



**Market Update – Fixed Income Trading Liquidity
For the Week Ended 4 September 2020**

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 at the end of each week.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
US Treasuries	<ul style="list-style-type: none"> Global developed market interest rates “bull flattened” during the week ended September 4 as the selloff in technology stocks reverberated across the fixed income markets as well. There were no meaningful changes on the liquidity front from the prior week. 	<p>Bid-offer spreads for on-the-run US Treasuries has improved significantly and are in line with pre-crisis conditions.</p> <p>Off-the-run Treasury bonds that are not in cheapest-to-deliver futures baskets are still trading with bid/ask spreads 2-3x wider than pre-covid-19 levels.</p> <p>TIPs bid/ask is 1.5x wider vs pre-crisis levels</p>
Investment Grade (IG) Corporates	<p style="text-align: center;">US IG</p> <ul style="list-style-type: none"> US IG cash bonds were largely unchanged during the week ended September 4. The index was marked 1 bp tighter, outperforming the broader macro tone and reversing some of the recent underperformance relative to equities. The overall moves for the week understate the actual market movements—the market was very firm Monday through Wednesday before selling off with the equity market volatility on Thursday and Friday. The Fed’s weekly report showed that the Fed purchased \$152 million for its secondary market purchase program (SMCCF) between August 26 and September 1. This was in line with the prior 	<p>US IG spreads are generically 2x wider vs normal market conditions</p> <p>AT1/Preferreds are 2-3x wider vs normal market conditions</p>

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	<p>week's pace, but still well below the pace when the program began when the Fed bought an average of \$1.4bn/week for the first seven weeks.</p> <ul style="list-style-type: none"> • Ahead of the Labor Day Weekend holiday in the US, the primary market slowed materially, with only \$5 billion in IG supply coming to market for the week ending September 4. • Bid/ask spreads remain wider than pre-crisis levels. <p style="text-align: center;">European IG</p> <ul style="list-style-type: none"> • Secondary market volumes remained very light with the focus on supply. While supply wasn't as heavy as it could have been, with a number of mandates diverted to USD, the market still saw a number of European-centric deals (notably corporate hybrids, subordinated bank capital). This supply was all well-received, with books multiple times oversubscribed and deals causing secondary markets to reprice tighter. • During the weakness in the latter half of the week ended September 4, liquidity remained fairly light (with not as many participants transacting) as new issue participation and trading remained the focus of the market. <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 but has improved from 2-3 months ago. • Dealers are only providing balance sheet capacity on select issuers, so for many issuers, trades must be done on an agency basis; trading is therefore limited. • Trading volume is trending low since valuations continue to recover. 	
High Yield (HY) Corporates	<p style="text-align: center;">US HY</p> <ul style="list-style-type: none"> • US HY secondary market trading was very quiet during the week ended September 4, leading into the holiday weekend. Only 2 new issues priced, totaling \$3.3 bn. A busier week is expected in the coming week. • The index spread was 13bp wider on the week, to 488bp. This compares to March 23 wide levels of 1100 bp and pre-covid-19 tight levels of 341 bp on Feb 13 and post-covid-19 tight levels of 471 bp on August 3. 	<p>Spreads are 0.75-1.25 point wider than normal times for BB-rated securities</p> <p>Spreads are 1-1.5 points wider than normal times for B-rated securities</p> <p>Spreads are 1.5-2.5 points wider than normal times for CCC-</p>

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	<p style="text-align: center;">Euro HY</p> <ul style="list-style-type: none"> • Volumes have picked up and Euro HY did not see significant pressure amid end-of-week equity weakness. In contrast, “real money” investors and dealers used it as an opportunity to source bonds they could not find in the first half of the week. • The primary market saw its first deal in a month during the week ended September 4, a high-quality issuer which came at a spread 45bps through the initial price talk and traded up 1 point on the break. Expectations are for a more active primary calendar for the next several weeks. • Underlying technicals remain constructive. Attention has remained on the earnings calendar and on idiosyncratic headlines, but it takes extreme misses/surprises versus expectations to cause meaningful volatility. Of note, there has been a rather deep distressed bid to the market as well, with funds adding to already meaningful size positions in the latest credits to announce formalized restructuring talks. <p style="text-align: center;">CDX HY</p> <ul style="list-style-type: none"> • CDX HY traded slightly higher during the week ended September 4, outperforming the move lower in equities. But it was a “tale of two weeks”, with the index up at Wednesday’s close, only to give up strength with equities selling off Thursday and Friday. • Trading volumes are trending lower now that summer illiquidity has kicked in ahead of the Labor Day holiday in the US. • Bid/ask spreads have declined but remain elevated relative to pre-crisis levels. 	<p>rated and below securities</p> <p>CDX HY bid/ask is 1-2x vs normal conditions.</p>
<p>Emerging-Market Debt (EMD)</p>	<p style="text-align: center;">Hard Currency EM</p> <ul style="list-style-type: none"> • EM credit finished the week ended September 4 10 bps tighter, with compression of HY to IG being the main theme. • Secondary market activity was relatively muted despite another outsized week of inflows into EM. Primary markets were quiet as participants anticipate a significant amount of supply (heavily skewed to IG sovereigns and corporates) over the coming weeks. Liquidity is slightly worse than average across the EM credit complex <p style="text-align: center;">Local Currency EM</p> <ul style="list-style-type: none"> • Liquidity is close to normal. 	<p>EM IG sovereigns are 1.25-1.5x wider vs normal market conditions</p> <p>EM HY sovereigns are 1.25-1.5x wider vs normal market conditions</p> <p>EM IG corporates are 1.25-1.5x wider vs</p>

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		<p>normal market conditions</p> <p>EM HY corporates are 1.25-1.5x wider vs normal market conditions</p>
Asia	<p style="text-align: center;">Asia Hard Currency</p> <ul style="list-style-type: none"> • Asia hard currency credit spreads were mixed over the week ended September 4, with positive flows to EMD offset by weakness in China IG as several new Chinese entities were placed on the US trade sanctions list. • Asia High Yield saw a return of interest in Indonesian low-dollar-price bonds which had been out of favor. China property was mixed with some cash deployment in benchmark names coupled with some disappointing earnings prints. • Liquidity was normal, with a mix of cash continuing to be put to work and some profit taking. <p style="text-align: center;">Asia Local Currency</p> <ul style="list-style-type: none"> • Asia local currency debt markets continue to trade cautiously around macro uncertainty. • Indonesian bonds were slightly weaker on a draft bill proposing a 5-member government committee with speaking and voting rights to sit on the Bank of Indonesia Board which was played down by ministers later in the week. • In India the RBI announced liquidity measures including Open Market Operations, Targeted Long-Term Repo Operations and relaxation of held-to-maturity (HTM) rules that stemmed the three-week government bond weakening streak and saw bonds rally 15-20bps. • India/China border tensions persist but are having little impact on the market. 	<p>Asia IG credit is ~1 to 1.2x wider vs. normal market conditions</p> <p>Asia HY credit is ~1 to 1.5x wider vs. normal market conditions</p> <p>Asia local currency debt is ~1 to 1.2x wider vs. normal market conditions</p>
Securitized	<p style="text-align: center;">CMBS</p> <ul style="list-style-type: none"> • There is little to report on both flows and price movements in CMBS and CMBX during the week ended September 4. A lack of meaningful trading volume resulted in bonds trading in very narrow price ranges. There was no new issuance to speak of and none is anticipated until mid-September. • Bid/offer spreads in CMBS and CMBX continue to moderate but for some parts of the capital stack remain wide of pre-COVID levels. In CMBS, AAA bid/offer spreads have retraced the post-COVID 	

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	<p>widening, while AA/A and BBB rated classes remain 2x their historical average.</p> <ul style="list-style-type: none"> • Meanwhile in CMBX, A.6, BBB-.6, and BB.6 bid/offer spreads remain at approximately 2x their historical averages. <p style="text-align: center;">ABS</p> <ul style="list-style-type: none"> • The ABS primary market priced five transactions for the week ending September 4 totaling \$2.9bn across timeshare, container and student loan sectors. ABS year-to-date supply now stands at \$116.1bn compared to \$157.0bn recorded in 2019 over the same time period. Pricing execution remains strong, as most issuance continues to price through initial spread guidance with solid over-subscription levels. • In the secondary markets, 1-2bp of tightening was recorded across prime auto loan ABS, with most other ABS sectors unchanged. BWIC (bids wanted in competition) volumes were lower during the week, with lighter primary issuance and stronger IG inflows, which helped feed net buying. • In the week ahead, eight deals are premarketing for a total of \$5.1 bn and 6 issuers that have filed 15G forms. <p style="text-align: center;">CRTs</p> <ul style="list-style-type: none"> • The week ended September 4 saw the lowest volume in all of 2020. CRTs outperformed the broader market even through the macro sell off on Thursday and Friday. There was some localized weakness in higher-premium last cash flow bonds and a plateauing of the recent rally in fixed severity bonds. The bottom of the capital stack had the strongest performance. Liquidity remains robust in all subsectors within CRTs. <p style="text-align: center;">Legacy Non-Agency RMBS</p> <ul style="list-style-type: none"> • Legacy RMBS have recovered back to pre-crisis levels. After having widened to the 1000-1200 bp range in March, spreads are currently trading at or around 200 bp discount margin currently. <p style="text-align: center;">CLOs</p> <ul style="list-style-type: none"> • The CLO market has performed very well. Spreads are closing in on pre-crisis levels. Top-tier managers are pricing at 125 bp (ask) for AAA-rated bonds and 165 bp (ask) for AA-rated bonds. This is within 5 to 10 bp of pre-crisis levels for significantly shorter 	

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	<p>structures (given these are 3-year non-call 1 vs 5-year non-call 2).</p> <ul style="list-style-type: none"> • For the majority of the summer the secondary market has been pricing meaningfully inside primary market levels, but over the past 2 weeks the primary/secondary spread has collapsed to only a few basis points. • Liquidity remains robust, especially at the top of the capital stack where blocks are trading with very little, if any, size discount. Bid/ask spreads have now cured to pre-crisis levels. <p style="text-align: center;">Agency MBS</p> <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. Bid/offer for lower coupon bonds is just ½ of a tick wide. 	
Money Market	<ul style="list-style-type: none"> • Government money market funds saw outflows of \$40 billion in the 7 days ending September 4. This has resulted in a slight back up in rates. The T-bill curve cheapened 1-2bps. Repo is trading at the top of the corridor at 0.10%. Prime fund flows were flat over the same time period. • The commercial paper spread to T-bills is still tight at approximately 0.10%. • 1-month LIBOR set at 0.16% and 3-month LIBOR set at 0.25%. 	
US Municipals	<ul style="list-style-type: none"> • During the week ended September 4 the municipal market began to stabilize after seeing two straight weeks of rising benchmark yields driven by US Treasury rates resetting higher, a pick-up in high-grade supply, and the strong seasonal cash flows dwindling. • The primary market was tested by California’s \$2.6 billion tax-exempt deal. The deal was well-received as many maturities were multiple times oversubscribed. However, it did come with concessions about 15-20 bps cheaper to where California general obligation bonds were recently trading in the secondary markets. • High yield deals still continue to be met with strong demand as a number of deals are seeing double-digit subscription levels. • After leaking wider last week, odd lot discounts worked their way tighter back to post-pandemic averages of 1 to 1.5 points below bid-side evaluations. 	

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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 <=CAD25 million; liquidity has improved in off-the-run, high coupon bonds with Bank of Canada (BOC) bond buying. Comments by central bank Governor Macklem that the BOC will buy at least \$5 billion of Canadian government bonds per week until the recovery is well underway should continue to support market liquidity. The fact that the BOC will buy more bonds at the long end of the curve should support liquidity at the 30-year part of the yield curve. • The BOC has purchased C\$118.2 billion to support liquidity in Government of Canada markets since the purchase program started on March 27 through September 2. <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. • Secondary-market liquidity in oil-generating provinces (Newfoundland, Alberta, Saskatchewan) has improved with WTI around US\$38 per barrel. • Most dealers will not bid aggressively on off-the-run, high coupon provincial issues, they will do agency trades, even with the Bank of Canada's buying program of provincial debt. • The BOC has purchased C\$7.8bn in par value year to date through September 2 within their provincial buying program to support liquidity. <p style="text-align: center;">IG Corporates</p> <ul style="list-style-type: none"> • Limited liquidity, particularly during risk-off trading days; 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. The market has improved in sectors such as banks and telecom companies. • The central bank has bought a relatively small amount of corporate securities to date (C\$ 150 million par), indicating the impact is limited. The central bank bought a modest amount in recent weeks (as of September 2). BBB- bonds are trading by appointment unless there is a new issue. The corporate calendar is expected to be more active in 	<p>Federal: bid/ask typically +1 bp but for the long end of the curve, it can be more depending on volatility (risk off markets) and size outstanding. Off the run Canadas can have a 10 bp bid-ask given small outstanding size in these securities.</p> <p>Provincial: concession of +1 bp and more on size > CAD 25 million, particularly at the longer end</p> <p>BBB- corporates are trading by appointment, particularly in the energy sector. Inventories are reduced and dealers are not looking to increase their BBB- exposure</p>

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	<p>September, which should help corporate market liquidity.</p> <p style="text-align: center;">Real Return Bonds (RRBs)</p> <ul style="list-style-type: none"> • The C\$400 million RRB auction of the long Canada 0.5% Dec. 2050 on September 2 provided liquidity in the benchmark RRB bond for a limited period in the benchmark RRB bond. • The program to purchase Government of Canada securities in the secondary market – the Government Bond Purchase Program or GBPP – should help liquidity since it includes RRBs. The program began on May 27. The BOC bought a total of C\$700mn with C\$100mn per line of the 7 Canada RRBs from 2021 to 2047. Even with the central bank buying net C\$400mn of Canada RRBs, liquidity remains challenging as dealers hold very limited inventories, if any, of these RRB securities. Trading a block can only be done on an appointment basis. 	<p>Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet.</p>

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