ALLIANCEBERNSTEIN

October 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 1 October 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 week ended October 1 was a tale of two periods with yields making new local highs on Tuesday at 1.55% before the weakness in stocks and month-end/ quarter-end rebalancing on Thursday and Friday caused yields to rally. • Treasuries settled higher by 1 bp at 1.462% (towards the top end of the recent range of 1.26-1.55%). • The developed market rates complex continues to be dominated by UK Gilts that have been the worst performer on a relative country basis for many weeks now. Gilts sold off by 8 bp last week amid high intraday volatility. • Transaction costs as measured by bid-to-offer spreads have widened in the long end of the US Treasury curve from 1 tick wide to 1+ to 2 ticks wide driven by recent volatility. • 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. Nominal Treasury bid-ask spreads are trading in line with recent historical averages of 3/8 to 1 tick wide in 5-year notes, 1 tick wide in 10-year notes, and between 1.5 to whole 2 ticks wide in 30-year notes depending on the size (a tick is 1/32 of a percent). • Liquidity in terms of market depth in on-the-run 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. • 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 5-10 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.	

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<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td>Investment Grade (IG) Corporates</td><td>US IG
The tone in the US IG credit market softened in line with the broader macro during the week ended October 1, but the technicals remain constructive. The index closed 2 bp wider week-over-week at 84 bp.
We saw real money sellers with dealers net hit with $2.6 bn of paper ($1.8 bn of that in the long end). Flows out of Asia were more two-way ahead of month-end and quarter end.
Supply picked up relative to prior week and overwhelmed expectations of $15-20 bn with $25 bn pricing. We saw less frequent issuers tap the market and technicals remained supportive with deals multiple times oversubscribed and pricing with little to no concession. For the month of September, issuance overwhelmed expectations of $130-140 bn as ~$168 bn priced (vs. the 5-year average of $155 bn).
The positive momentum on flows continued during the week with another $3.1 bn of inflows.
Looking ahead, another $15-20 bn of issuance is expected next week and expectations for the month of October are in the range of $80-90bn (5-year average is $98bn).
Euro IG
The tone in the Euro IG credit market was softer in the week ended October 1, with the market seeing decompression in line with the macro tone. Spread product remained relatively resilient and was generically unchanged to 4 bp wider.
The new issue market saw some NIPs (new issue premium) creep in for the first time in a while. However, they remained modest (with maximum of 10 bp) and broadly, new issues ended the week wrapped around reoffer.
What felt weaker was cash price product with AT1s 0.5/0.875 pts lower on average. However, similar to prior week this masked substantial dispersion between better structures (-0.5 pts) and weaker structures (1/2pts lower).
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.</td><td>Bid/ask conditions in the IG market are back to normal</td></tr>
<tr><td>High Yield (HY) Corporates</td><td>US HY
During the week ended October 1 we saw ~$15 bn of issuance across 17 deals, bringing to end a heavy month of issuance where $43.2 bn priced across 59.</td><td>Bid/ask spreads vary by issuer but generically:</td></tr>
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	• Most deals that priced last week followed the same progression as others in September, tightening significantly from IPT (initial price talks) with heavily oversubscribed books. Most deals had add-on buying when the new issue freed to trade, which pointed to continued healthy cash balances. • After months of anticipation the Medline transaction finally priced and accounted for ~50% of the notional supply. • The secondary market was comparatively quieter with some macro-triggered softness. Despite the macro volatility we did not see significant selling pressure in the secondary markets thanks to healthy cash balances. The selling mostly occurred in hedge funds, ETFs and other momentum type accounts. • The index ended the week 17 bp wider, with spreads at 293 bp. • The CCC-BB spread difference was 8 bp wider to 321 bp. **CDX HY** • CDX HY traded weaker along with macro tone during the week ended October 4th. CDX HY debuted series 37 and the new series was well supported out of the gate given net long positions in CDX HY. • Trading volumes picked up on the back of roll week and macro volatility.	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: 1.5 points 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** • Another heavy week in EM credit as the Index widened ~5 bp following the softness in global macro risk. EM HY avoided massively unperforming IG for the first time in weeks as a handful of real money accounts began to bottom feed after a 8-9 point decline in the 30-year HY paper over the previous two weeks. • Asian lifer flow remained mostly constructive although there were bouts of selling which put further stress on the IG market ahead of next week's golden week holiday. • EPFR outflows were highest since March putting further pressure on price action	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Asia credit spreads remained overall unchanged, but the index posted a negative return of 0.5% as the US Treasury selloff resumed. • Primary activity remained very quiet with only 5 small deals printing in the market for a total of USD 1 billion, as sentiment remained weak on the back of equities selloff and China-related headlines. • China high yield sector dropped by 1.8% with the property developers losing 2 points on the week, as Evergrande's likely default continued do dampen investor appetite.	Liquidity conditions are normal for Asia hard currency IG credit. HY liquidity is more challenging especially in China HY with spreads 1.5x wider than normal. .

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	Asia Local Currency • Asia local currency bonds sold off sharply following the upward movement in global rates • China rates outperformed the selloff with bond yields rising modestly, as the PBOC kept the liquidity ample with daily open market operations heading into the Golden week period.	Liquidity conditions are normal for Asia local currency debt
Securitized	**ABS** • The ABS primary market priced four transaction for the week ending October 1 totaling $1.9 bn across equipment and unsecured consumer loans sectors. ABS year-to-date supply now stands at $201 bn compared to $140.9 bn and $179.4 bn recorded over the same period in 2020 and 2019, respectively. • With the exception of the esoteric sector, which saw 5 bp of tightening, spreads were relatively unchanged during the week. Despite the heavy supply in primary and secondary in September ($27.3 bn), ABS spreads have held firm overall and have tightened for MPL and credit card ABS. Last week, SCLP (SoFi Consumer Loan Program Trust) 2021-1 priced roughly 5-10 bp inside of initial guidance and 20-35 bp tighter than SCLP 2020-1 back in February 2020 (pre-pandemic) across the capital stack. The bottom BBB tranche priced at swaps +125bp, which is a 60 bp pickup to comparable subprime auto ABS. • On September 28th, Navient announced a definitive agreement for Maximus to take over its servicing contract for the Department of Education (ED) owned federal student loans. The proposal for contract novation is subjected to the approval of the ED office of Federal Student Aid (FSA). Separately, FedLoan (PHEAA) announced in July it will exit federal student loan servicing upon its contract expiration at year end with the ED and will soon begin transferring some borrowers to MOHELA (Missouri Higher Education Loan Authority). **CMBS** • The dominant theme in the CMBS market continues to be plentiful new issue supply. Approximately $3 bn of new conduit and single asset/single borrow supply priced last week. An additional $4.5 bn bonds are currently being marketed and expected to price the week of October 4. New issue conduit spreads have held in relatively well despite the deluge of new issue, with most weakness displayed at the bottom of the capital stack where spreads at the BBB level widened 10 bp. While supply is expected to remain abundant in the coming weeks, demand remains robust. Given CMBS	

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	market technicals remain positive and demand remains healthy, bid/offer spreads have now retraced all post-COVID widening. • At the top of the capital stack, CMBX spreads were little changed week-over-week. However, there was weakness in BBB- and BB tranches in many series, with the most seasoned indices (Series 6-8) performing worst. While trading volume is modest, bid/offer spreads remain unchanged and have retraced all the post-COVID widening. **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. **Agency MBS** • Bid/ask spreads in Agency MBS remain well supported, given the Fed purchases of $40bn per month. Bid/offer spreads remain tight in the sector. Current coupon bonds are trading at 0.5-1 tick wide and the rest of the coupon stack is wider by 3-4 ticks. Higher coupons trade less frequently.	
Money Market	• The Fed Reverse Repo facility (RRP) usage was ~$1.6 trn at quarter end. • 1-month LIBOR set at 0.078%; 3-month LIBOR set at 0.127%. • SOFR set at 0.05%. Effective Federal Funds Rate set at 0.08%. • Treasury Secretary Yellen warned congress that the US Treasury will run out of 'extraordinary measures' on or around October 18. Congress must raise or suspend the debt ceiling to avoid default. • Government money market funds had $38 billion of inflows in the week ended October 1. Prime funds had $5bn of outflows over the same period.	
US Municipals	• During the week ended October 1 muni bonds trailed the rates move from the previous week and underperformed treasuries. AAA benchmark yields were 2-7 bp higher in the front end, 10-14 bp higher in the belly, and 8-9 bp higher in the long end. The hesitance earlier in the week dissipated towards the middle as the market found buyers at these wider levels. • Flows overall stayed slightly positive on the week, while HY muni funds had their first weekly outflows in six months. • In high grades, we generally saw new issue concessions and some deals had to cheapen to get done. The expected issuance for the week of October 4 is 10.6 billion which is about average. • Odd-lot liquidity has been somewhat challenging during periods of weakness. Odd-lot haircuts ranged from 1-2 pts vs.	

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	the average 0.5-1 pt concessions that are observable during normal market conditions.	
Canadian Market	**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 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 September 29). • The Government Bond Purchase Program (GBPP) has resulted so far in $283.75 in net buying (assets minus liabilities minus position at the start of the QE in March 2020). As expected, QE bond buying of $2bn per week was confirmed at the September BOC meeting (no cut). • The BOC was not able to get decent size in high-coupon Canadas in their buying program - they only bought $10m to $20m per security showing limited liquidity. Liquidity is better in on-the-run benchmark Canadas. According to the latest BOC research, Federal debt is the most liquid sector within the Canadian fixed income markets. **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) ended in May. Therefore, the central bank does not provide a back stop to the provincial sector. • Given the large borrowing needs of provinces, the new issue calendar is expected to increase trading activity in coming weeks. Liquidity is best in on-the-run, current coupon bonds in the provincial sector (compared to off the runs). **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 may not provide bids in some sectors.	Federal: bid/ask was at 4 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. For example – the latest ultra-long Canada 2064 bid-ask is at 30 cents, reflecting its liquidity issues given this is not a benchmark. Off the run, high coupon Canadas were reported to have limited liquidity given small outstanding size in these securities. 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.

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	• 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. • Dealers expect a busier new issue calendar in coming weeks which is expected to bring higher trading volumes and improved 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. • Trading in Canada RRBs continues to show a continued lack of liquidity. • 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 RRB auction on December 1 will most likely be a re-opening of RRB Canada 2054 bond. The central bank was not able to complete its $280mn RRB target purchase program in September showing challenging liquidity in Canadian RRB markets from tenor of 2041 to 2050. • Liquidity remains challenging, trading by appointment, as dealers hold limited inventories in RRB securities.	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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