**September 2020**

## Market Update – Fixed Income Trading Liquidity
## For the Week Ended 18 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 | • US Treasuries underperformed both the UK and Germany during the week ended September 18 and the curve steepened by ~3bps end to end.<br>• The highlight of the week was the FOMC meeting and "dot plot" that showed the Federal Reserve's official rates are expected to be anchored at ~zero through the 2023 forecast horizon.<br>• On the inflation front, the FOMC stated that "the Committee will aim to achieve inflation moderately above 2 percent for some time so that inflation averages 2 percent over time and longer-term inflation expectations remain well anchored at 2 percent. " and "it will be appropriate to maintain this target range until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time. " While TIPS have lagged the move in nominal Treasuries during the month of September, with the 5-10 year part of the curve underperforming the long-end on a breakeven basis, they did put in relative outperformance during the week, which saw equities continue to sell off and credit spreads widen.<br>• There were no meaningful changes on the liquidity front from the prior week. Federal Reserve bond purchases stand at $80 bn US Treasuries and $60 bn MBS per month. | Bid-offer spreads for on-the-run US Treasuries has improved significantly and are in line with pre-crisis conditions.<br><br>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.<br><br>TIPs bid/ask is 1.5x wider vs pre-crisis levels |
| Investment Grade (IG) Corporates | **US IG**<br>• US IG cash bond spreads ground tighter during the week ended September 18. The index moved 3 bp | US IG spreads are generically 2x wider vs |

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| | tighter, as the $45bn of supply underwhelmed expectations in terms of composition and duration.<br>• Demand for IG paper remains robust with deals more than 3x oversubscribed despite pricing with -2.7bps new issue premium.<br>• Two themes that continue within the market are (1) beta compression - as higher-beta issuers remain well bid - and (2) the flattening of 10/30s curves, with the long end continuing to outperform.<br>• Amid the firm tone of the market, the Fed's latest weekly report showed that the Fed purchased $133 million for its secondary market purchase program (SMCCF). This remains at levels well below the pace when the program began when the Fed bought an average of $1.4bn/week for the first seven weeks.<br>• Bid/ask spreads remain wider than pre-crisis levels.<br><br>**European IG**<br>• During the week ended September 18, secondary market volumes remained very light with the focus on supply which seems to have underwhelmed.<br>• Overall technicals continued to feel good even during softness, where it seemed the market lagged reacting to the broader macro weakness.<br><br>**REIT Preferreds**<br>• Liquidity in the REIT preferred market is typically limited under more normal conditions given the retail nature of the investor base. Current liquidity is better than in March and April, but is still not back to normal.<br>• 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.<br>• Trading volume is trending low since valuations continue to recover. | normal market conditions<br><br>AT1/Preferreds are 2x wider vs normal market conditions |
| High Yield (HY) Corporates | **US HY**<br>• Focus in the US HY market continued to be on new issue supply during the week ended September 18, with $24bn in new deals pricing across 25 issuers in the week ended September 18. New issue deals generally tightened from initial price | Bid/ask spreads vary by issuer but generically:<br><br>BB-rated securities: 0.75-1.25 points, which is 0-0.25pt wider versus |

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| | guidance, were upsized, were oversubscribed and 21 out of 27 deals traded up off “the break”. $19bn of the new issuance was used to refinance existing bonds.<br>• Secondary market trading was relatively quiet with no widespread cash raising sales. Cruise line and airline issuers have continued to shore up liquidity. Carnival bonds traded up a point after a $1.4bn equity offering announcement. Delta came to market with a loyalty bond/loan transaction upsized to $9bn from $6bn. Bonds traded up on the break, with large add-on interest from crossover buyers. This transaction repriced the space, with competitors like United and Spirit Airlines trading up in response.<br>• The index spread was 6bp wider on the week, to 491bp. 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.<br>• The CCC-BB spread was 28 bps tighter to 563 bp. This compares to April 6 wide levels of 1139 bp and pre-covid-19 tight levels of 613 bps on February 13. This was driven by CCC tightening, as BB-rated bonds were flat on the week. Bombardier was a major contributor, gaining 7-11 points off news of higher-than-expected proceeds from asset sales.<br><br>**Euro HY**<br>• During the week ended September 18, the compression bid slowed into the end of the week. But on the margin, investors still had more appetite for above-market-yield risk rather than tight-beta, BB-rated bonds, in both primary and secondary markets. Euro HY generally outperformed other high-beta asset classes as macro volatility picked up into the end of the week.<br>• Overall focus remains on the primary market calendar, where 5 deals printed for a total of EUR2.3bn of supply. New issue performance was mixed, with most deals closing near re-offer +/- 0.5 point.<br>• There seemed to be little need for material selling against the primary market calendar which points to still-solid technicals.<br><br>**CDX HY** | normal market conditions<br><br>B-rated securities: 1-1.5 points; 0 to 0.5pt wider vs normal<br><br>CCC-rated and below: 1.5-2.5 points; 0 to 1pt vs normal<br><br>CDX HY bid/ask is 1-2x vs normal conditions. |

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| | • CDX HY traded better during the week ended September 18, outperforming both equities and investment-grade.<br>• Trading volumes began to pick up as the market heads to the roll.<br>• Bid/ask spreads have declined but remain elevated relative to pre-crisis levels. | |
| Emerging-Market Debt (EMD) | **Hard Currency EM**<br>• EM credit followed the global macro soft risk tone post-FOMC and closed the week ended September 18 a few basis points wider on limited secondary market volumes as the market continued to focus on a parade of new issues.<br>• Following last week's busy calendar, this week brought the much-anticipated new issue from the Dominican Republic. The BB- sovereign issued $3.5bn across a 12-year bond (that traded up 1 pt on the break) and a 30-year bond (that languished and was down 75 cents following Friday's soft tone).<br><br>**Local Currency EM**<br>• Liquidity is close to normal. | EM IG sovereigns are 1.25-1.5x wider vs normal market conditions<br><br>EM HY sovereigns are 1.25-1.5x wider vs normal market conditions<br><br>EM IG corporates are 1.25-1.5x wider vs normal market conditions<br><br>EM HY corporates are 1.25-1.5x wider vs normal market conditions |
| Asia | **Asia Hard Currency**<br>• Asia hard currency investment-grade credit spreads had a muted week ended September 18, with spreads 2 bp wider.<br>• Asia high yield was also lackluster with better liquidity returning to China property issuers which had mixed performance.<br>• New issuance at ~14bn was double the previous week and was reflected in some of the larger issuers trading "under water" in the secondary market.<br>• Liquidity was normal, although volume was on the low side as market participants digested new issues.<br><br>**Asia Local Currency**<br>• Asia local currency debt markets traded normally during the week ended September 18.<br>• The Malaysia curve steepened after an exceptionally weak 30-year sukuk auction that "tailed" by 30 bp, however found some support and rallied back 10 bp. | Asia IG credit is ~1 to 1.2x wider vs. normal market conditions<br><br>Asia HY credit is ~1 to 1.5x wider vs. normal market conditions<br><br>Asia local currency debt is ~1 to 1.2x wider vs. normal market conditions |
| Securitized | **CMBS** | |

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| | • Activity in CMBS picked up modestly as two new issues were announced. Both issues were well oversubscribed, and most classes priced tighter than the initial guidance. There continues to be persistent demand at the top of the capital stack. 10-year, AAA-rated classes are now consistently trading at levels not seen since February. While there was an increase in trading of mezzanine classes and levels have improved, there is wide dispersion depending on collateral composition, credit enhancement, and delinquency rates. In CMBS, AAA bid/offer spreads have retraced the post-COVID widening, while AA/A and BBB-rated classes remain approximately 2x their pre-covid 19 levels.<br>• CMBX trading volumes remain depressed, particularly in Series 6. Trading in the single-A and BBB- tranches were 74% and 85% lower than the previous 3-month weekly averages. With little in the way of two-way flows to tighten bid/offer spreads, they remain unchanged, with A.6 and BBB-.6 at approximately 2x and BB.6 at ~3x their normal bid/offer spread.<br><br>**ABS**<br>• The ABS primary market priced fourteen transactions for the week ending September 18 totaling $10.2bn across equipment, unsecured consumer, floorplan, auto leases and non-prime auto loan ABS deals. ABS year-to-date supply now stands at $132.1bn compared to $174.4bn recorded in 2019 over the same time period. Despite the surge of new issue supply, deals were over-subscribed and priced well within the initial guidance range, validating the vast investor appetite in the space.<br>• In the secondary markets, benchmark spreads took their cue from the strong primary execution and tightened 2bp across credit cards, 0-5bp across prime auto loans, 0-20bp for non-prime auto loans, 0-7bp across equipment and stranded assets and 0-10bp across private credit student loan ABS.<br>• In the week ahead, nine deals are premarketing for a total of $6 bn and 1 issuer that has filed 15G forms.<br><br>**CRTs**<br>• The CRT secondary market was quiet during the week ended September 18. Liquidity remains robust in all subsectors within CRTs. With quarter end | |

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| | approaching, that may force some dealer selling which could introduce some volatility leading up to the end of the month.<br><br>**Legacy Non-Agency RMBS**<br>• 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.<br><br>**CLOs**<br>• The CLO market has performed very well since April/May. Spreads in late August hit a post-covid tight level of 125 bp for top-tier AAA-rated bonds. This has caused some lower-tier managers to try to tap the market while levels look attractive. There has been some indigestion due to this primary market supply. Investors are pushing back on spread levels as "too far, too fast" and mezzanine classes are trading wider in the secondary market by 10-15 bps.<br>• Liquidity remains robust however, 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.<br><br>**Agency MBS**<br>• 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 | • Headlines around prime funds converting to government money market funds have spurred $11bn in outflows in the past 7 days ending September 18. Government money market funds saw outflows of $40 billion over the same period. The much talked about widening in the commercial paper space has not yet materialized.<br>• 1-month LIBOR set at 0.15% and 3-month LIBOR set tighter at 0.22%.<br>• There has been heavy buying across the entire T-bill curve. T-bills have tightened 2-3 bps week-over-week. With government stimulus still in gridlock and negative net T-bill supply, the market is expected to continue to grind tighter. | |
| US Municipals | • Benchmark yields finished unchanged across the curve for a sixth consecutive session on Friday, September 18, in anticipation of elevated issuance in | |

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| | the coming weeks. The market expects to see a robust supply pipeline forming through October and ahead of November's US Presidential election. Since the tax-exempt benchmark outperformed US rates, the Municipal/Treasury ratios moved lower, especially on in shorter maturities. Additionally, taxable municipals sold off as investors took gains.<br>• The market tone was slightly stronger than the previous week. For odd lot trades, discounts to round lot bidside evaluations averaged around 1 point or less.<br>• Inflows, although declining, remain positive. Given that, the $1bn NYC TFA deal saw spreads tighten across the curve, after tapping the market with $1.3bn issuance just last month. YTD inflows per Lipper total $19.8bn.<br>• There has been generous supply in the airport sector: a Houston Airport subordinate deal came during the week ended September 18 and a large senior lien deal from Chicago O'Hare International Airport is expected in the week ahead, with both tax exempt and taxable bonds. | |
| Canadian Market | **Federal**<br>• 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.<br>• The BOC has purchased C$127.4 billion to support liquidity in Government of Canada markets since the purchase program started on March 27 through September 16.<br><br>**Provincial**<br>• Liquidity is best in benchmark bonds from Quebec, Ontario and British Columbia.<br>• Concessions are requested so dealers will take less-liquid positions.<br>• Secondary-market liquidity in oil-generating provinces (Newfoundland, Alberta, Saskatchewan) has improved with WTI around US$37 per barrel. | Federal: bid/ask typically +0.5 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.<br><br>Provincial: concession of +1 bp and more on size > CAD 25 million, particularly at the longer end. In risk-off markets, liquidity is drying up and spreads can widen |

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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.<br>• The BOC has purchased C$8.4bn in par value year to date through September 16 within their provincial buying program to support liquidity, but BOC participation has not been meaningful in this sector in recent weeks.<br><br>**IG Corporates**<br>• Limited liquidity, particularly during risk-off trading days; many dealers are maintaining low balance sheet inventories, so will not provide bids in many sectors.<br>• Trading on an agency basis for high-beta issuers. The market has improved in sectors such as banks and telecom companies.<br>• 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 did not buy additional bonds in recent weeks (as of September 16). BBB- bonds are trading by appointment unless there is a new issue.<br><br>**Real Return Bonds (RRBs)**<br>• 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.<br>• 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. | depending on market tone.<br><br>BBB- corporates are trading by appointment, particularly in the energy sector. Inventories are reduced and dealers are not looking to increase their BBB- exposure. Dealers estimate bid/ask could be as high as +20bps on BBB-. Dealers may refuse to bid in a risk off market with gaps in spreads.<br><br>Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet. |

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