



Market Update – Daily Fixed Income Trading Liquidity Update 21 April 2020

In the current markets, volatility is at an extreme level and liquidity has become significantly reduced across many fixed income instruments including government bond markets. Liquidity management has been a heightened focus for AllianceBernstein for years, as we recognized the reduced liquidity in the marketplace after the 2008-2009 financial crisis. We view liquidity management as a business imperative.

In an effort to provide timely updates for our clients on fixed income market trading liquidity, we have developed the following update, aggregated from our traders towards the end of the New York trading day.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
US Treasuries	<ul style="list-style-type: none"> The open-ended bond purchase program enacted by the US Federal Reserve (Fed) is having a positive effect on liquidity and market functionality. The Fed has reduced their purchases of US Treasuries to \$15bn per day during the week of April 20-24 (from \$30bn per day the week of April 13). The big recent improvement has been in Treasury market depth, which had fallen by as much as 90+% in the worst of the crisis in March but has recovered to 55-65% of the average depth over the last year. Rate volatility continues to fall and there continues to be good “two-way” trading in the market. While still relatively liquid in most contracts, depth in the Treasury futures market is also much lower vs historical averages. Trading in “ultra” contracts is challenging. With the oil price plummet reducing inflation expectations and 5-year yields already at 32 bps, the only thing that can rally substantially is the 30-year bond, and the curve continues to flatten accordingly. From a liquidity standpoint the only change of note is in TIPs where liquidity has suffered as a result of the oil selloff and tapering of Fed purchases. On-the-run 10-year TIPs can be moved at 2-3 tick wide bid/offer spreads but liquidity in off-the-run bonds and longer-maturity bonds can be 3-6x as wide. 	<p>Bid-offer spreads for on-the-run benchmark 2- through 10-year US Treasury notes has improved significantly and are in line with pre-crisis conditions.</p> <p>For the 30-year note, bid/ask is ~2.5x wider vs pre-crisis.</p> <p>Off-the-run Treasury bonds still trade significantly wider than on-the run bonds, but bid/offer has compressed.</p>
Investment Grade (IG) Corporates	<p style="text-align: center;">US IG</p> <ul style="list-style-type: none"> US IG cash bonds dripped wider during the April 20-21 trading sessions New issue supply remained quieter as companies head into their blackout period. There were only \$9 	<p>US IG spreads are generically 4-5x wider vs normal market conditions</p>

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	<p>billion in new deals coming to market over April 20-21. Demand was less robust, but still relatively strong with deals 4.3x oversubscribed on average.</p> <ul style="list-style-type: none"> • Credit curves, in particular the 5-year part of the curve and in, continue to normalize across the quality spectrum. • Bid/ask spreads remain wider than pre-crisis levels. Odd-lot liquidity is still improving, but not back to normal conditions yet. <p style="text-align: center;">European IG</p> <ul style="list-style-type: none"> • Supply lightened in the European IG market as many companies approached their blackout period. • With the macro tone more mixed, concessions in the primary market were variable, ranging from 0 to 40bps with secondary market performance also mixed. • More off-the-run names which have had poor liquidity since the selloff began in earnest are gaining investor focus and are becoming tradeable with primary volumes dropping. • Conviction levels are waning from the dealer community in the AT1 (subordinated financial) market, given the decent bounce in prices off the lows. However, given the technical picture remains intact with many investors sitting on cash, it is leading to an impasse where volumes are lower and is causing the bid/offer spreads to be modestly wider to reflect that. • So far this week (as of April 21), the market is priced lower but technicals have not changed significantly. We are beginning to see a buyer strike. <p style="text-align: center;">REIT Preferreds</p> <ul style="list-style-type: none"> • Liquidity in the REIT preferred market is limited under more normal conditions and has become significantly challenged amid the current crisis. • Dealers are not providing balance sheet capacity to support the market and so trades must be done on an agency basis; trading is therefore limited. • On April 21, trading volume continued to be very light. 	<p>AT1/Preferreds are 4-5x wider vs normal market conditions</p>
<p>High Yield (HY) Corporates</p>	<p style="text-align: center;">US HY</p> <ul style="list-style-type: none"> • The tone of high yield in recent weeks has been tied to equities—with high yield closely following equity market moves. • On April 21, there was some softness in the high yield market, which was generically quoted down 1- 	<p>Spreads are 1.5 points wider than normal times for BB-rated securities</p> <p>Spreads are 2 points wider than normal times</p>

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	<p>3 points on light volumes</p> <ul style="list-style-type: none"> The new issue market continues to be active with 7 “drive by” deals in the market on April 21, and these continue to see solid demand <p style="text-align: center;">European HY</p> <ul style="list-style-type: none"> Daily sentiment continues to follow equities and the iTraxx Crossover index, but cash bonds continue to outperform the iTraxx index. In periods of softness in equities/iTraxx there have still generally been buyers of cash bonds. Markets continue to see better two-way flow. Fallen angels that have been some of the best performers of the last two-weeks came off the highs and there was some profit taking in the highest-quality, best-trading credits. However, underlying technicals still broadly feel intact, with limited outflow-related selling and generally investors with high cash balances waiting to deploy at better valuations into weakness or new issue when it comes. Light dealer inventories have exacerbated the positive technical in the market as equities/macro products have generally been supported and “real money” investors have looked to spend cash. Investors are becoming more discriminating among lower-quality issuers, as dispersion increases and restructuring headlines begin to appear. Bid/ask spreads are still wide, but there is no more panic in the market. Sellers are primarily opportunistic, selling on strength in relative outperformers or rotating out of more challenged issuers. Outflow-driven sellers have not been prominent in the past several sessions. So far this week (as of April 21), the market is priced lower but technicals have not significantly changed. We are beginning to see a buyer strike. <p style="text-align: center;">CDX HY</p> <ul style="list-style-type: none"> CDX HY traded with good two-way flows on April 21. Volumes picked up, but still much lower than at the peak. Bid/ask spreads declined a bit but remain elevated relative to pre-crisis levels. 	<p>for B-rated securities</p> <p>Spreads are 3-4 points wider than normal times for CCC-rated and below securities</p> <p>CDX HY bid/ask is 4-5x vs normal conditions.</p>
Emerging-Market Debt (EMD)	<p style="text-align: center;">Hard Currency EM</p> <ul style="list-style-type: none"> On April 21, the hard currency EM index widened 20 bps as oil continued its decline and a buyer strike emerged, especially in high yield sovereign risk. As expected, oil exporters saw underperformance 	EM IG sovereigns are 1.5x wider vs normal market conditions

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	<p>across EM.</p> <ul style="list-style-type: none"> Liquidity and price transparency continue to improve in sovereigns and quasi sovereigns, albeit still below average. Profit taking began in the high yield corporate space as investors who rode the rally of the previous two weeks were happy to shed some risk into the first sign of weakness. <p style="text-align: center;">Local Currency EM</p> <ul style="list-style-type: none"> Local EM rates continue to track macro risk and the moves in currencies. Liquidity is close to normal 	<p>EM HY sovereigns are 2x wider vs normal market conditions</p> <p>EM IG corporates are 2x wider vs normal market conditions</p> <p>EM HY corporates are 3x wider vs normal market conditions</p>
Securitized	<p style="text-align: center;">CMBS</p> <ul style="list-style-type: none"> The tone of the CMBS market remains positive at the top of the capital structure, while bids for mezzanine classes continue to be difficult to find. Bids for senior single-asset paper continue to be strong and demand is beginning to materialize in the lower-rated classes. However, despite the green shoots we are beginning to observe, liquidity is the same and bid/offer spreads remain unchanged. Bid/offer spreads are 20bps for 10-year AAA-rated bonds or approximately one quarter point. This is 4x the normal of ~5 bps. Illiquidity persists below the single A-rated level and bid/offer spreads remain stretched at the BBB-rated level at 5x pre-COVID levels. Bid/offer spread for CMBX A.6 is ~2x, BBB-.6 is ~3 x and BB.6 ~5x the normal bid/offer spread. <p style="text-align: center;">ABS</p> <ul style="list-style-type: none"> It has been a light start to the week in ABS secondary markets as dealers traded just \$1.2bn week to date. In the primary market, issuance continues to ramp up with 3 deals priced for \$3.45bn across prime auto loan (Toyota and Hyundai) and equipment (Dell) ABS. The prime shelves priced through Initial Price Thoughts, and the Toyota deal was upsized from \$800mn to \$1.2bn. Hyundai's AAA-rated 1-year and 2-year tranches priced inverted at +105 and +100 respectively, and the subordinated tranches were pulled from the offering. There are two other prime auto deals in the market to be priced—Nissan which will offers only seniors and CarMax which will most likely retain the BBB- 	

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	<p>rated bonds given the lack of liquidity in the secondary market.</p> <ul style="list-style-type: none"> Overall spreads are unchanged from the end of last week. <p style="text-align: center;">CRTs</p> <ul style="list-style-type: none"> In the CRT market, spreads/prices vary based on seasoning, LTV, seniority in the capital structure but nearly every segment was tighter week over week ending April 17. One exception was fixed severity M2 bonds, which have widened over uncertainty about the language of these deals being potentially modified/supported by the FHFA. With increased two-way flow and some dealers inclined to take positions in bonds again, bid/ask spreads continue to shrink. <p style="text-align: center;">Legacy Non-Agency RMBS</p> <ul style="list-style-type: none"> Legacy RMBS continues to trade through the recent crisis. Since January spreads have widened from ~ 200bps to now > 1000 bps, but demand for the sector never really faded. <p style="text-align: center;">CLOs</p> <ul style="list-style-type: none"> The entire CLO capital stack remains well bid, although spreads week over week haven't changed much. What was new last week (week of April 13) was that better managers are starting to test the market to see if it is worth bringing a deal. The capital stack for a top-tier manager looks like the following: <table border="1"> <thead> <tr> <th>Rating</th> <th>Spread*</th> <th>Price</th> </tr> </thead> <tbody> <tr> <td>AAA</td> <td>h100s</td> <td>h90s</td> </tr> <tr> <td>AA</td> <td>h200s</td> <td>mh90s</td> </tr> <tr> <td>A</td> <td>mh300s</td> <td>l90s</td> </tr> <tr> <td>BBB</td> <td>h500s</td> <td>mh80s</td> </tr> <tr> <td>BB</td> <td>lm1000s</td> <td>h70s</td> </tr> </tbody> </table> <p>*h=high; mh=mid to high; l = low; lm= low to mid</p> <ul style="list-style-type: none"> Bid/ask spreads on AAA-rated bonds continue to be close to normal levels (~1 point); mezzanine bid/ask remains ~3x wider relative to typical levels as dealers remain defensive. <p style="text-align: center;">Agency MBS</p>	Rating	Spread*	Price	AAA	h100s	h90s	AA	h200s	mh90s	A	mh300s	l90s	BBB	h500s	mh80s	BB	lm1000s	h70s	
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	<ul style="list-style-type: none"> Bid/ask spreads in Agency MBS have returned to pre-crisis levels, driven tighter by the combination of Fed buying and increased investor interest 	
Money Market	<ul style="list-style-type: none"> Massive inflows into government money market funds (\$28bn April 20, \$47bn in last 7 days) continue to increase the demand for short-maturity securities. The entire T-bill curve keeps tightening, 5-7bps in the past 2 days. Bills up to 1month in maturity are trading negative on the offer side again. Repo is trading at the lower bound. The Fed RRP had \$13bn in subscriptions on April 21 reflecting signs of limited intraday liquidity. \$60bn in new cash management bill (CMB) supply was announced bringing the total to \$955bn. Rumors of additional stimulus should bring more T-bill issuance. LIBOR continues to set lower as funding pressure subsides. 1-month LIBOR set at 0.624 % and 3-month set at 1.04%. 	
US Municipals	<ul style="list-style-type: none"> The municipal markets were weaker on April 20-21. A couple new deals came on April 21 and a new 1.1bn "drive buy" deal popped up for tomorrow. in addition to the upsized California GO deal last week and a \$1.1 bn LA Unified School District deal expected to come on April 22, additional states appear to be lining up to issue in the next couple weeks, and that trend is expected to continue. Overall investor cash balances seem healthy, and new issue oversubscriptions are still in the 6x+ range for high-quality bonds. The high yield market is still in its own land with not much new issuance and low A-rated paper still hard to place. Odd lot penalties are at the lower band of what we have been seeing, ranging from 50 cents to 7 points below round lot bidside evaluations, but were noticeably weaker on April 21. For context, high grade odd-lots typically trade 0.10-1 points below round lot bid-side evaluations under more normal market conditions. 	
Canadian Market	<p style="text-align: center;">Federal</p> <ul style="list-style-type: none"> Liquidity is best in benchmark issues for block sizes of <=CAD25m; limited liquidity in off-the-run, high coupon bonds but the Bank of Canada buying these securities in secondary markets may support liquidity 	<p>Federal: bid/ask typically +1 to +2bp but for the long end of the curve, it can be more depending on volatility</p> <p>Provincial: concession of</p>

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	<p style="text-align: center;">Provincial</p> <ul style="list-style-type: none"> • Liquidity is best in benchmark bonds from Quebec, Ontario and British Columbia • Concessions are requested so dealers will take less liquid positions. • Very limited secondary-market liquidity in oil-generating provinces (Newfoundland, Alberta, Saskatchewan) with Western Canadian Select oil price trading at low levels. • Most dealers will not bid on off-the-run, high coupon provincial issues, they will do agency trades. • The Bank of Canada's C\$50bn buying program of provincial debt should support liquidity. <p style="text-align: center;">IG Corporates</p> <ul style="list-style-type: none"> • Limited liquidity; many dealers are maintaining low balance sheet inventories, so will not provide bids in many sectors. • Trading on an agency basis for high-beta issuers. However, the market has improved in telco and bank sectors. • The Bank of Canada's C\$10bn buying program of corporate debt should support liquidity in the secondary markets. <p style="text-align: center;">Real Return Bonds (RRBs)</p> <ul style="list-style-type: none"> • Trading "by appointment", similar to private placement market 	<p>+2 to +4bp and more on size > CAD 25m, particularly at the longer end</p>

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