AllianceBernstein

October 2020

Market Update – Fixed Income Trading Liquidity
For the Week Ended 23 October 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 (DM) interest rates increased during the week ended October 23, with curves steepening across the board, led by the US which traded higher and steeper than other DM counterparts. Volumes were relatively muted into the selloff. The high correlation between the moves in duration and curve is mostly a biproduct of the Fed's monetary policy stance on front end rates, and asset purchase programs shifting volatility to longer maturities. Curve has been trading directionally with duration for many months now. • The focus of the week was on negotiations around fiscal stimulus size and timing, with expectations that it will come after the US election. • The 10-year US Treasury to German Bund spread made new local highs of 142 bp – the widest level since mid-March. • Federal Reserve bond purchases stand at $80 bn US Treasuries and $60 bn MBS per month. • Liquidity in the TIPS market improved slightly as investors bought 5-year TIPS on fiscal stimulus hopes. The tone in the market improved and there was decent two-way interest with meaningful trading volume. • Depth in the Treasury market—defined as the sum of the three bids and offers by queue position, using the top 3 bids and offers in 10-year Treasury notes, averaged between 8:30 and 10:30am daily (Sourced from BrokerTec)—has recovered to levels last seen before the covid-19 crisis. • Deep off-the-run US Treasuries are nearly back to their pre-covid bid/ask spread levels. Bonds that	Bid-offer spreads for on-the-run US Treasuries has improved significantly and are in line with pre-crisis conditions. Off-the-run Treasury bond bid/ask spreads are nearly back to pre-covid-19 levels. TIPs bid/ask is 1.5x wider vs pre-crisis levels

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	have less than 70% of Federal Reserve System Open Market Account ownership have deeper liquidity, as they can be offered into the Fed purchase programs.	
Investment Grade (IG) Corporates	**US IG** • US IG cash bond spreads slowly ground tighter during the week ended October 23, closing the week 2 bp tighter week-over-week. At 123bp, the US IG index closed at the tightest level since February 28. • Like the previous week, there was little new issue supply during the week and engagements remain relatively low with the average deal only 2.8x oversubscribed (versus YTD average of 3.9x oversubscribed) and pricing with 0.5 bp concession. • Longer maturity bonds remained well-supported by both US and Asia investor buying over the past week and a half. • Technicals remain supportive with continued inflows, light supply expectations for the remainder of the year, and dealers remaining light on risk. Engagement levels remain low and liquidity is expected to continue to be thin heading into the US election and year end as both dealers and investors want to preserve the solid performance achieved YTD. • Fed purchases under the secondary market purchase program (SMCCF) remained light as they bought only $78mn ($15.6mn/day) over the past week. The Fed oversight commission made news during the week saying that the purchase of corporate bonds under the SMCCF should end. • Bid/ask spreads remain wider than pre-crisis levels. **European IG** • Irrespective of the macro tone, the technical picture remained decent in the Euro IG market during the week ended October 23. Supply continues to underwhelm and is more focused on “niche” areas like ESG-oriented and hybrid issuers. New issues came to market at/through existing secondary market levels and although secondary market performance was lackluster, these new deals performed in line with the broader market. There was very light overall flow, as investors	US IG spreads are generically 1-1.5x wider vs normal market conditions AT1/Preferreds are 1-1.5x wider vs normal market conditions

<table>
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<tr><td></td><td>appear to be positioned as they want to be ahead of the US election.

REIT Preferreds
• 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.
• 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.</td><td></td></tr>
<tr><td>High Yield (HY) Corporates</td><td>US HY
• The US high yield market remained better bid during the week ended October 23. Secondary market activity was light as investors maintained positioning ahead of the US general election and amid fiscal stimulus uncertainty.
• In the new issue market, 14 deals priced for a total of $6.9bn notional value, below the 2020 weekly average of $10.2bn. Most new issues during the week were multiple times oversubscribed (1-7x) after upsizing and tightening from initial price guidance, as the primary market remains the most popular way to put cash to work.
• The HY index moved 8 bp tighter to 464 bp, near recent tight levels of 460bp set on October 13. This compares to March 23 wide levels of 1100 bp and pre-covid-19 tight levels of 341 bp on Feb 13.
• The CCC-BB spread was 7 bp wider to 542 bp. This compares to April 6 wide levels of 1139 bp and pre-covid-19 tight levels of 613 bps on February 13.

Euro HY
• During the week ended October 23, it was all about new issues in the Euro HY market.
• The primary market was strong with most deals pricing at the tight end of initial price guidance and trading up on average 1 point.
• The Euro HY market continues to outperform amid macro volatility given supportive underlying technical.</td><td>Bid/ask spreads vary by issuer but generically:

BB-rated securities: 1 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 1-2x vs normal conditions.</td></tr>
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	• Liquidity is still challenged due to minimal overall flow in the market, but the technical picture remains supportive. **CDX HY** • CDX HY was unchanged during the week ended October 23 and continued to underperform cash bonds. • Trading volumes were below average. Bid/ask spreads have declined but remain elevated relative to pre-crisis levels.	
Emerging-Market Debt (EMD)	**Hard Currency EM** • It was a quiet week ended October 23 as the JPMorgan EMBI Global Diversified index spreads traded 6 bp wider on muted secondary flows. • Investment-grade bonds were under pressure following a 10 bp selloff in "core" interest rates, coupled with the absence of demand out of Asia. • "Real money" investors generally seem satisfied with positioning after a volatile year and heading into the US election. If sentiment turns more positive post-election, conditions could lead to a squeeze heading into year-end, amid light dealer positioning. **Local Currency EM** • Liquidity is close to normal.	EM IG sovereigns are back to normal market conditions EM HY sovereigns are back to normal market conditions EM IG corporates are back to normal market conditions EM HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Asia hard currency credit spreads tightened 1bp during the week ending October 23 despite a sharp bear flattening of the US Treasury curve. • The primary market remained active with 22 issuers raised a total of USD 12bn • Liquidity was constructive overall, but investors were better buyers of shorter maturities given the uncertainties around the US election and fiscal stimulus. **Asia Local Currency** • Asia local currency markets were generally uneventful, and liquidity was supportive • Indonesia government bonds rallied ~10 to 15 bp with weekly inflows picking up to roughly US 500mn as investors cited optimism around the recent passage of the omnibus bill and potential Biden victory leading to better EM appetite. • China government bonds bull steepened by ~2 to 7 bp as the renminbi added to its recent	Asia IG credit is ~1 to 1.5x wider vs. normal market conditions Asia HY credit is ~1.5 to 2x wider vs. normal market conditions Asia local currency debt is ~1 to 1.5x wider vs. normal market conditions

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<tr><td>Securitized</td><td>CMBS

CMBS market levels held steady during the week ended 23 October. The top of the capital stack was mostly unchanged, with 10-year AAA-rated bonds settled into the swaps +90bp spread area. Spread tightening in AA-rated and A-rated tranches slowed although robust demand remains for bonds in the middle of the capital structure.
With a light new issue calendar ahead, the technical backdrop remains positive, albeit subject to volatility ahead of the US election and around severity of second wave covid-19 infections.
Liquidity varies within quality tranches based on several factors including performance and collateral characteristics. AAA-rated bid/offer spreads have retraced the post-covid-19 widening. Those deals perceived as “top-tier” AA/A rated securities have also seen their bid/offer spreads normalize, while “lower-tier” AA/A rated securities and BBB-rated classes remain approximately 2x their pre-covid-19 levels.
CMBX performance was mixed during the week. Newer vintages modestly outperformed older vintages on modest trading volume. Much of the trading volume was in more recent indexes (Series 10-13). Liquidity conditions remain challenged at times but are improving as trading volumes increase. Bid/offer spreads remain wider than their pre-covid-19 levels, with A.6, BBB-.6, and BB.6 at approximately 2x their historical averages.

ABS

The ABS primary market priced ten transactions for the week ending October 23 totaling $5.7bn across unsecured consumer loan, aircraft, floorplans, equipment, FFELP student loan, prime and non-prime auto loans ABS deals. ABS year-to-date supply now stands at $160bn compared to $203bn recorded in 2019 over the same time period.
ABS spreads were unchanged on the week, as the primary market continued to churn out deals ahead of an anticipated lull around US election day.
In the week ahead, four deals are pre-marketing for a total of $2.455 bn and two issuers have filed 15G forms.
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	CRTs • The new issue calendar was fairly light in the CRT market during the week ended October 23, with only one deal pricing in the market. MGIC, a mortgage insurer and infrequent issuer, came to market with a deal. Liquidity can sometimes be challenged in this name due to infrequent issuance. The last cash flow bonds came at a spread of 525 bp, wider than where other mortgage insurer deals are currently being marketed. • The secondary market was fairly quiet. The week ended with some macro pressure forcing spreads generically 10-20 bp wider on the week. • Liquidity remains robust in all subsectors within CRTs. **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** • Spreads continued to drift wider during the week ended October 23. The primary market leaked marginally wider with AAA-rated deals coming in the 130-140bp spread range. The secondary market saw a more pronounced widening. Second and third tier managers widened the most with their AAA-rated bonds trading into the 170bp spread area. Top-tier issuers now trade in the 140-150bp spread range. The bottom part of the capital stack (BB-rated) are trading in the 700 to 800 bp spread range. • 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 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	• Government money market funds saw outflows of $13bn in the 7 days ended October 23, including a single-day outflow of $22bn on Friday. Prime funds saw outflows of $5bn over the same period. • The T-bill curve flattened week over week, with roughly 1 bp difference between the 1-month and	

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	12-month tenors. Repo has been trading in the 0.07-0.08% range. • 1-month LIBOR set at 0.15% and 3-month LIBOR set at 0.22%. SOFR set at 0.09%. The CP spread to T-Bills remains around 10 bp.	
US Municipals	• During the week ending October 23, benchmark municipal bond yields widened 2 bp in most parts of the curve, except in 2024-2027 maturities where yields were unchanged to 1 bp wider, outperforming US Treasuries. • Most of the focus was on the primary market, with muni issuers rushing to market ahead of the US election and uncertainty around fiscal stimulus. It was the largest supply week since December 2017 with $21.9bn coming to market. There has also been record issuance of taxable municipals, where YTD issuance just passed the previous record set in December 2010. The new deals are bringing in “crossover” buyers, so despite heavy supply, new issues have shown healthy subscription levels, pricing well through initial price guidance and trading up on the break in the secondary market. Secondary market volumes have been lighter given the attention on the primary market. • The odd lot penalty has been a bit wider relative to recent trend, depending on market volume – lower volume days see higher haircuts. Discounts to round lot bid side evaluations averaged 1 to 1.25 points on odd lots of 5k-15k size, while larger lots of 100k to 1mn are 0.25 to 0.5 points.	
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$151.2 billion to support liquidity in Government of Canada markets since the purchase program started on March 27 through October 21. In coming weeks liquidity could be negatively impacted by the US election and the Canadian banks’ fiscal year end.	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 wide bid-ask given small outstanding size in these securities.

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	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, they will do agency trades, even with the Bank of Canada's buying program of provincial debt. • The BOC has purchased C$10.2bn in par value year to date through October 21 within their provincial buying program to support liquidity. **IG Corporates** • Limited liquidity, particularly during risk-off trading days can impact pricing; 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 Bank of Canada's buying program (focused on securities of 5-years or less) should support liquidity for corporate bonds rated BBB and higher. However, the central bank has bought a relatively small amount of corporate securities to date (C$160 million par), indicating the impact is limited. The central bank has purchased only a small amount of additional bonds in recent weeks (as of October 21). BBB- bonds are trading by appointment unless there is a new issue. • It should be noted that corporate traders will be pressured not to increase their inventories as bank fiscal year end of October 31 approaches, reducing liquidity. Volatility around the November 3 US election could also lead to dislocations in liquidity. **Real Return Bonds (RRBs)** • 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 next auction will be held on December 2. 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	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 depending on market tone. 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 +20 to +25bp on BBB-. Dealers may refuse to bid in a risk off market with gaps in spreads. Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet.

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	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.	