



**Market Update – Fixed Income Trading Liquidity
For the Week Ended 7 January 2022**

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 |
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| US Treasuries | <ul style="list-style-type: none"> • Entering into the first week of 2022, rates continued their selloff with 10-year US Treasury rates increasing 25bps, underperforming German bunds and UK gilts where rates also increased 14 bp and 21 bp respectively. Rates were driven by real yield increases as US TIPS sold off for 5 straight days. • The hawkish Federal Reserve commentary & FOMC minutes, as well as the most recent labor market report repriced the front end of the curve with 12bps more of hikes vs the prior week. The market is now pricing in 84bps of hikes in 2022 and 65bps in 2023, with the first full 25bp hike being priced into the May FOMC meeting, there remains a 78% probability of the Fed hiking by 25bps at the March meeting. The FOMC minutes reflected a debate around slowing or even stopping re-investments of US Treasuries and mortgage backed securities (MBS) to reduce the size of the balance sheet. This took many market participants by surprise causing risk assets to suffer. • The FOMC Purchase schedule is due January 13th and will start on the 14th. Over the next month the Fed will be purchasing \$40bln of U.S. Treasuries and \$20bln of Agency MBS. this is down from \$60bln of USTs and \$30bln of Agency MBS. This tapering down of purchases has been well communicated so any impact in the market is likely to be felt on implementation. • From a technical perspective, the market broke thru some important support levels of 1.70% in the 10 year and 2.05% in the 30 year. • Nominal Treasury bid-ask spreads are trading in line with recent historical averages of 3/8 to 1/2 tick wide in 5-year notes, 1/2 tick wide in 10-year notes, and between 1/2 to 1 tick wide in 30-year bonds depending on the size (a tick is 1/32 of a percent). | |

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| | <ul style="list-style-type: none"> Transaction costs in off-the-run bonds are wider than they were prior to the Thanksgiving/Holiday season. Pre-holidays off-the-runs traded in 2 tick wide markets, now it costs 4 ticks to trade similar bonds. In TIPS, liquidity is episodic, trading well around Fed purchase operations, but less liquid on risk off days. On-the-run bond bid-offer spreads are still trading 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 | <p style="text-align: center;">US IG</p> <ul style="list-style-type: none"> Technicals in the US IG credit market firmed into the end of 2021, with the index closing 6 bp tighter month-over-month (+92bp). We kicked off 2022 with \$63.6 bn in supply, overwhelming expectations of \$40bn. Supply was skewed to financials and technicals softened as deals were 2.2x oversubscribed on average (vs 2021 average of 2.9x). Non-financials held in well early in the week but softened after the hawkish Fed minutes on Wednesday. <p style="text-align: center;">EUR IG</p> <ul style="list-style-type: none"> Within the euro IG market, bid/ask spreads are normally 2-4 bp and remain at the average. There is healthy two way flows with a focus on primary activity as we start the year. New issue premiums are in the high to low double digits with 2x oversubscription. Performance has been little changed. <p style="text-align: center;">REIT Preferreds</p> <ul style="list-style-type: none"> 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. | |
| High Yield (HY) Corporates | <p style="text-align: center;">US HY</p> <ul style="list-style-type: none"> Higher quality, longer duration paper was under pressure for the first week of January as rates moved higher. Secondary market spreads drifted wider during the month, with index spreads ending 10 bp wider at 294 bp. In the primary market \$6.44 bn across 6 new issues priced and were generally well received with books 2-4.5x oversubscribed. Most deals ended the week lower than where they priced along with the broader market. Technicals seem healthy and are back to normal following lighter trading sessions into New Years. | <p>Bid/ask spreads vary by issuer but generically:</p> <p>BB-rated securities: 0.75 point, which is in line with normal market conditions</p> <p>B-rated securities: 0.75 point, which is in line</p> |

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| | <p style="text-align: center;">EURO HY</p> <ul style="list-style-type: none"> Bid/ask spreads appear normal in Euro HY, but activity to start the year is still very limited. | <p>with normal market conditions</p> <p>CCC-rated and below: 1.25 points which is in line with normal market conditions</p> <p>CDX HY bid/ask is in line with normal conditions.</p> |
| Emerging Market Debt (EMD) | <p style="text-align: center;">Hard Currency EM</p> <ul style="list-style-type: none"> An eerily similar start to what we saw last year in EM credit as core rates stole the show with the 10-year spiking 25bps following the Fed's hawkish minutes and continued improvement in hourly average earnings and unemployment data. EM credit spreads largely withstood the rate move, tightening a few bps. Kazakhstan was in focus amid intensifying street protests on higher fuel prices and the government's resignation. Supply got off to a bang with 3 deals pricing a total of ~\$5bn. New issue premia ranged from 15-35bps with performance mixed between down 1 point to up 1 point. | Liquidity conditions normalized a bit from December, but the market is still a little gappy, but trading continued. Focus remains on supply. |
| Asia | <p style="text-align: center;">Asia Hard Currency</p> <ul style="list-style-type: none"> The Asia Primary market kicked off strong with 2 jumbo issuances of \$4 billion each and a total \$11.6 billion coming to the market. The new year started firm with India investment-grade rallying 10 bps but volumes were on the light side as dealers rebuild inventory. Some selling in long end sovereign bonds as the back up in US Treasuries steepened the credit curve. The China Property market continues to wobble in anticipation of a heavy maturity and coupon schedule combined with lower sales volume and continued headlines continuing to drag the sector lower. The direction of 2022 liquidity is 75-80% of normal but in line with expectations for the opening of the year. With further new issue pipeline for January estimated at \$30-\$40 billion, liquidity is anticipated to improve. <p style="text-align: center;">Asia Local Currency</p> <ul style="list-style-type: none"> Still a few holidays to come in Asia in the first few weeks of January, but we are seeing decent liquidity in most of the rates complex. Indonesia had their first auction of the year met with firm interest. | <p>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.</p> <p>Liquidity conditions are normal for Asia local currency debt.</p> |

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| | <ul style="list-style-type: none"> Korean rates had a volatile start to the year due to rate increases in the US, political budget noise, policy uncertainty, and heavier received positions. | |
| Securitized | <p style="text-align: center;">ABS</p> <ul style="list-style-type: none"> ABS spreads are firmer over the turn of the year as dealer inventories declined with an abundance of investor demand in secondary and a lack of primary issuance. Most ABS sectors saw some tightening in spreads. Prime auto and equipment ABS spreads were 1-5bp tighter. Student loans ABS spreads were 1-5bp tighter for FFELP and 5-10bp tighter for private. ABS credit fundamentals remain unchanged and solid. While Omicron has dampened economic activity to start the new year, this week's rate volatility and shifting Fed expectations had no appreciable negative impact on ABS spreads. The primary market pipeline is building quickly with \$6bn in the pipeline, and issuance pace is expected to remain robust with 2022 full year ABS supply forecast at \$265bn, flat to the \$264bn for 2021. <p style="text-align: center;">CMBS</p> <ul style="list-style-type: none"> Both the CMBS and CMBX markets traded sluggishly as 2022 opened. New issue CMBS volumes were light, and the issuance calendar is expected to remain light until mid-January. Secondary spreads remained firm, with the increase in nominal yields bringing buyers into the market. Bid/offer spreads remain unchanged, having retraced all the post-COVID widening. <p style="text-align: center;">CLOs</p> <ul style="list-style-type: none"> Spreads remained firm throughout the capital stack. Following a record year of issuance, the market has yet to see significant supply resulting in strong positive technicals. The LIBOR/SOFR transition continues to be at the forefront of investors' minds. Bid/ask spreads remain at or around pre-crisis levels. <p style="text-align: center;">Credit Risk Transfer (CRT)</p> <ul style="list-style-type: none"> Secondary volume started midweek with B2s representing the bulk of flows. There was an abundance of interest, but investors are generally very cautious. While liquidity is present, looming supply held levels in place. Fannie and Freddie will continue to tender seasoned paper. Between tenders and paydowns we will likely have net negative M2 supply for the year, which should keep M2 spreads relatively tight. Heavy new issue will likely weigh heaviest on B1s and B2s, where you need new CRT "B1/B2 money" to absorb supply. | |

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| | <ul style="list-style-type: none"> • Housing continues to be a positive tailwind for CRT credit. <p style="text-align: center;">Agency MBS</p> <ul style="list-style-type: none"> • Bid/ask spreads in Agency MBS have come off the tight levels as investors worry about a more aggressive Fed taper plan and potential quantitative tightening. The Fed purchased \$30 bn of Agency MBS during the month of December, down from \$35bn in November. 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 2-4 ticks. Higher coupons trade less frequently. | |
| Money Market | <ul style="list-style-type: none"> • Fed reverse repo facility (RRP) saw record usage of \$1.9T at year-end. Usage has since decreased to ~\$1.5T. • 1-month LIBOR set at 0.105%; 3-month LIBOR set at 0.236% on January 7th. • SOFR set at 0.05% • Effective Federal Funds Rate set 0.07-0.08%. • Congress raised the debt ceiling by \$2.5T giving Treasury enough room to fund the government until early 2023. The US Treasury has ramped up T-bill issuance to bring their General Account (TGA) from a low of \$42B (12/16) to \$435B (1/5). We expect T-bill issuance to continue increasing until the TGA reaches a comfortable \$500-600B. • The SEC voted to propose a third round of money market reforms. The proposed measures include increased liquidity requirements from 10% to 25% in daily liquid assets and 30% to 50% in weekly liquid assets, eliminating gates & fees which contributed to the March 2020 run on money market funds, and instituting “Swing Pricing” on institutional prime and institutional tax-exempt money market funds. This will go to a 60 day comment period. | |
| US Municipals | <ul style="list-style-type: none"> • Municipal benchmark yields were 13bps higher the first week of 2022, which was the largest weekly increase since the week of March 2021. • There was weakness across the credit spectrum with a focus on the 2-5 year part of curve where ratios vs. Treasuries remain unattractive. • The recent selloff follows a very strong December where municipals significantly outperformed Treasuries. • Despite the weakness this week, liquidity remains strong and the technical backdrop is very supportive, cash is abundant, inflows are consistent, dealer inventory is light, and the supply outlook is manageable. • Odd-lot discounts to round lot bid-side evaluations are approximately 1.25-1.75 points vs. the average .75-1 point in normal markets. | |

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| Canadian Market | <p style="text-align: center;">Federal</p> <ul style="list-style-type: none"> • 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 \$292.5 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. <p style="text-align: center;">Provincial</p> <ul style="list-style-type: none"> • 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. <p style="text-align: center;">IG Corporates</p> <ul style="list-style-type: none"> • 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. • 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 | <p>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.</p> <p>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 negative headlines related to the new Omicron virus with restrictions, curfews and a decline in volume related to the calendar year- end, bid/ask spreads on Canadas benchmark were wider than average at month end reaching 20 cents on benchmark liquid Canadas.</p> <p>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 on market tone and volatility.</p> |

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| | <p>bonds rated BBB and higher. As expected, the BOC has ended this Corporate Bond Purchase Program (CBPP) in May 2021.</p> <p style="text-align: center;">Real Return Bonds (RRBs)</p> <ul style="list-style-type: none"> • 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 last \$400 mn RRB auction on December 1 was a reopening of the Canada 0.25% / 2054 bond with the next quarterly auction scheduled for March 9th, 2022 with expectations of another re-opening of the RRB 2054 bond. | <p>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.</p> <p>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.</p> |

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