AllianceBernstein®

November 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 30 November 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 month.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
US Treasuries	• During the month of November, 10-year US Treasuries rallied 8 bp, meaningfully underperforming German bunds and UK gilts which rallied 25 bp and 23 bp respectively. Volatility spiked across the developed market rates complex. The market had plenty of ups and downs with the lack of movement from the Bank of England primarily responsible for the outperformance of gilts, despite all signs pointing to a hike. • During the month the new Omicron covid-19 variant emerged which caused a flight to quality move and led market participants to mark risk assets lower, especially risk assets tied to reopening and reinflation trades such as travel, leisure, and energy names. Five-year inflation breakevens fell by 13 bp. • In terms of Monetary policy, Chair Powell's Congressional testimony – particularly the statement that it's "time to retire the word transitory regarding inflation" caused the market to reprice the path of the Fed. The combination of Omicron fears, strong tier-one economic data, and a Fed Chair who has pivoted away from the transitory inflation narrative means a lot of uncertainty and volatility in financial markets. • Liquidity in terms of market depth in on-the-run Treasuries across the yield curve is at the lower end of the post-covid 19 pandemic ranges. It takes longer to move large blocks within quoted bid levels; estimated depth is lower by 20% month-over-month. • Observable bid-offer spreads are in line with historical averages in the most liquid bonds. Transaction costs in off-the-run bonds are still wider than historical averages but have improved meaningfully since late February 2021. • Nominal Treasury bid-ask spreads are trading in line with recent historical averages of 3/8 to 1/2 tick wide in 5-year	

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	notes, 1/2 tick wide in 10-year notes, and between 1/2 to 1 tick wide in 30-year notes depending on the size (a tick is 1/32 of a percent). • 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 ~2-3 ticks wide; longer-maturity TIPS are trading 6-7 ticks wide.	
Investment Grade (IG) Corporates	**US IG** • The technicals in the US IG credit market gradually softened throughout the month ended November 30, with the index closing 11 bp wider month-over-month (+99bp), breaking out of the narrow range (+80 to +91) seen since April. • New issue supply for the month overwhelmed expectations of $100 bn and exceeded the five-year average of ~$99bn with $115bn pricing. Technicals softened as deals were 2.7x oversubscribed on average (vs YTD average of 3x) and saw an uptick in concessions (5 bp new issue premium vs YTD average of 1.4 bp). • In the middle of the month, many bid wanted in competition (BWIC) portfolio trades traded a few basis points back of the bid side, highlighting dealers reluctancy to take on risk given the time of year. Amid the Thanksgiving holiday at month end, liquidity was thin and patchy heading into December. • The positive momentum on flows continued throughout the month of November, with the market receiving inflows each week. • Supply is expected to be $40-65 bn for the month of December, mostly front loaded, with the wild card being M&A issuance. **EUR IG** • Within the euro IG market, bid/ask spreads are normally 2-4 bp and that is where they have been most of this year. in mid-November, volatility picked up and bid/ask spreads widened to 5-7 bp (and at times wider) and that is roughly the level where they ended the month of November. Volumes and liquidity are becoming lower than normal and the executable liquidity is on the worse end of what it has been in some time. • What drove the decline in liquidity in November was primarily and uptick in supply at a time when dealers were defensive and reducing their balance sheets. At the peak of the November supply, concessions on new issues were in excess of 20 bp, and order books just 1.5x oversubscribed, some of the largest concession and lowest book levels seen all year. As supply slowed the market tone improved, but two-way liquidity is still not at best levels.	

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<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td></td><td>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></td></tr>
<tr><td>High Yield (HY) Corporates</td><td>US HY
The primary focus in the US HY market during the first three weeks of November was new issuance, with $30.85 bn pricing across 43 deals.
Secondary market spreads drifted wider during the month, with index spreads ending 50 bp wider at 337 bp and yields moving 54 bp higher to 4.81% which is within 5bp of the highest yield of the year. Most of the widening occurred in the lead up to Thanksgiving on interest rate/inflation fears.
Post-Thanksgiving news of the new Omicron Covid variant triggered a selloff that was met with retail buying. Additionally, Omicron headlines led covid-exposed sectors (cruise lines, lodging, airlines) down 2-4 points month-over-month and 4-6 points off intra-month highs.
Technicals seem healthy heading into December, with dealers having significantly less inventory, an expected slowdown of supply and organic cash balance growth from coupons/calls/tenders in high yield portfolios.
EURO HY
Bid/ask spreads remained normal in Euro HY throughout the month at +0.5 to +0.625 points. The market did not experience the liquidity deterioration seen in the Euro IG market. There was some primary market supply, but it did not weight on the market to the same degree as in Euro IG and overall two-way flows were healthy, with a generally constructive underlying tone.
At the very end of the month with the omicron variant hitting the market, covid-sensitive names came under pressure, trading down 3 to 5 points at the lows, as hedge fund investors cut long positions as year-end approached. But there was again good two-way flow as other investors used the opportunity to opportunistically add exposure.
Cash balances appear high in anticipation of all the known unknowns around speed of central bank tightening, inflation/stagflation, which seems to have brought stability to Euro HY amid the period of macro volatility.</td><td>Bid/ask spreads vary by issuer but generically:

BB-rated securities: 0.75 point, which is in line with normal market conditions

B-rated securities: 0.75 point, which is in line with normal market conditions

CCC-rated and below: 1.25 points which is in line with normal market conditions

CDX HY bid/ask is in line with normal conditions.</td></tr>
<tr><td>Emerging Market Debt (EMD)</td><td>Hard Currency EM
EM Credit’s Q4 weakness hit a crescendo in November with index spreads widening 32 bp. EM HY continued to show</td><td>Liquidity conditions deteriorated in the face of heightened volatility, exacerbated further by</td></tr>
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	meaningful weakness, posting the largest decompression versus EM IG (59 bp) since March 2021. • Turkey was in focus as President Erdogan continued to push dovish monetary policy and remove Central Bank members that disagreed with his unorthodox views, leading USDTRY to sell off by 40% and CDS to widen by 62 bp. • Supply underwhelmed amid the volatile backdrop with the majority of deals that priced forced to offer sizable new issue premia of ~25 bps or more.	the holiday season and market participants' consensus positioning in underperforming market segments (overweight EM HY and underweight EM IG risk).
Asia	**Asia Hard Currency** • Asia credit spreads widened 11 bp during the month ended November 30, but posted a total return gain of 0.2% as a ~5-20bps rally in US Treasuries more than offset spread widening. • Although November proved to be a challenging month for EM hard currency assets, the Asian subsector fared relatively better as its sovereign sector lost only -0.5% and corporate sector actually posted a positive return of +0.2%. • Primary markets were lackluster with only USD 22 bn printed during the month, vs USD 33 bn seen in October and USD 39 bn in August. • The China high yield property sector continued to experience extreme turbulence with property developer bonds reaching lows in the first half of the month but staging a strong recovery in the second half. **Asia Local Currency** • Asia local interest rates were generally well bid as central banks fought back against ongoing fears of persistent inflation, and bonds rallied especially into the month-end as fears of the Omicron variant took the market by surprise. • Australian rates outperformed, rallying ~35 to 45bp as the RBA maintained its dovish message, whereas Korean rates dropped ~30 to 35 bp with the market pricing out some of its aggressive Bank of Korea rate hike expectations. • Gains in China government bonds lagged in the absence of preemptive easing signals by the PBOC, and Indonesian bond yields fluctuated as investors mulled the impact on the local currency assets by a potential Omicron outbreak and the Fed's policy pivot.	Liquidity conditions are normal for Asia hard currency IG credit. HY liquidity is more challenging especially in China HY with spreads 2x wider than normal. Liquidity conditions are normal for Asia local currency debt.
Securitized	**ABS** • For the month of November, heavy new issue supply pushed spreads wider across auto and equipment ABS sectors. ABS year-to-date supply now stands at $258 bn compared to $172.6 bn and $225.4 bn recorded over the same period in 2020 and 2019, respectively. • FFELP student loan ABS performance is back to tracking long-term trends as pandemic relief impact has faded. Private	

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	credit student loan ABS has seen relatively limited impact due to COVID-19 given the high quality and above average income borrowers on the refinancing side as well as prime borrowers and cosigners on in-school loan programs. **CMBS** • Secondary market CMBS spreads were modestly wider month-over-month. 10-year, AAA-rated classes widened a basis point, while BBB-rated classes widened 2-5 basis points. The new issue calendar remained the primary focus of market participants. Four conduit and nine single asset/single borrower deals priced. The supply weighed on the market and many of the issues needed to be cheapened to fully place. The pace of supply is expected to slow in the coming weeks as lending pipelines are purged before year end. This is expected to be a positive technical for the sector heading into the new year. Bid/offer spreads remain unchanged, having retraced all post-COVID widening. • CMBX spreads widened in all series and tranches. AAA-rated classes were wider by 3-5 basis points, while A-rated classes widened 11-103 bps. Seasoned series underperformed recent series on a spread basis. Trading volumes were slightly above recent monthly averages. Bid/offer spreads remain unchanged, having retraced all the post-COVID widening. **CLOs** • Historic CLO issuance volumes continue to be the main driver of valuations. US CLO issuance topped $43bn during the month of November. This was a slight increase from October's totals. Volume is expected to decline into year end, as the market transitions away from LIBOR indices and into SOFR. • Spreads were softer throughout the capital stack month-over-month but remain near recent tights. • Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels. **Credit Risk Transfer (CRT)** • New issue CRT spreads widened for the month of November. STACR 2021-DNA7 priced wider across the capital structure relative to STACR 2021-DNA6, which priced at the end of October. The M1, M2, B1 and B2 tranches priced at 85bp, 180bp, 365bp and 780bp respectively, which is 5bp, 30bp, 25bp and 30bp wider than the prior deal. The widening in the M1s and M2s, tranches that are not directly impacted by the new 5yr call, suggests that broader technicals and heavy supply have started to impact the CRT market. New issue volumes in the CRT market have picked up, going from $1 to	

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	$2bn per month for much of 2021 (with an outlier of $3.5bn in October). There also remains the possibility of more issuance in 2022 if Fannie decides to CRT its seasoned collateral from 2020. • The CRT market outperformed High Yield with liquidity good. Post-Thanksgiving holiday, with the large move in interest rates and high yield, there was liquidity up and down the capital stack, with less of a move than high yield experienced in levels. Before that, the market was finding a clearing point for structures, given the amount of over-supply seen in October. **Agency MBS** • Bid/ask spreads in Agency MBS have come off the YTD tight levels as investors worry about a more aggressive Fed taper plan. The Fed purchased $35 bn of Agency MBS during the month of November, down from $40bn in October. 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	• During the month ended November 30, the Fed Reverse Repo facility (RRP) usage was ~$1.4-1.6 trn. • 1-month LIBOR set at 0.094%; 3-month LIBOR set at 0.173%. • SOFR set at 0.05% • Effective Federal Funds Rate set 0.07-0.08%. • US Treasury Secretary Yellen urged Congress to resolve the debt ceiling before the newly perceived "X-date" of 12/15. The US Congress must raise or suspend the debt ceiling to avoid default. Late December T-bills and Treasury coupons are trading 5-10 bp wide to the rest of the curve. Market estimates show that the Treasury has enough cash to fund the government through January and expects a resolution before all extraordinary measures are exhausted. • Fed Chair Powell told the Senate Banking Committee that "it's probably a good time to retire" the word "transitory" amid higher inflation pressure and suggested a faster pace of taper. The testimony re-priced the front-end of the money market curve to reflect 2-3 rate hikes (25bp each) in 2022.	
US Municipals	• Municipals outperformed US Treasuries during the month ended November 30, most notably in long maturities. Municipal high-grade benchmark yields were 0-1 bp lower in 2022-2024 maturities, 3-8 bp lower in 2025-2028, 13-18 bp lower in 2029-2033, and 19-21 bp lower in 2034 and longer. • Supply was low during the month as a result of the Thanksgiving and Veteran's Day holidays, and technicals were supportive of municipals as investors looked to spend cash before year end.	

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	• Odd-lot discounts to round lot bid-side evaluations are approximately 1.25 point for odd-lots of 5k-15k size and 0.25 points for odd-lots of 100k+.	
Canadian Market	**Federal** • Liquidity is best in benchmark issues for block sizes of <CAD25 million. The Bank of Canada (BOC) ended quantitative easing (QE) and moved into the reinvestment phase, during which it will purchase Government of Canada bond solely to replace maturing bonds. The Bank will adjust its purchases to match maturities over a longer period, so that its purchases are not unduly volatile. The target range for total purchases will initially be between $4bn and $5bn per month and will be adjusted as necessary. Primary market purchase amounts will be reduced to a total of between $1bn and $2bn per month. Total secondary market purchases will be reduced to a range of between $2.5bn and $3.5 bn per month. This should continue at the margin to support market liquidity. • The latest BOC balance sheet shows that the central bank has started to cut its buying program in Canadian markets (as of November 24). The Government Bond Purchase Program (GBPP) has resulted so far in $288.08 bn in net buying (assets minus liabilities minus position at the start of the QE in March 2020). • Liquidity is better in on-the-run benchmark Canadas. **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 central bank does not provide a back stop to the provincial sector. • Liquidity is better in on-the-run, current coupon bonds in the provincial sector compared to off-the-run/high coupon provincial securities, particularly in risk off markets. Some dealers may refuse to bid on off-the-run/high coupon provincial bonds. The end of the GBPP is not supportive of liquidity if there is high volatility in the government sector. **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 5 cents in the 10-year area, but for long-maturity benchmark bonds, it remains relatively wider at 15 cents given its 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, particularly in risk off markets. Given the FTSE index extension by +0.07 years on December 1 and negative headlines related to the Omicron variant, bid/ask on benchmark Canadas was wider than average at November month end, reaching 25 cents on benchmark liquid Canadas. Provincial: concession reported to be above average on size > CAD 25 million, particularly in longer maturities in normal market conditions. In risk-off markets, liquidity is drying up and spreads can widen depending

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	• Trading is on an agency basis for issuers affected by merger and acquisition news or the new covid variant. • 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. **Real Return Bonds (RRBs)** • The program to purchase Government of Canada securities in the secondary market – the Government Bond Purchase Program or GBPP – was discontinued on October 27 for RRBs. Trading in Canada RRBs has shown a continued lack of liquidity across the RRB curve. The end of the GBPP will not support liquidity; dealers are trading RRBs by appointment only as they hold limited inventories in RRB securities. • The Finance Department will announce its debt projections in the next budget, but expectations are that RRB supply will again be limited. • The $400 mn RRB auction on December 1 was a reopening of the Canada 0.25% / 2054 bond. The latest auction resulted in a negative median yield of nearly 4 basis points; a negative RRB yield structure is unlikely to attract investors and could hinder market liquidity.	on market tone and volatility. 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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