CFIF Volume/Liquidity update - Return to Normal

September 15, 2020



Key Takeaways

Key Takeaways:

- Rates: At the peak of the crisis in March, US Treasury bid-ask spreads widened ~ 15x and market depth declined by ~ 90%; market depth remains depressed in the long end (by ~ 40%) and has seasonal risk of falling further.
- <u>Credit</u>: Bid-ask spreads widened ~ 20x in CDX (IG, HY) and iTraxx (Main, XOVER) in March Credit and Rates led bid-ask spread widening in other asset classes.
- Mortgages: Bid-ask spreads in FNCL TBAs widened by ~ 3-6x across the coupon stack with higher coupons getting hit harder.
- F.I. ETFs were able to provide the liquidity that froze up in the cash bond markets; while bid-ask spreads of TLT and LQD widened by 6-7x, they fared much better compared to 30Y US Treasuries and CDX IG, respectively.
- FX: Return of volatility to market was accompanied by a divergence in impact on bid-ask spreads and market depth; e.g., for USDJPY, bid-ask spreads widened (~ 800%) and depth declined (~ 40%) more than most EM pairs.
- <u>X-Asset</u>: While bid-ask spreads have largely normalized to pre-pandemic levels for most assets (except Credit and FX), order book depth remains somewhat depressed compared to the beginning of the year. This can worsen further over the coming weeks given seasonal "August" effect.

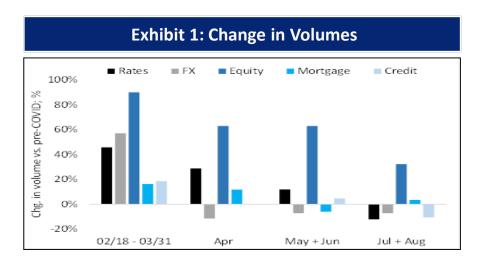
Assets	Bid-Ask Spreads		Market Depth		Trading Volume		Realized Volatility	
	Peak	8/31/20	Peak	8/31/20	Peak	8/31/20	2/18 - 3/31	7/1 - 8/31
10Y US Treasuries	↑ 300%	\leftrightarrow	↓ 90%	\leftrightarrow	↑ 100%	↓ 10%	个 225%	↓ 35%
30Y US Treasuries	↑ 1200%	\leftrightarrow	↓ 80%	↓ 10%	↑ 100%	↓ 10%	↑ 250%	↓ 15%
Credit Indices	↑ 1500%	↑ 30%	-	-	↑ 50%	\leftrightarrow	↑ 850%	\leftrightarrow
Mortgage TBAs	↑ 500%	\leftrightarrow	-	-	↑ 50%	\leftrightarrow	↑ 800%	↑ 30%
F.I. ETFs	↑ 600%	\leftrightarrow	-	-	个 150%	个 10%	↑ 300%	↓ 10%
FX	↑ 500%	\leftrightarrow	↓ 40%	↓ 10%	↑ 100%	\leftrightarrow	↑ 400%	↑ 100%
Equities (S&P500)	↑ 500%	个 50%	↓ 2 5% [†]	↓ 5%†	↑ 140%	↑ 30%	↑ 600%	\leftrightarrow

[†] For Equities, the numbers reflect only top of the order book quote size

Note: Baseline/pre-pandemic level defined as the average over 1/2/20 - 2/14/20; ↔ implies back to pre-pandemic levels



Pre-Covid vs Post-Covid Volume/Volatility



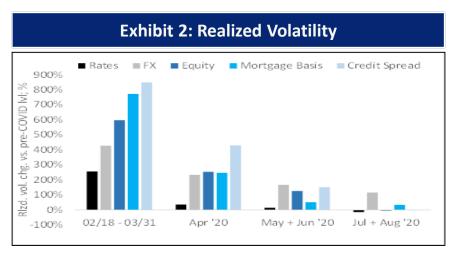


Exhibit 3: D2D Notional Treasury Volume

BTEC + ESPEED + DW Daily Volume (MM Notional)												
Date	2Y	5Y	10Y	30Y	Total	YOY						
2019.04m	24,863	45,466	41,328	9,878	121,534							
2019.05m	32,640	59,263	48,440	11,359	151,702							
2019.06m	39,486	69,586	49,318	13,531	171,921							
2019.07m	29,220	52,075	39,591	9,845	130,731							
2019.08m	37,876	72,725	57,755	14,731	183,087							
2019.09m	31,436	53,436	48,633	11,498	145,003							
2019.10m	28,851	47,629	44,674	10,283	131,436							
2019.11m	23,348	41,088	37,483	9,210	111,128							
2019.12m	20,252	36,915	32,023	7,732	96,923							
2020.01m	22,144	44,420	39,982	10,687	117,233							
2020.02m	30,904	63,767	52,933	13,645	161,249							
2020.03m	38,388	72,843	63,468	17,408	192,107							
2020.04m	18,109	36,352	32,333	10,663	97,457	-20%						
2020.05m	15,626	35,405	32,537	10,020	93,587	-38%						
2020.06m	13,663	36,717	34,260	10,221	94,861	-45%						
2020.07m	9,151	23,704	21,828	8,305	62,987	-52%						
2020.08m	11,797	29,570	30,002	11,608	82,977	-55%						
2020.09m	9,671	32,417	35,583	10,442	88,113	-39%						



Market Depth Analysis

Exhibit 4: 10 Year UST (\$mn)

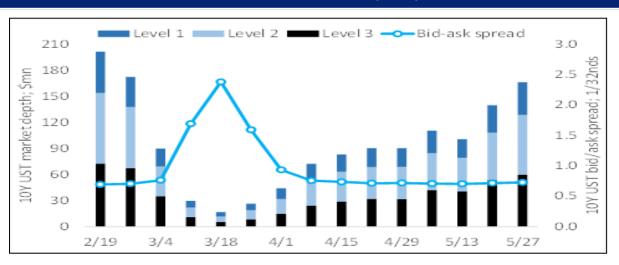
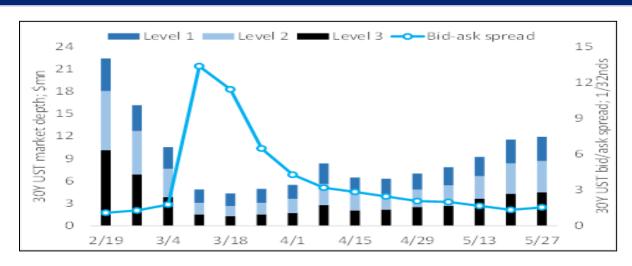


Exhibit 5: 30 Year UST (\$mn)





Market Depth Analysis - 2

Exhibit 6: Intraday Range vs 10 Year Market Depth

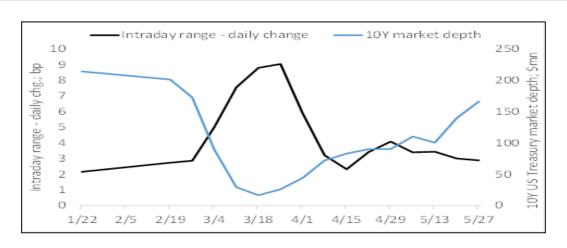
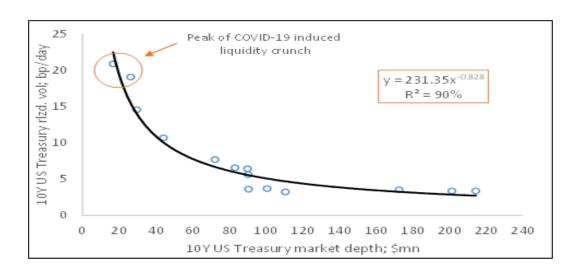


Exhibit 7: Realized 10Y UST Volume vs Market Depth (\$mn)





Average monthly trading volumes in Fixed Income ETF's



