AllianceBernstein

August 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 27 August 2021

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	• The global developed market interest rate complex sold off in the week ended August 27, with the European Government bonds yields leading the way higher. The two primary drivers of the price action were 1) equities hitting new all-time highs and 2) a heavy slate of Euro government supply expected in the coming week(s). • The 2, 5, and 7-year US Treasury auctions continued the recent trend of solid end-user demand, with dealers takedown well below 12-month averages. Positioning in the rates market continues to lean slightly short but has been getting closer to neutral; bear steepener trades are underperforming. • Market pricing of FOMC rate hikes did not change materially from pre-Jackson Hole conference. The markets are still pricing in the first full 25 bp rate hike in February-March 2023. • In his prepared remarks Fed Chairman Powell stayed the course and reiterated much of what was written in the minutes of the July meeting which set the table for a taper of asset purchases later this year if sufficient progress has been made to the dual mandate. The Fed Chair preserved optionality on the timing and speed of tapering. • Summer liquidity and volumes are likely to be lower in the week as market participants are away on vacations. • Liquidity in terms of market depth in on-the-run cash 5-year and 10-year Treasuries has improved 80-90% from the challenges seen in February 2021. Market depth in the 30-year part of the curve has improved ~80% since February. • Observable bid-offer spreads are in line with historical averages in the most liquid bonds. Transaction costs in off-the-run bonds are wider but have improved meaningfully since late February. • In TIPS, on-the-run bond bid-offer spreads are 1-2 ticks wide during the most liquid parts of the day; off-the-run bonds in 5-	

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	10 year maturities are ~3-4 ticks wide; longer-maturity TIPS are trading 6-8 ticks wide. • Federal Reserve bond purchases continue at $80 billion US Treasuries and $40 billion MBS per month.	
Investment Grade (IG) Corporates	**US IG** • US IG was very firm throughout the week ended August 27 on the back of little supply ($2.15 bn across 3 deals) and low liquidity with the index closing 3 bp tighter week-over-week. • Trading volumes remained light, and the street was lifted on ~$3.8 bn of paper throughout the week, mainly in the front end/belly of the curve. • Asia flows remained light but continued to be net buyers of long-end paper. • The positive momentum on flows continued with another $3.4 bn inflow this week. Looking ahead, no supply is expected until after the Labor Day and early expectations for the month of September are $130-140 bn (5yr average ex-2020 is $155 bn). **Euro IG** • The secondary market was quiet during the week ended August 27, with the activity in the primary market stealing the show and picking up aggressively after very slow ~2 months. • Although composites reflected a broadly unchanged picture, risk has been clearing a touch softer with supply weighing on overall secondaries. The market also saw some modest curve steepening with this supply induced pressure. • On the primary front we saw ~€16 bn equally split between financials and non-financials. Deals came on the screws for the most part (apart from well telegraphed frequent issuers such as ANNGR) but received lackluster demand; either book coverage was low or when issuers had an attractive angle (e.g ESG / rare features) secondary performance was still not particularly robust and spreads ended the week anywhere from +6/-5 bp. **REIT Preferreds** • Liquidity in the REIT preferred market is typically limited under more normal conditions given the retail nature of the investor base. • 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.	Bid/ask conditions in the IG market are back to normal
High Yield (HY) Corporates	**US HY** • HY was extremely quiet during the week ended August 27 with many market participants out on vacation. Secondary activity was quiet on the whole with some pockets of liquidity around select idiosyncratic situations.	Bid/ask spreads vary by issuer but generically:

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	• US HY index spreads ended the week 18 bp tighter week-over-week to 294 bp. The CCC-BB spread difference was 3 bp wider to 321 bp. • New issue slowed to a crawl with only one $100 mm add on pricing for the week bringing MTD issuance to $33.8 bn. Expectations for September issuance are hovering around $40-45 billion. **CDX HY** • CDX HY traded very firm along with the macro tone during the week ended August 27. However, looking at a longer time horizon, CDX HY performance seems to be capped; while stocks have made new highs, CDX HY hasn't gotten back to YTD high yet. • Trading volumes were below the 30-day average heading into the end of summer.	BB-rated securities: 0.75 point, which is in line with normal market conditions B-rated securities: 1 point, which is in line with normal market conditions CCC-rated and below: 1.5points which is in line with normal market conditions CDX HY bid/ask is in line with normal conditions.
Emerging Market Debt (EMD)	**Hard Currency EM** • EM credit remained quiet during the week ended August 27 amid the August lull. In the risk on environment, we saw beta compression with HY outperforming IG by 12 bp. Overall risk remains well bid post Fed Chairman Powell’s comments on Friday at Jackson Hole.	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Asia credit spreads tightened 8 bp in the week ended August 27, but the index posted a negative return of 0.1% as the US Treasury selloff erased the gains in credit compression • Primary activity remained slow with only 6 issuers tapping the market for USD 2.55bln but the supply is expected to pick up next week as market participants return from summer holidays • Despite continuing worries about Evergrande’s liquidity, China high yield property sector drifted higher with single-B rated papers gaining about 1 point on the week, whereas higher quality double-B credits advanced about 0.5 point **Asia Local Currency** • Asia local currency bond yields were generally higher following the upward movement in global rates. • One notable exception was Indonesia where bonds rallied by as much as 20 bp as Bank Indonesia announced the extension of the “burden sharing” scheme with the government, whereby the government would privately place IDR 215 trillion in 2021 and IDR 224 trillion in 2022 to the central bank in a form of debt monetization, which means a drastically reduced supply in the market.	Liquidity conditions are normal for Asia credit. Liquidity conditions are normal for Asia local currency debt

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Securitized	**ABS** • The ABS primary market priced two transactions for the week ended August 27 totaling $1.6 bn across Canadian credit card and Federal Family Education Loan Program (FFELP) student loan sectors. ABS year-to-date supply now stands at $171.0 bn compared to $112.9 bn and $151.2 bn recorded over the same period in 2020 and 2019, respectively. • Year-to-date ABS issuance has been running at the highest pace on record since the financial crisis. Despite the abundance of supply, indicative benchmark spreads remain at/near cyclical tights. • The forward calendar has two deals pre-marketing and the primary and secondary activity will likely be even quieter next week ahead of the Labor Day weekend. However, the pipeline is expected to re-fill quickly and flows should pick up in September. ABS demand should remain strong and smoothly absorb the quarter-end issuance surge. **CMBS** • CMBS and CMBX are now amid the summer doldrums. Trading volumes have slowed, while spreads were modestly tighter in the week ended August 27. • CMBS market participants are eagerly awaiting the new issue supply expected after the Labor Day, but until that materializes levels should remain rangebound and the technical backdrop will remain positive. • CMBS bid/offer spreads in AAA to A rated tranches have retraced their post-COVID widening, while BBB rated classes remain 2x the historical average. CMBX bid/offer spreads remain unchanged and have retraced all the post-COVID widening. **CRTs** • The technicals in the CRT market continued to improve during the week ended August 27, with Freddie Mac taking the remainder of August off from issuance. • Secondary market liquidity is robust, and bid/ask spreads remain tight, around pre-covid levels. **Legacy Non-Agency RMBS** • Legacy RMBS continue to trade well. After having widened to the 1000-1200 bp range in March 2020, spreads are currently trading inside 200 bp discount margin. **CLOs** • Generic primary market clearing levels on the week stood roughly at 114-119 bp for AAA-rated spreads; AA-rated spreads at around 160-165 bp; A-rated at 200-210 bp; BBB-rated at 295-310 bp; and BB at 600-650 bp.	

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<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td></td><td>Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels.
Agency MBS
Bid/ask spreads in Agency MBS remain well supported, given the Fed purchases of $40bn per month. Current coupon bonds are trading at 0.5-1 tick wide and the rest of the coupon stack is wider by 2-2.5 ticks.</td><td></td></tr>
<tr><td>Money Market</td><td>The Fed Reverse Repo facility (RRP) usage was around $1.1 trn.
1-month LIBOR set at 0.086%; 3-month LIBOR set at 0.120%.
SOFR set at 0.05%. The Effective Federal Funds Rate set at 0.08%.
There was still some concern around late October/early November US Treasury maturities as investors believe the government will run out of "extraordinary measures" and potentially default on its debt. Congress must raise or suspend the debt ceiling to avoid default.
Government money market funds had $22 billion of inflows in the week ended August 27. Prime funds had $8bn of inflows over the same period.</td><td></td></tr>
<tr><td>US Municipals</td><td>Earlier in the week ended August 27, we saw more bid-wanted lists and customer offers concentrated in the front-end of the curve because of low muni-to-treasury ratios. This selling pressure in the 2-4 year part of the curve ultimately pushed benchmark yields 2-3 bp higher as muni investors rotated out of munis and into treasuries. On Wednesday and Thursday, munis outperformed treasuries on the week in the 10-30 -year part of the curve, widening less. After rates stabilized and rallied on Friday following J. Powell's speech at Jackson Hole, the tone in the muni market shifted and buyers emerged across the curve.
The technical outlook remains very supportive as we have seen 24 consecutive weeks of inflows and new cash from bonds maturing on September 1. Additionally, the tax-exempt calendar is less than $5 bn this week vs. the YTD weekly average of $7-8 bn.
Liquidity for odd-lots remained unchanged. Bid side levels are approximately 1 point for small odd lots (5-15k) and .025 for larger odd lots (100k+).</td><td></td></tr>
<tr><td>Canadian Market</td><td>Federal
Liquidity is best in benchmark issues for block sizes of <=CAD25 million. Bank of Canada (BOC) is "buying at least $2 billion of Canadian government bonds a week until the recovery is well underway.'' It should continue to support market liquidity. "Purchases of longer-maturity bonds have a greater impact, dollar-for-dollar spent, by removing more term risk from markets and putting downward pressure on</td><td>Federal: bid/ask was at 5 cents in the 10-year area, but for the long end of the curve, it remains relatively wider at up to 12 cents given the recent higher volatility. Off the run,</td></tr>
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	term premiums. Lower term premiums imply lower GoC bond yields, all other things equal.” • The latest BOC balance sheet shows that the central bank continued to support liquidity in Canadian markets (as of August 25). • The Government Bond Purchase Program (GBPP) has resulted so far in $259.76bn in net buying (assets minus liabilities minus position at the start of the QE in March 2020). As expected, there was a reduction of QE bond buying to $2bn per week after the July BOC meeting. • According to the latest BOC research, Federal debt is the most liquid sector within the Canadian fixed income markets. • Looking ahead, the central bank has gone into silent mode with a federal election on September 20, providing limited feedback to investors on Canadian capital market liquidity. **Provincial** • Liquidity is best in benchmark bonds from Quebec, Ontario, and British Columbia. • Depending on market tone, concessions may be requested in order for dealers to take less-liquid positions. • Most dealers will not bid aggressively on off-the-run, high coupon provincial issues but will favor agency trades. • The Bank of Canada’s Provincial Bond Purchase Program (PBPP) has ended. Therefore, the central bank does not provide a back stop to the provincial sector. Reduced trading activity during summer months could hinder liquidity. **IG Corporates** • The latest Bank of Canada research highlights the limited liquidity in Canadian corporate bond markets, which can impact pricing; many dealers are maintaining low balance sheet inventories, so will not provide bids in some sectors such as telecommunications, pipelines, and transportation. • Trading is on an agency basis for issuers affected by mergers and acquisitions. • The Bank of Canada had a buying program (focused on securities of 5-years or less) to support liquidity for corporate bonds rated BBB and higher. As expected, the BOC has ended this Corporate Bond Purchase Program (CBPP) in May 2021. • We had a limited new issue corporate calendar in August indicating lower trading volume and reduce liquidity.. **Real Return Bonds (RRBs)** • 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.	high coupon Canadas were reported to have limited liquidity in volatile periods with much wider bid-ask given small outstanding size in these securities. For example – the latest ultra-long Canada 2064 bid-ask is at 30 cents, reflecting its liquidity issues given this is not a benchmark. Provincial: concession reported to be above average on size > CAD 25 million, particularly at the longer end. In risk-off markets, liquidity is drying up and spreads can widen depending on market tone. BBB- corporates are generally trading by appointment, particularly in the energy sector. Inventories are reduced and dealers are not looking to increase their BBB- exposure. Dealers may refuse to bid in a risk off market with gaps in spreads. Provincial RRBs trading by appointment only and activity is rare. Dealers do not hold these securities on their balance sheet. Bid-ask is not a reliable indicator for trading.

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	• Trading in Canada RRBs continues to show a continued lack of liquidity. Trading a block can only be done on an appointment basis. • Finance Department documents indicate that Canada will issue only C$1 billion in RRBs in the current fiscal year with four auctions. This will result in net negative supply (BOC buying program plus maturities less new supply). The next $300m RRB auction on September 1 will be a re-opening of RRB Canada 2054 bond which should improve liquidity for that day. • Liquidity remains challenging, trading by appointment, as dealers hold very limited inventories in RRB securities.	

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