



**Market Update – Fixed Income Trading Liquidity
For the Week Ended 16 July 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	<ul style="list-style-type: none"> Global developed market rates rallied in the week ended July 16, with the US outperforming its developed-market counterparts. Liquidity in terms of market depth in on-the-run cash 5-year and 10-year Treasuries has improved meaningfully from the challenges seen in February 2021. 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. In TIPS, on-the-run bond bid-offer spreads are 1-2 ticks wide vs. normal levels during the most liquid parts of the day; off-the-run bonds in 5-10 year maturities are ~4 ticks wide vs normal; longer-maturity TIPS are trading 8-10 ticks wide. Federal Reserve bond purchases continue at \$80 billion US Treasuries and \$40 billion MBS per month. 	
Investment Grade (IG) Corporates	<p style="text-align: center;">US IG</p> <ul style="list-style-type: none"> Relative to the prior week, the tone in the US IG market improved at the beginning of the week ended July 16, as spreads ground tighter on the back of light supply and interest rate moves upward on Tuesday. Following 2Q2021 earnings, Goldman Sachs, Bank of America, and Morgan Stanley tapped the primary market on Wednesday and Thursday, accounting for \$21.75bn of the \$31bn supply that priced during the week. Similar to the prior week, engagement remained low as new issues priced with larger concessions and lower book coverage than the YTD average. The tone softened in the latter half of the week as the market digested the large financials supply, dealer balance sheets were heavy and interest rates rallied. Overnight flows remained quiet but Asian investors remained buyers of long maturity bonds. Overall positive momentum on flows continued with \$4.4 billion in inflows during the week. 	Bid/ask conditions in the IG market are back to normal

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	<p style="text-align: center;">Euro IG</p> <ul style="list-style-type: none"> • Euro and GBP IG spreads were unchanged to 1bp tighter with relatively low trading volumes during the week ended July 16 as the summer lull begins. • Given the lack of primary market issuance during the week the market felt firmer with a good underlying bid. EUR hybrids outperformed. • Supply was very light with only EUR 2bn and GBP 1bn, and is expected to stay low for the coming weeks. Overall book coverage remains relatively low, and new issue premia have modestly crept up. Most deals still performed well in the secondary market. • AT1s continued to feel firm amid the interest rate volatility. <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"> • During the week ended July 16, the US HY market was softer on relatively light volume as focus shifted to new issues. Index spreads ended the week 13 bp wider week-over-week to 282 bp. The CCC-BB spread difference was 15 bp wider to 267 bp. • In the primary market \$7.94 billion priced across 12 deals. <p style="text-align: center;">Euro HY</p> <ul style="list-style-type: none"> • In the week ended July 16, the focus remained on primary market supply. Subscriptions suggest investor cash balances are healthy. Underlying technicals are constructive. • The secondary markets remained heavier although seemed to find firming footing as investors are noticing the underperformance of Euro HY vs US HY in recent weeks. <p style="text-align: center;">CDX HY</p> <ul style="list-style-type: none"> • CDX HY traded weaker, along with the macro tone and cash bonds during the week ended July 16. • Trading volumes picked up amid the macro volatility • Bid/ask spreads have declined to pre-crisis levels. 	<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: 1 point, which is in line with normal market conditions</p> <p>CCC-rated and below: 1.5points which is in line with normal market conditions</p> <p>CDX HY bid/ask is in line with normal conditions.</p>

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Emerging Market Debt (EMD)	<p style="text-align: center;">Hard Currency EM</p> <ul style="list-style-type: none"> • The week ended July 16, was a non-directional week in EM credit, with index spreads widening by a few basis points as interest rates continue to grind lower. • Supply in Latin America picked up dramatically with several high yield inaugural issuers pricing deals with new issue premium generous relative to other deals priced YTD. Order books continued to be oversubscribed and deals traded up 3-4 basis points on the break. • There was a slight reversal of beta decompression, as some of the worst performers in high yield snapped back with some “real money” and hedge fund investor demand. • Colombia was in focus as long bonds started the week down following some forced selling from passive funds. That supply was quickly absorbed by Asia and US investors. 	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	<p style="text-align: center;">Asia Hard Currency</p> <ul style="list-style-type: none"> • During the week ended July 16, Asia credit primary market issuance dropped to USD 5.3 billion despite the firmer market. • The China property sector recovered 1-2 points throughout the week. • Within China financials, Huarong International announced their intention to call their September perpetual bonds, which saw the curve rally; this has been topical in the market as a measure of China support for the SOE sector. <p style="text-align: center;">Asia Local Currency</p> <ul style="list-style-type: none"> • Liquidity continues to function normally despite the increase in covid cases and lockdowns across the region. • Indonesia had a large bond maturing, that decreased foreign holdings but a large portion of this seems to have been reinvested, with Indonesia government bonds rallying. 	<p>Liquidity conditions are normal for Asia credit</p> <p>Liquidity conditions are normal for Asia local currency debt</p>
Securitized	<p style="text-align: center;">CMBS</p> <ul style="list-style-type: none"> • During the week ended July 16, CMBS spreads were little changed week-over-week. There was no new conduit issuance, but 2-3 new deals are expected in coming weeks. Secondary market trading volume increased to a level more consistent with recent history following a couple weeks of depressed activity. • With modest primary and secondary market supply, the technical backdrop of the CMBS market remains positive. Bid/offer spreads in AAA to A rated tranches have retraced their post-COVID widening, while BBB rated classes remain 2x the historical average. • CMBX was softer in most series and tranches. Summer doldrums seem in place with dealers less likely to take additional risk. Bid/offer spreads in CMBX have retraced their post-COVID widening. 	

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	<p style="text-align: center;">ABS</p> <ul style="list-style-type: none"> • The ABS primary market priced eleven transactions totaling \$11bn across equipment, floorplan, unsecured consumer loans, credit cards, student loans, auto leases, prime auto and non-prime auto loan sectors during the week ended July 16. ABS year-to-date supply now stands at \$140 billion compared to \$89 bn and \$129bn recorded over the same period in 2020 and 2019 respectively. • Indicative benchmark spreads remained near cyclical tights. AAA 3-year credit card ABS spreads tightened by 2bp this week, while private credit student loan ABS spreads narrowed 2-20bp across the capital structure with consumer and esoteric spreads unchanged on the week. <p style="text-align: center;">CRTs</p> <ul style="list-style-type: none"> • During the week ended July 16, the market for last cash flow bonds was softer by a few basis points. Equity classes continued to retrace the gains seen in the past 6-8 weeks. • Secondary market liquidity is robust and bid/ask spreads remain tight, around pre-covid levels. <p style="text-align: center;">Legacy Non-Agency RMBS</p> <ul style="list-style-type: none"> • 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. <p style="text-align: center;">CLOs</p> <ul style="list-style-type: none"> • Generic primary market clearing levels on the week stood roughly at 112-115bp for AAA-rated spreads; AA-rated spreads at around 165bp; A-rated at 205bp; BBB-rated at 305bp; and BB at 625-675 bp. • Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels. <p style="text-align: center;">Agency MBS</p> <ul style="list-style-type: none"> • Bid/ask spreads in Agency MBS remain well supported, given the Fed purchases of \$40bn per month. Current coupon bonds are trading at 0.5-1 tick wide and the rest of the coupon stack is wider by 2-2.5 ticks. 	
Money Market	<ul style="list-style-type: none"> • The Fed Reverse Repo facility (RRP) usage remains high at ~\$860 billion. • 1-month LIBOR set at 0.085%; 3-month LIBOR set at 0.134%. • SOFR set at 0.05%. The Effective Federal Funds Rate set at 0.10%. • Government money market funds had \$9.6 billion of outflows in the week ended July 16. Prime funds had \$7bn of outflows over the same period. 	
US Municipals	<ul style="list-style-type: none"> • In the week ended July 16, municipal yields were steeper with the benchmark tighter by 1 bp in short maturities and 2 bp wider in long maturities. Municipals outperformed US Treasuries in the 	

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	<p>short maturities and underperformed elsewhere. Despite the rates moves, municipals continued to see inflows and with the large amounts of cash investors still have as part of the summer technicals, the market largely seemed to be business as usual except in the very long end.</p> <ul style="list-style-type: none"> • There was limited trading in the secondary market as most investors don't need to sell, and so focus is on the primary market. There have been a couple weeks of larger primary market issuance which has helped, but given inflows this hasn't made a huge dent into cash and investors seem to be largely parking cash in short maturity bonds. • For the smallest (5k-15k) odd lots, there was around a 1pt haircut to round lot bid side levels and this was around 0.25pts for larger (100k+) odd lots. 	
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. 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 July 14). • The Government Bond Purchase Program (GBPP) has resulted so far in \$245.41 in net buying (assets minus liabilities minus position at the start of the QE in March 2020). As expected, there was a reduction of QE bond buying to \$2bn per week after the latest BOC meeting. • According to the latest BOC research, Federal debt is the most liquid sector within the Canadian fixed income markets. <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 Bank of Canada's Provincial Bond Purchase Program (PBPP) has ended. Therefore, the central bank does not provide a back stop to the provincial sector. Reduced trading activity during summer months could hinder liquidity. <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; 	<p>Federal: bid/ask was at 5 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. Off the run, high coupon Canadas were reported to have limited liquidity in volatile periods with much wider bid-ask given small outstanding size in these securities. For example – the latest ultra-long Canada 2064 bid-ask is at 35 cents reflecting its liquidity issues given this is not a benchmark.</p> <p>Provincial: concession reported to be above average on</p>

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	<p>many dealers are maintaining low balance sheet inventories, so will not provide bids in some sectors.</p> <ul style="list-style-type: none"> • Trading on an agency basis for high-beta issuers. • 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) on May 25, 2021. Lower corporate supply in summer months could lead to reduced secondary market liquidity. <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 – should help liquidity since it includes RRBs. • Trading in Canada RRBs continues to show a continued lack of liquidity. Trading a block can only be done on an appointment basis. • 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 last \$400m RRB auction in the RRB Canada 2054 bond reflected the net negative supply with a \$316m buyback RRB program and estimated \$800m + in coupon payments on June 1. • Liquidity remains challenging, trading by appointment, as dealers hold very limited inventories in RRB securities. 	<p>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.</p> <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. Dealers do not hold these securities on their balance sheet. Bid-ask is not a reliable indicator for trading.</p>

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