

Liquidity in the Time of Social Distancing

CLO Special Report

- We have been taking a defensive posture, minimizing spread duration and lowering credit risk to shorter/more senior bonds ([Mar 6th](#), [Mar 4th](#), [Feb 27th](#)) and reiterate this as the risk of an uncontained COVID-19 pandemic is rising.
- On [Mar 9th](#), we introduced downside cases for supply (-50% y/y to \$50bn-70bn) and secondary spreads (AAA 180-200bp) – only to have spreads just about reach this in a matter of days.
- The economic consequences may not yet be fully clear, but the outbreak has already been felt in market volatility. Our colleagues have discussed how market depth and liquidity have amplified moves in markets such as US Treasuries ([here](#) and [here](#)).
- YTD there has been \$8.4bn US CLO BWICs. The proportion that Did Not Trade (DNT) increased to 25.5% on a YTD basis as the outbreak intensified and is ~3.4 sigmas above the average since 2011. Europe has also had €2.9bn BWICs (compared to €1.1bn in 2019 YTD).
- It's hard to quantify market depth in CLOs given less transparency. For now, the market seems to be functioning given higher BWIC volumes, albeit with more DNTs, gappy spread moves, and rising dispersion. It's possible that increasing use of social-distancing policies will impact CLOs as participants deal with informational challenges, which could exacerbate market moves, and we will continue to track activity and pricing in our research.

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Liquidity in the Time of Social Distancing: CLO Special Report

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Liquidity in the Time of Social Distancing: CLO Special Report

We have been taking a defensive posture, minimizing spread duration and lowering credit risk to shorter and more senior bonds ([Mar 6th](#), [Mar 4th](#), [Feb 27th](#)), and reiterate this as the risk of an uncontained COVID-19 pandemic is rising. On [Mar 9th](#), we introduced downside cases for supply (-50% y/y to \$50bn-70bn) and secondary spreads (AAA 180-200bp), only to have spreads just about reach this in a matter of days. **By how much has CLO valuation de-rated?** Since Feb 21st, on a normalized basis CLO BB/B spread moves are in line with Loans (~47% widening) whereas CLO Single-A and BBB have widened the most (81-88%). IG/HY bonds have widened 66% on a normalized basis to 219bp (JULI) and 736bps (HY Bonds). There is significant tiering in CLOs, e.g. BBs range ~ 875-1250bps as of March 11th close.

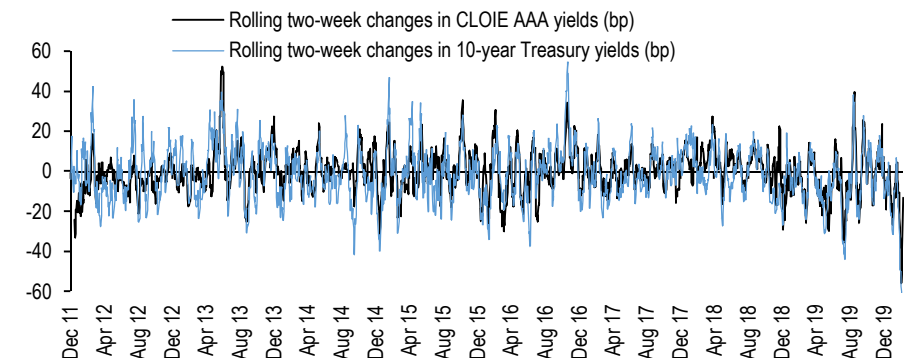
Exhibit 1: CLO spread widening versus credit markets

	March 11 th close	Change Since Feb 21 st	% Change	'15-'16 Energy wides	GFC wides
IG Bonds	219	+87	66%	247	560
HY Bonds	736	+291	66%	920	1929
Loans	665	+213	47%	693	2088
CLO AAA	180	+74	70%	180	700
CLO AA	278	+125	81%	280	1140
CLO A	375	+175	88%	415	1848
CLO BBB	555	+235	73%	650	2305
CLO BB	1063	+348	49%	1100	2700
CLO B	1450	+445	44%	1700	

Source: J.P. Morgan. Data as of March 11th, 2020 close. JULI (all ex EM) spread to TSY, JPM Domestic HY Bond Spread to worst, JPM Loan index spread fwd to 3Y, and weekly CLO secondary spreads. Based on US 3.0 Secondary CLO Spreads (2016-current) and US Benchmark (Pre-Crisis) CLO Spreads (2007-2016).

The economic consequences of COVID-19 may not yet be fully clear, but the outbreak has already been felt in market volatility. Our colleagues have discussed how market depth and liquidity amplified moves in markets such as US Treasuries ([here](#) and [here](#)). This is harder to quantify in CLOs given less transparency. In considering the data at hand, it seems reasonable to conclude the market is functioning with higher BWIC volumes, albeit higher DNT's, with gappy spread moves, and rising dispersion. It's also possible that increasing use of social-distancing policies will impact CLOs as participants deal with informational challenges, exacerbating market moves.

Exhibit 2: Markets as disparate as CLOs and US Treasuries experienced some of their largest moves ever as the COVID-19 outbreak intensified



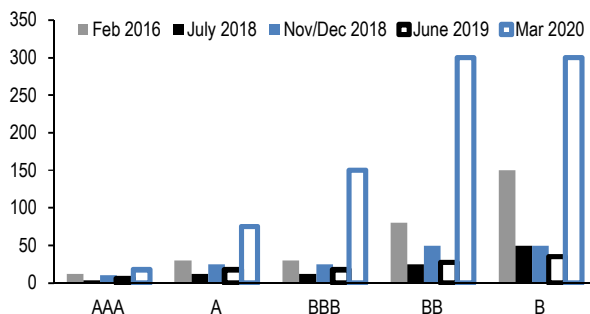
Source: J.P. Morgan. As of March 9th, 2020.

For context, our colleagues observed that the drop in 10-year Treasury yields over the last two weeks has been the largest since August 2011 ([link](#)). The rolling two-week change in CLOIE AAA yields moved in a similar trend, with the index its biggest decline in yield of -56bp on March 4, 2020, since inception in 2012.

Bid/ask: standardized and normalized

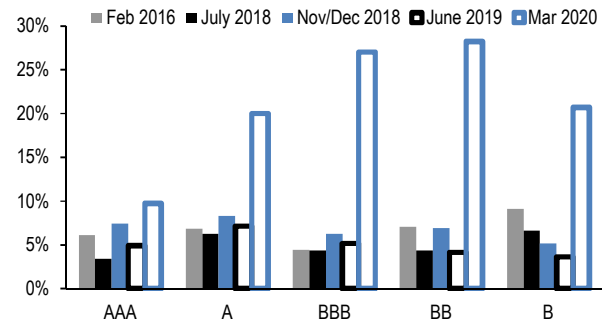
Given a fluctuating market, we refresh generic bid/ask spread observations for additional perspective on CLO market liquidity and trading friction. We caveat that these are indicative levels and there is a range of bid/ask spreads at each tranche level with the tiering and price discovery the market is experiencing. Exhibits 3 and 4 show the mid-point of bid/ask spread for each tranche and normalized bid/ask spread, as a percent of the spread itself. For example, the bid/ask spread of US CLO AAA bonds is generically 17.5bp, which is the mid-point of 10-25bp range and the normalized bid/ask spread is 10% based on current mid-tier AAA spread (180bp). As we move down the capital structure, the bid/ask spread and tiering both increase; for example, the mid bid/ask spread of US CLO BB bonds is 300bps, the mid-point of 200-400bps bid/ask spread. March 2020 is the widest across all tranches in our tracking of this indicative measure and even on a normalized basis, the bid/ask range on mezzanine bonds is high relative to IG tranches currently. As a broader comparison, we note indicative bid/ask spread of ABS Benchmark AAA is similarly ~10bp in the context of current levels.

Exhibit 3: Illustrative US CLO bid/ask spread (bp)



Source: J.P. Morgan. Bid/ask as of March 10th, 2020 close. We use the mid-point of a range of bid/ask spread for each tranche.

Exhibit 4: Illustrative normalized US CLO bid/ask spread

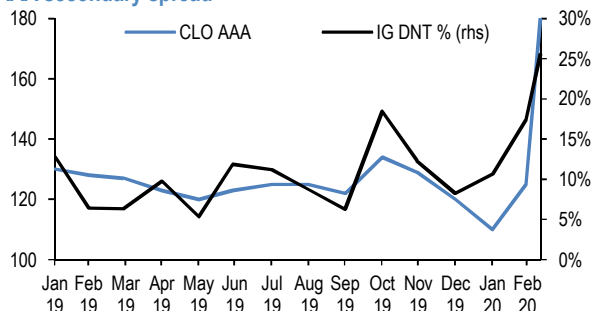


Source: J.P. Morgan. Bid/ask as of March 10th, 2020 close. We use the mid-point of a range of bid/ask spread for each tranche. Spread levels as of March 11th, 2020 close.

Trading Volume (BWIC)

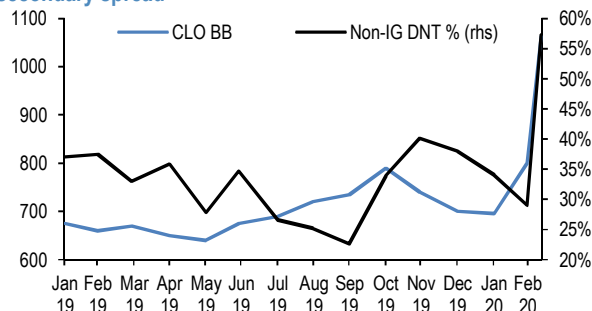
The US CLO market has grown 2.5x to \$711bn since 2011, while BWIC percentage of market size fluctuated around 6% with a maximum 7.8% in 2013 and a minimum 3.5% in 2017. Year to date, there has been \$8.4bn BWICs so far and the estimated annual BWICs would be \$45bn on a proportional basis, all else equal, or roughly 6.3% of market size. On the other hand, the proportion of BWICs that Did Not Trade (DNT) increased to 25.5% on a YTD basis as the COVID-19 outbreak intensifies, and is ~3.4 sigmas above the average we have tracked since 2011 (Exhibit 7). Non-IG tranches typically have a higher percentage of DNTs. YTD IG (AAA-BBB) DNTs are 26% and non-IG (BB-B) DNTs are 57%. Higher DNTs may indicate that market participants are testing the markets, which makes sense as spreads are widening in the volatile market, bid/ask levels have increased, and price discovery continues. To observe a measure of market depth in CLOs and the impact of price action on liquidity, we observe AAA and BB secondary market activity and spread levels where we find DNT% of BWICs tend to move along with US secondary spreads (Exhibits 5- 6).

Exhibit 5: Monthly US CLO IG (AAA-BBB) DNT % Versus US AAA secondary spread



Source: J.P. Morgan. Spread levels as of March 11th, 2020 close. BWIC data as of March 9th, 2020.

Exhibit 6: Monthly US CLO non-IG (BB-B) DNT % Versus US BB secondary spread



Source: J.P. Morgan. Spread levels as of March 11th, 2020 close. BWIC data as of March 9th, 2020.

Exhibit 7: US CLO BWIC volumes as a percentage of CLO Market Size (\$bn) and DNT % of BWICs

Year	IG	Non-IG	EQ	Total US CLO BWICs	CLO Market Size (\$bn)	BWIC Volumes / Market Size	Total US CLO BWIC DNT	DNT Volumes/BWIC Volumes
2011	13.21	1.44	1.66	16.31	284	5.7%	3.19	19.6%
2012	17.30	1.20	2.59	21.09	298	7.1%	3.38	16.0%
2013	18.29	3.37	2.94	24.60	314	7.8%	5.05	20.5%
2014	15.69	3.39	3.26	22.33	381	5.9%	4.35	19.5%
2015	25.55	4.62	3.77	33.94	438	7.8%	6.81	20.1%
2016	18.50	6.23	2.96	27.68	464	6.0%	5.31	19.2%
2017	9.56	6.02	2.43	18.01	519	3.5%	2.53	14.0%
2018	20.12	4.74	2.66	27.52	603	4.6%	4.24	15.4%
2019	26.81	6.16	2.66	35.63	691	5.2%	6.01	16.9%
YTD	5.89	1.77	0.69	8.36	711	1.2%	2.13	25.5%

Source: J.P. Morgan. Data as of March 9, 2020. CLO market size estimates are as of the end of each year. YTD is as of March 2nd, 2020.

In Europe, spreads have drifted wider 25-90bps in IG and ~135bps in mezz over the last week. The secondary market has been active YTD, with €2.9bn BWICs (compared to €1.1bn in 2019YTD). The European CLO market is now ~€151bn in size and annual BWIC volumes are an average 6% of market size since 2013 with a maximum 8% in 2015 and a minimum 4% in 2019. Recently, the proportion of BWICs that Did Not Trade (DNT) increased to 13.3% on an YTD basis with the global market volatility.

Trading Volume (TRACE)

As BWICs don't fully capture CLO market activity, we also track TRACE data as a supplementary data source for trading volumes (Exhibit 8). Recall, TRACE captures all US CDO activity (combining CBOs, CDOs and CLOs) and the data is only broken out by IG and non-IG. 2020 YTD TRACE volumes total \$34bn which compares to \$21bn over the same period last year. TRACE volumes had reached a high of \$111bn buys and sells in 2019.

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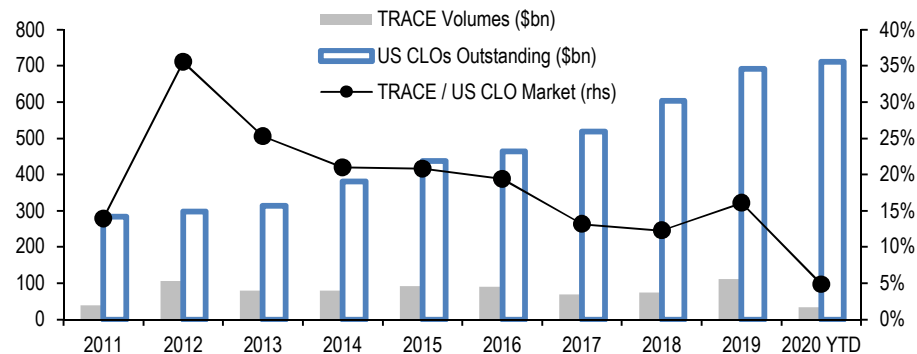
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Exhibit 8: TRACE CDO volume versus US CLO market



Source: J.P. Morgan, FINRA. * FINRA data commenced May 16, 2011. Data as of March 9th, 2020.

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