ALLIANCEBERNSTEIN®

August 2020

Market Update –Fixed Income Trading Liquidity
For the Week Ended 28 August 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	• Global developed market interest rates sold off and curves steepened during the week ended August 28 in the wake of Federal Reserve Chair Powell's Jackson Hole speech, which stated the FOMC's move to average inflation targeting. Risk markets performed well, peripheral European spreads held in and longer-dated inflation breakevens modestly outperformed. • There were no meaningful changes on the liquidity front from the prior week. Volumes have been trending lower as expected amid the summer calendar doldrums. There were no changes to the Fed asset purchase program.	Bid-offer spreads for on-the-run US Treasuries has improved significantly and are in line with pre-crisis conditions. 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. TIPs bid/ask is 1.5x wider vs pre-crisis levels
Investment Grade (IG) Corporates	**US IG** • US IG cash bonds were largely unchanged during the week ended August 28, continuing the recent underperformance trend versus the broader macro tone. • The Fed's weekly report showed that the Fed purchased $119 million for its secondary market purchase program (SMCCF) between August 19 and August 27. This was slightly higher than the prior week's pace, but still insignificant to the market and much lower than the pace when the program began. • The primary market began to slow down with $16 billion in IG supply coming to market for the week	US IG spreads are generically 2x wider vs normal market conditions AT1/Preferreds are 2-3x wider vs normal market conditions

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	ending August 28. New issue concessions remain minimal; however, book coverage was lower for the more frequent issuers than what we've seen recently, indicating some investor fatigue. That said, demand for new issuers and higher-spread issuers remains strong, as evidenced by RPRX's inaugural deal which was 4x covered and traded up 10 to 20 bp on the break. • Bid/ask spreads remain wider than pre-crisis levels. **European IG** • Secondary 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. **REIT Preferreds** • 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	**US HY** • The summer doldrums were in full effect in the US HY market in the week ended August 28, with low secondary trade volumes, market participants out on vacation, and only two deals pricing in the new issue market for $985mn total. • While slow, market spreads ground tighter through most of the week. • The index spread was 25bp tighter on the week, to 477bp. This compares to March 23 wide levels of 1100 bp and pre-covid-19 tight levels of 341 bp on Feb 13. **Euro HY** • Volumes are still lighter than normal but improving. Overall, the market remains well bid,	Spreads are 0.75-1.25 point wider than normal times for BB-rated securities Spreads are 1-1.5 points wider than normal times for B-rated securities Spreads are 1.5-2.5 points wider than normal times for CCC-rated and below securities

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	and in particular, a bid has been developing for wider-trading, single-B issuers that are not already at distressed levels. • There was no activity in the primary market during the week ended August 28, supporting a grind tighter in spreads amid a general trend of global credit inflows and sidelined cash being put to work. • Underlying technicals are constructive. Attention is increasingly being put on the earnings calendar, but it takes extreme misses versus expectations or talks of restructuring to cause meaningful volatility. Even in those negative instances, a rather deep distressed bid has existed and there has been limited contagion risk to the broader market. **CDX HY** • CDX HY traded higher along with stocks and outperformed CDX IG during the week ended August 28. This continued the recent beta compression theme seen over the past few weeks. • Trading volumes are trending lower now that summer illiquidity has kicked in. • Bid/ask spreads have declined but remain elevated relative to pre-crisis levels.	CDX HY bid/ask is 1-2x vs normal conditions.
Emerging-Market Debt (EMD)	**Hard Currency EM** • EM credit finished the week ended August 28 broadly unchanged with high yield continuing to outperform investment grade bonds as the Fed's new inflation policy led to a spike in longer-maturity bond yields and investors selling high-quality duration. • Investment-grade bonds were easily recycled as EM credit flows continue to be robust, underscoring the amount of capital coming into the asset class on top of anecdotally higher cash levels being held by "real money" investors. • On the supply front, Abu Dhabi came to market with the first large cap investment-grade deal since Colombia issued $2.5bn on June 1. The gulf nation issued $5bn across 3 tranches, had more than $24bn in subscriptions, with pricing inside of existing spread levels, highlighting the ample "dry powder" in EMD. **Local Currency EM** • Liquidity is close to normal.	EM IG sovereigns are 1.5x wider vs normal market conditions EM HY sovereigns are 2x wider vs normal market conditions EM IG corporates are 2x wider vs normal market conditions EM HY corporates are 3x wider vs normal market conditions

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<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td>Asia</td><td>Asia Hard Currency
Asia hard currency credit spreads were stable over the week ended August 28, but total returns registered a modest decline due to higher US Treasury rates.
The primary pipeline was relatively quiet but remained open, with 10 issuers raising $3.5bn.
Liquidity was normal and dealer balance sheets had ample room to accommodate two-way flows.
Asia Local Currency
Asia local currency debt markets had a turbulent week ending August 28, especially following the Jackson Hole event on Thursday.
In Korea, KTB rates sold off by 4-8 bps after the August Bank of Korea (BOK) meeting failed to shed light on the central bank's plans regarding potential unconventional policies.
Indian rates continued to climb higher as onshore investors remained bearish about the ongoing supply risk, but sentiment seemingly turned the corner when the Reserve Bank of India (RBI) bought duration aggressively in the first round of their special Open Market Operations.</td><td>Asia IG credit is ~1 to 1.2x wider vs. normal market conditions

Asia HY credit is ~1 to 1.5x wider vs. normal market conditions

Asia local currency debt is ~1 to 1.2x wider vs. normal market conditions</td></tr>
<tr><td>Securitized</td><td>CMBS
There is little to report on both flows and price movements in CMBS and CMBX during the week ended August 28. 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 widening, while AA/A and BBB rated classes remain 2x their historical average.
Meanwhile in CMBX, A.6, BBB-.6, and BB.6 bid/offer spreads remain at approximately 2x their historical averages.
ABS
The ABS primary market priced three transactions for the week ending August 28 totaling $2.2bn across venture debt and container sectors. ABS year-to-date supply now stands at $113.4bn compared to $154.0bn recorded in 2019 over the same time period. Pricing execution remains strong, as most</td><td></td></tr>
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	issuance continues to price through initial spread guidance with solid over-subscription levels. • In the secondary markets, 1-5bp of tightening was recorded across prime auto loan ABS, while the A- and BBB-rated segments of private credit student loan ABS tightened 5bp and 10bp, respectively, on the week. **CRTs** • After underperformance of the broader risk markets in July, CRT spreads continued to tighten modestly in the week ended August 28. Volumes have been extremely muted with no sellers of large blocks. However, what has been sold seems to have been readily absorbed by a good two-way flow. • Fixed severity deals (early issued CRTs where losses are calculated according to a fixed severity schedule as opposed to actual-loss schedule) were down dramatically in July but have recovered by 5-10 bp in August. **Legacy Non-Agency RMBS** • 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. **CLOs** • Significant size has been passing through the CLO market at or around the recent tight spread levels. The top of the CLO stack in particular shows little sign of wear with all this recent volume. Demand remains quite high as most people see the CLO market as having only recovered 60-70% of what it gave up during the crisis. • Bid/ask spreads are all but back to normal, pre-crisis levels. **Agency MBS** • 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	• There were no liquidity issues of note in the repo markets for the week ended August 28. • SOFR traded at 0.07%. • Government money market funds saw outflows of $11 billion in the 7 days ending August 28. Prime	

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	funds saw inflows of $6 billion in 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 0.24%.	
US Municipals	• The municipal market was weaker again during the week ended August 28 on the back of US Treasury rates resetting higher, a pick-up in high-grade supply, elevated bid-wanted lists, and the strong seasonal cash flows dwindling. • After some larger, high-grade deals in the prior week ended with unsold balances, underwriters priced their higher-credit-quality deals at a large enough concession to get sold. For example, AA-rated City of New York issued over $1bn at A-rated spread levels. • On the other hand, the market continues to seek higher-yielding credit, with most lower-rated deals seeing order books multiple times oversubscribed. • Odd lot penalties crept a little wider again, especially for the smallest piece sizes given the overall weaker tone.	
Canadian Market	**Federal** • 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$116.2 billion to support liquidity in Government of Canada markets since the purchase program started on March 27 through August 26th. **Provincial** • 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 over US$40 per barrel.	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 12 bp bid-ask given small outstanding size in these securities. Provincial: concession of +1 bp and more on size > CAD 25 million, particularly at the longer end

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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$7.4bn in par value year to date through August 26 within their provincial buying program to support liquidity.

IG Corporates

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$ 130 million par), indicating the impact is limited. The central bank did not buy any security in recent weeks as of August 26. BBB- bonds are trading by appointment unless there is a new issue. The corporate calendar is relatively light in August, another factor that could be a detriment to corporate market liquidity.

Real Return Bonds (RRBs)

The last C$400 million RRB auction of the long Canada 0.5% Dec. 2050 on May 27 supported liquidity in the benchmark RRB bond for a limited period.
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$300mn of Canada RRBs, liquidity remains challenging as dealers hold very limited inventories, if any, of these RRB securities. The next auction on September 2 was reduced to C$300mn. Trading a block can only be done on an appointment basis.

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BBB- corporates are trading by appointment, particularly in the energy sector. Inventories are reduced and dealers are not looking to increase their BBB- exposure with reduced trading activity in summer days
Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet.
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