.49% ▲	0.87% ▲	2.74% ▼	0.62% ▲	-0.10% ▼
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6M	49.09% ▼	-10.61% ▼	-1.48% ▼	2.49% ▼	7.86% ▲	0.55% ▲	3.69% ▲	1.67% ▲	0.39% ▲

BTC SABR ATM IMPLIED VOLATILITY - has risen to its highest levels in the last 30 days before settling near to 50% at all tenors



BTC 25-Delta Risk Reversal - bullish spot price action has lifted sentiment as expressed by the relative pricing of the IV of OTM puts and calls



ETH Options

Tenor ▲	ATM			Skew			Butterfly		
	ATM	YTD	24hr Change	25 Delta	YTD	24hr Change	25 Delta	YTD	24hr Change
1d	52.59% ▲	10.87% ▲	5.97% ▲	5.97% ▲	7.32% ▲	5.94% ▲	3.88% ▲	3.43% ▲	0.39% ▲
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ETH SABR ATM IMPLIED VOLATILITY - has risen alongside BTC's, but remains nearly 5 vol points lower across the terms structure



ETH 25-Delta Risk Reversal - prices up- and down-side protection at similar levels in the middle of the term structure, with a slightly higher implied vol of OTM calls at 1W and 6M tenors

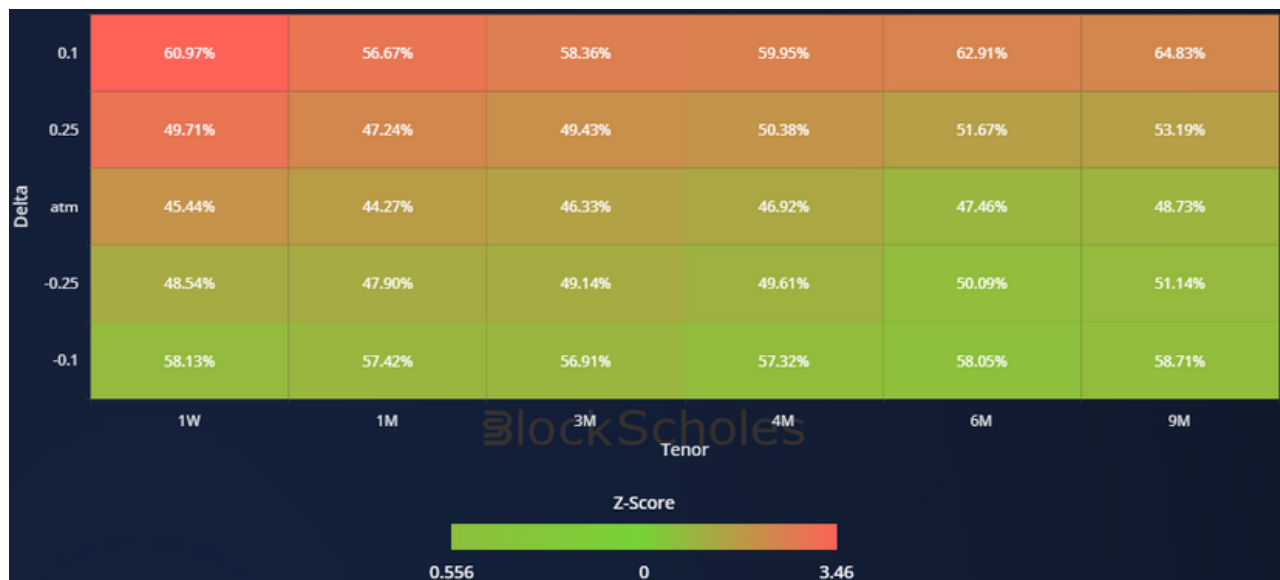


Volatility Surface

BTC IMPLIED VOL SURFACE - showcases the strong performance in implied volatility across the tenor and strike domains in the last month



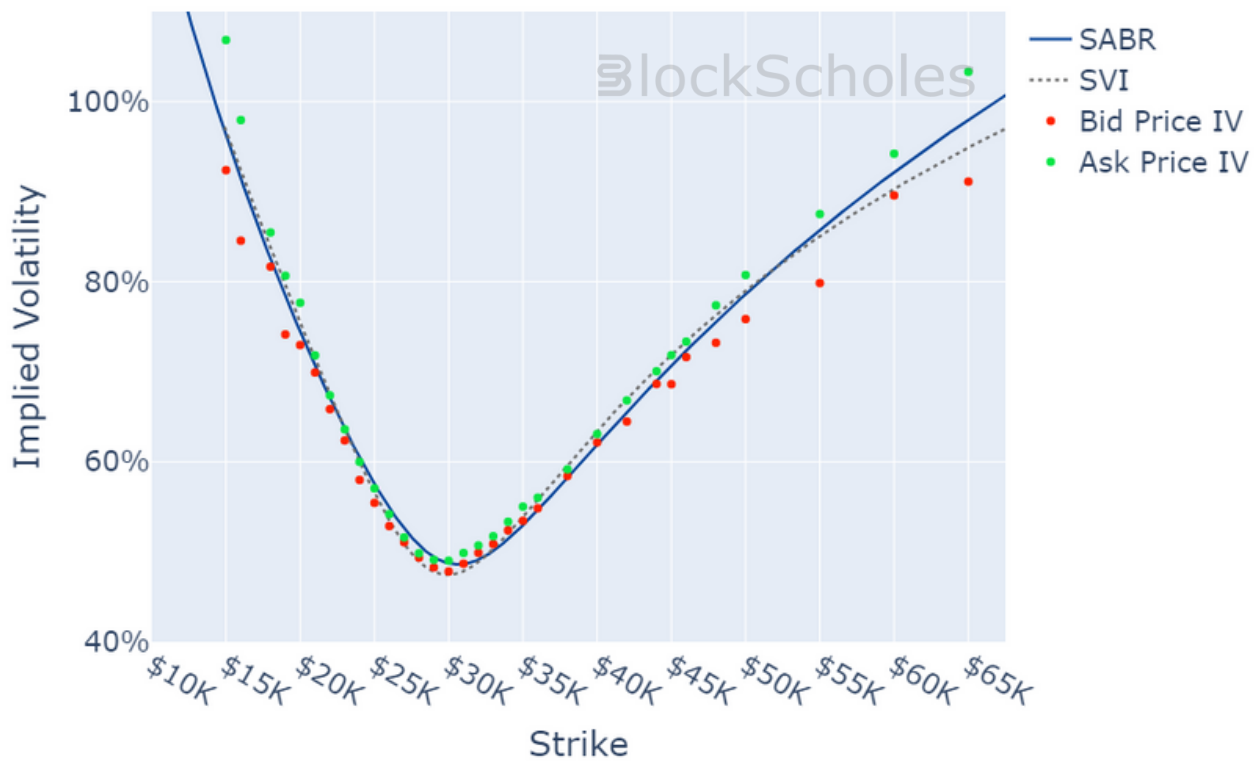
ETH IMPLIED VOL SURFACE - whilst also showing an increase, highlights the smaller rally in implied vol across ETH's options market



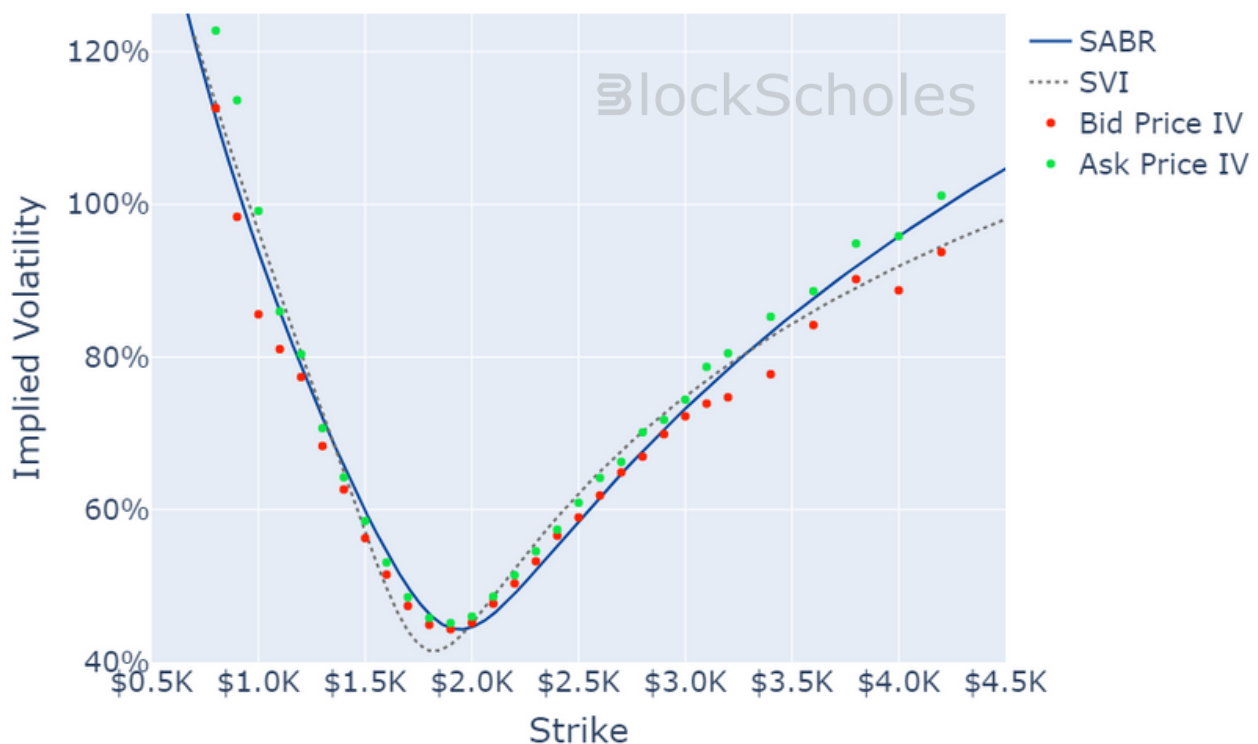
Z-Score calculated with respect to the distribution of implied volatility of an option at a given delta and tenor over the previous 30-days of hourly data, timestamp 10:00 UTC, SABR smile calibration

Volatility Smiles

BTC SMILE CALIBRATIONS - 30-Jun-2023 Expiry, 10:00 UTC Snapshot

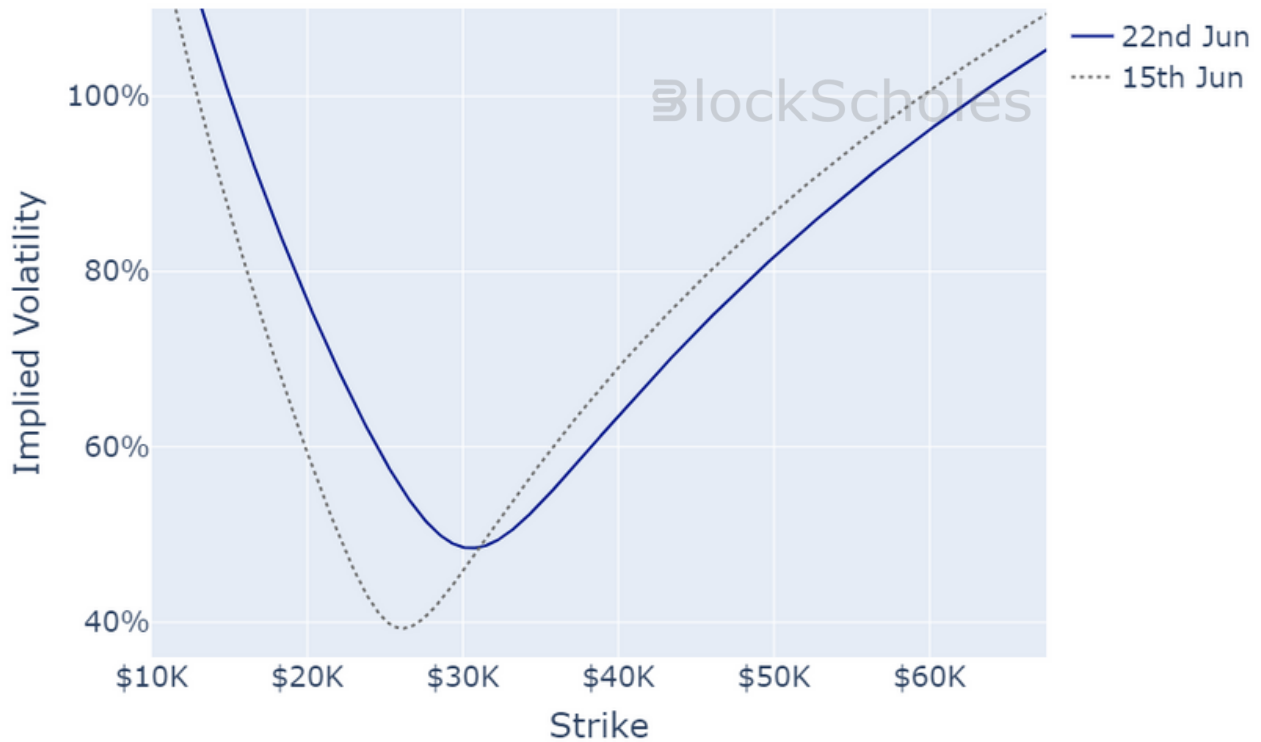


ETH SMILE CALIBRATIONS - 30-Jun-2023 Expiry, 10:00 UTC Snapshot

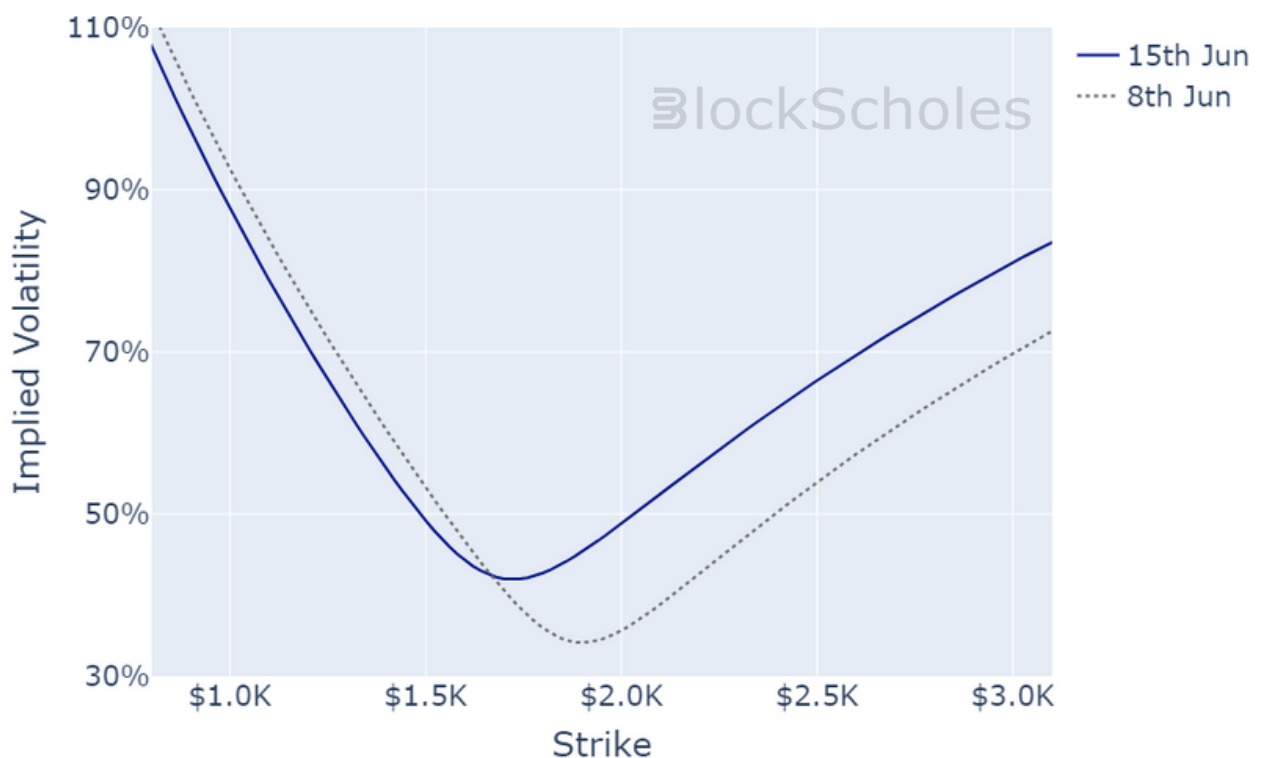


Historical SABR Volatility Smiles

BTC SABR CALIBRATION - 30 Day Tenor, 10:00 UTC Snapshot



ETH SABR CALIBRATION - 30 Day Tenor, 10:00 UTC Snapshot



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