AllianceBernstein

January 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 29 January 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	• During the week ended January 29, developed market interest rates traded modestly lower. The volatile week saw US stock markets make new highs early in the week amid a steady stream of strong corporate earnings from large platform technology companies before selling off 3.5% from those highs. The positive earnings coincided with a spike in the VIX which most attributed to the euphoria of retail investors piling into retail stocks that were popular shorts among institutional investors. • The January FOMC meeting was largely a non-event with Chair Powell reiterating the committee's supportive monetary policy stance to aid in the pandemic recovery and that it is too early to discuss tapering asset purchases. Fed bond purchases continue at $80 billion US Treasuries and $40 billion MBS per month. • The developed market rates complex is at the peak liquidity of the past two years. Depth is high in both cash and futures markets. Facilitating large risk transfers can be done without "paying up" for the liquidity. Bid-offer spreads continue to grind tighter.	Bid-offer spreads are trading in line with pre-covid levels. Bid-offer spreads continue to grind tighter, with 10-year notes trading ½ of a tick wide and 30-year notes also trading as tight as ½ of a tick (1 tick = 1/32nd).
Investment Grade (IG) Corporates	**US IG** • In line with the broader macro tone, spreads leaked wider in the US investment-grade cash bond markets during the week ended January 29. The index closed 2bp wider week-over-week. However, cash bonds outperformed synthetics and US IG traded much more orderly than stocks indicated. • Similar to last week, investors remain cautious in their purchases at current valuations, but there is still cash on the sidelines as dealers managed to get "lifted" on ~$4.8bn in bonds this week. • Strong demand persists in the primary market despite deals continuing to price with negative concessions; the market saw another robust inflow of $6bn during the week. Overnight flows	Bid/ask conditions in the IG market are back to normal

<table>
<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td></td><td>from Asia remained muted and are expected to remain light until after Lunar New Year.

Supply for the week ending February 5 is expected to be steady, in the ~$30bn range.

European IG

During the week ended January 29, there was a weaker tone across the space given the macro tone/equity market volatility. However, the moves wider seemed dealer-led, with little end-investor participation. In fact, the market saw buyers of higher-beta bonds that had repriced lower, suggesting the underlying technicals continue to feel reasonable.

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 market continued to be in focus during the week ended January 29, as 24 deals priced, totaling $16.3bn notional. Beta compression continues to play out in new issues, with many deals pricing 25 to 50 bp inside initial price talk. This trend continued, despite the equity market volatility, although some new issues lost steam in the secondary market as risk assets weakened. Many new issues ended the week close to their issue price.
Secondary markets were not a focus. Dealers quoted bonds down amid equity market weakness later in the week, but sales were limited.
High yield index spreads were 13 bp wider to at 362bp. The spread between CCC and BB-rated bonds was 29bp tighter to 356 bp. Energy underperformed the broader index this week as the market continues to digest the Biden administration's executive actions imposing new limits on oil and gas production.

Euro HY

During the week ended January 29, it remained all about primary market supply, with deals continuing to price well through initial price talk and above-market yielding issuers continuing to outperform.
Secondary market liquidity is spotty. There was more selling against the new issue calendar this week than seen since the start of the year. Secondary market pricing drifted lower over the course of the week, with covid-exposed names continuing
</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 in line with normal conditions.</td></tr>
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	to underperform. That said, at the lows of the week on Thursday, there was strong dip buying from "real money" and hedge fund investors in select covid-exposed issuers and overall good two-way flow as the primary calendar is expected to slow as earnings blackout begins. Overall volumes remain below historical averages for this time of year (30-40% of reported averages) **CDX HY** • CDX HY traded weaker, in line with the macro tone during the week ended January 29. • Trading volumes were heightened amid equity market volatility, but flows were more supportive than in previous weeks. • Bid/ask spreads have declined to pre-crisis levels.	
Emerging-Market Debt (EMD)	**Hard Currency EM** • During the week ended January 29, EM credit traded with a firm tone, outperforming global macro risk assets, as the EMBI Global Diversified Index spreads tightened 4bp on the week to ~354bp. Spread tightening was driven by the continued robust technical picture which was further strengthened by large month-end buying and numerous investors putting cash to work. • Thematically, high yield/investment-grade beta continued to compress, tightening another ~10bp. • Supply was relatively uneventful, with a few Latin America corporate deals coming to market in the second half of the week, offering generous new issue concessions following Wednesday's volatility. **Local Currency EM** • Liquidity is close to normal.	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Primary market activity picked up with $12.7bnin deals coming to the market during the week ended 29 January (versus $7.9bn prior week). This made January the strongest issuance month ever for Asia ex Japan at $57bn. • Spreads were slightly wider on the week with investment-grade outperforming high yield, mainly due to supply with more than 80% of high yield new issues under water by the end of the week and correlated issuers trading lower in sympathy. • China investment-grade corporates traded 5-10bp tighter over the week with European/US supply met by Asian buyers. **Asia Local Currency** • During the week ended January 29, tightening liquidity in onshore China left the rates market somewhat perplexed as typically the PBOC injects liquidity ahead of Lunar New Year.	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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	• Continued positive flows into local currency debt and end of month purchasing left a better tone to the government bond markets at the end of the week. • In the India government bond market, focus is on next week's budget.	
Securitized	**CMBS** • During the week ended January 29, CMBS secondary market spread compression paused as investors turned their attention to new issues. Spreads were mostly unchanged week-over-week. • Five new issues came to market, including the first two conduit issues of 2021. Most classes were well oversubscribed and priced at or through initial price guidance. The speed of issuance is expected to increase, but continued robust demand for CMBS should offset the increased supply. • Bid/offer spreads remain unchanged: spreads for AAA to A-rated classes have retraced their post-covid-19 widening, while bid/offer spreads for BBB-rated classes remain approximately 2x their pre-covid-19 levels. • CMBX ended the week under modest pressure. Previous support seen at the bottom of the capital stack seemed to abate, while the top of the stack widened modestly by 1-2bp. Bid/offer spreads remain unchanged. CMBX A.6, BBB-.6, and BB.6 bid/offer spreads remain approximately 2x their historical averages. **ABS** • The ABS primary market priced five deals for the week ending January 29 totaling $2.2bn across consumer loans, containers, equipment and non-prime auto loan sectors. Year-to-date ABS supply now stands at $13.2bn compared to $18bn recorded over the same period in 2020. Primary market execution remained strong as deals priced at or through the lower end of the initial guidance range, with upsized amounts and oversubscription. • The forward calendar is quickly filling up, with six ABS deals totaling $3.6bn currently in pre-marketing. Indicative benchmark spreads remained at record tight levels across sectors, except for +5bp widening in BB non-prime auto ABS spreads as investors booked profit after the series recorded the tightest prints of +175bp last week. **CRTs** • The week ended January 29 was a mixed one for the CRT market. The rally from previous weeks continued up until Thursday afternoon when supply and continued macro pressure finally had an effect on the market.	

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Secondary market liquidity remains robust and there is good two-way flow in all aspects of the CRT market. Bid/ask spreads have normalized around pre-covid levels. 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 inside 200 bp discount margin currently. CLOs The week ended January 29 continued to be busy in the CLO market. The secondary market continues to pull the primary market tighter. As other securitized markets have recently tightened, investors have begun to rotate into CLOs, particularly mezzanine classes, to pick up yield.
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 remain at the tighter end of their range in terms of OAS relative to US Treasuries, given the supportive Fed purchases of $40bn per month. Bid/offer spreads remain at historical tight levels at just ½ of a tick wide.</td><td></td></tr>
<tr><td>Money Market</td><td>To much of the market’s surprise, Government-Sponsored Enterprise (GSE) cash, accompanied by investor cash, kept front-end rates depressed throughout most of the week ended January 29.
SOFR set at 0.03%, which is the lowest level since May 2020. There were no tweaks to the Reverse Repurchase or Interest on Excess Reserves (IOER) rates at Wednesday’s FOMC meeting
For similar reasons, 1-month LIBOR set at lows of 0.113%, while 3-month LIBOR set at all-time lows of 0.196%.
Government money market funds saw $22bn of inflows in the 7 days ended January 29. Prime funds had $6bn of inflows over the same period.</td><td></td></tr>
<tr><td>US Municipals</td><td>Despite the broader macro weakness, the tone in municipal bonds continued to be strong during the week ended January 29. Benchmark AAA-rated yields lowered 2-3bp in short maturities and 5-6bp in longer maturities.
Demand is far outweighing supply, causing new issues to be heavily over-subscribed, and repriced much tighter than initial price guidance.
Investors searching for additional yield have had a nearly insatiable demand for the higher-yielding segment of the market.</td><td></td></tr>
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	• As a result of the market strength, liquidity remains robust with odd lots of 100k to 1mn in size seeing discounts to round-lot bid side evaluations of 0 to 0.5 point and <100k pieces typically 0.5 to 1.5 points depending on size and credit quality.	
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 $4 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$199.7 billion to support liquidity in Government of Canada markets since the purchase program started on March 27 through January 29. Government of Canada bonds are the most liquid securities in capital markets in Canada as seen in the latest (November) Bank of Canada research. (Note: BOC figures can be revised) **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$15 billion in par value year to date through January 29 within their provincial buying program to support liquidity. A continued rise in crude oil prices from current levels could help liquidity in provinces where oil revenues will be pushed upward – Alberta, Saskatchewan and Newfoundland. **IG Corporates** • The latest Bank of Canada research highlights the lack of liquidity in Canadian corporate bond markets, which 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 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$180 million par), indicating the impact is limited. The central bank	Federal: bid/ask typically 5 cents in the 10-year area, 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. 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

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	has not bought bonds since November (as of January 14). BBB-bonds are trading by appointment unless there is a new issue. • Recent conversations with the deputy BoC governor indicated that they view the bond-buying program as a "back-up" facility. They do not see a current need to intervene to provide liquidity to the BBB-corporate market.	may refuse to bid in a risk off market with gaps in spreads.
	Real Return Bonds (RRBs) • 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 last auction was held on December 2 with the FTSE index duration extending by a historical amount of over 1.6 years. On that day, the BOC bought a total of C$434mn with a target of C$75 million per line of the 7 Canada RRBs from 2021 to 2047. Even with the central bank buying net C$34 million of Canada RRBs in December, liquidity remains challenging as dealers hold very limited inventories of these RRB securities. We expect a re-opening of the Canada Benchmark 2050 bond on Feb 10 where once again that day, the Bank will try to buy $75mn per line of the 6 Canada RRBs from 2026 to 2047. • Trading in Canada RRBs continues to show a chronic lack of liquidity. Trading a block can only be done on an appointment basis.	Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet.

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