

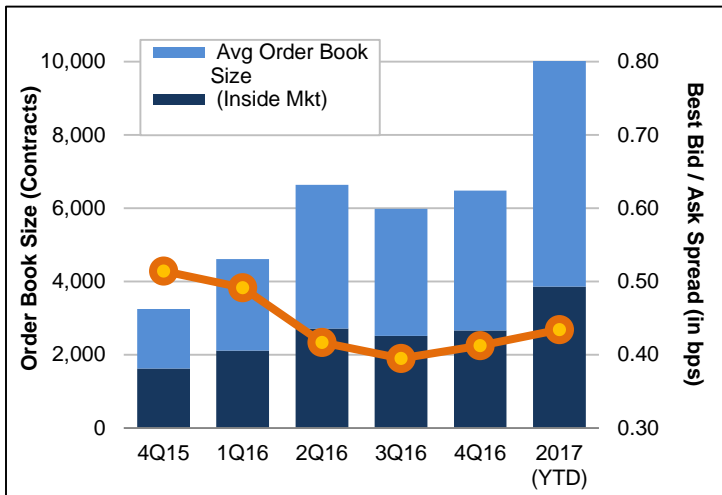
Consistent Liquidity

Eris Markets Tightening

Increasing Liquidity in Eris Markets

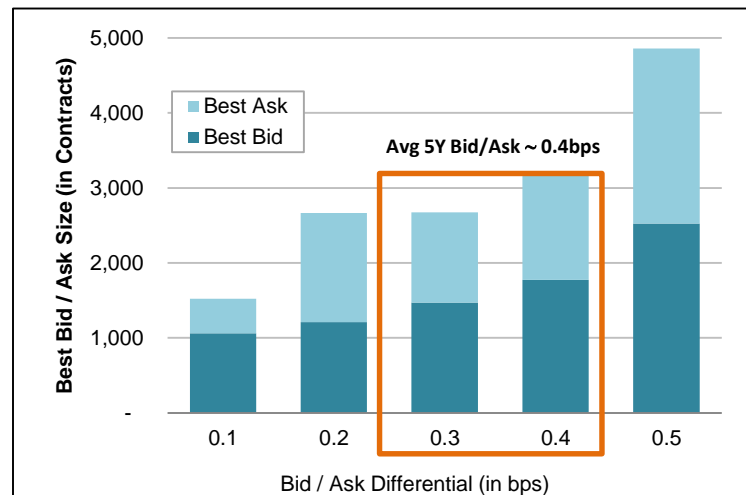
- Eris offers transparent, anonymous Central Limit Order Book liquidity consolidated into benchmark tenors like other futures markets
- Trading in Off-The-Run tenors has increased as well, with volumes increasing 30% from 2015 to 2016, and bid / offers consistent with On-The-Run quoting at ~1/4bp from mid

5Y Stnd: Avg Bid / Ask & Order Book Size



Source: Eris Exchange

5Y Stnd: Avg Amt Quoted vs Bid / Ask Spread (2H2016)



Consistent Liquidity in Volatile Markets: Brexit

- Britain's vote to leave the EU created massive rate market volatility
- Eris order book remained liquid, with markets briefly widening to ~1/2bp from mid, before returning to ~2/10bp for larger size, fully normalizing by Monday afternoon



Source: Eris Exchange

Consistent Liquidity

Eris Markets Tightening

Eris Markets vs. OTC

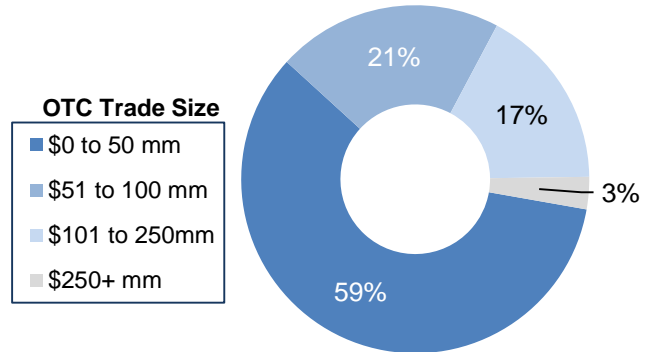
Typical OTC trades fall within the best Bid / Offer range of Eris order book

Tenor	OTC: Avg Trade Size (IRS on SEF)	Eris Std: Avg Inside Market (Best Bid / Offer)	Eris Std: Total Amount Quoted (Full Order Book)
2Y	\$143mm	\$262 / 237mm	\$818mm
5Y	\$80mm	\$126 / 124mm	\$594mm
10Y	\$48mm	\$55 / 54mm	\$227mm

Source: Bloomberg & DTCC SDR Data, Eris Exchange, Full Year 2016

* Eris "Sweet Spot" = 2Y - 10.5Y Tenors, were a majority of volume & open interest occur, and best liquidity exists

2016 SDR Reported OTC Swap Trading Activity (2Y-30Y)



- 92% of all OTC swaps are below the block threshold
- 70% of all OTC swaps fall in the Eris "Sweet Spot" *

Case Study: 11/7/2016

On 11/7/2016, >5,500 Eris 10Y Contracts Traded

- The order book immediately prior to the trades was 5 ticks wide (~0.5bps) for 1405 x 500 contracts
- In the following 10 minutes, over 5,500 Eris 10Y traded at an average price better than the original best bid
- Three blocks traded, including two that were larger than the best bid size
- The order book showed no signs of stress during these executions

