ALLIANCEBERNSTEIN®

April 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 2 April 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 April 2, US markets traded with a risk-on tone on improving virus and economic outlook. The March employment data exceeded expectations at 916,000 versus 660,000 estimated. Additionally, President Biden's infrastructure spending proposals and reflation concerns pushed US Treasuries to bear-flatten, led by selling in intermediate maturities. For the week, 10-year yields were up by 4.7 bp to 1.724% and the 5s30s curve was flatter by 13.6 bp to 137.5 bp. The payroll release led markets to bring forward the pricing in of the first full Federal Reserve official interest rate hike, to December 2022. • Liquidity in terms of market depth in on-the-run cash 5-year and 10-year Treasuries has improved by 80-90% from the worst levels on February 26. Market depth in the 30-year part of the curve has improved 70-80% since February 26. Liquidity around economic data and auctions has been challenging at times given the recent backdrop. • The observable bid-offer spread is in line with historical averages in on-the-run and off-the-run bonds. • Federal Reserve bond purchases continue at $80 billion US Treasuries and $40 billion MBS per month.	
Investment Grade (IG) Corporates	**US IG** • The US investment-grade cash bond market was firm during the week ended April 2, rallying the most since December 2020. The index closed the week at 9bp, 1 bp away from YTD tight levels, led by long-maturity bonds. Underwhelming supply ($9bn vs $20-25bn expected), supportive macro tone and strong month-end flows drove the strong performance. • Asian investors continued to be net buyers during the week, focusing on 30-year maturity bonds. • The positive momentum on flows continued with another $1.69bn inflow. • Looking ahead, supply is expected to slow down over the next few weeks as companies head into their earnings blackout period.	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>Supply for April is expected to be $85-100bn. Euro IG The euro IG market saw light trading activity ahead of the Easter holiday during the week ended April 2. A lack of supply during the week helped the technical picture, allowing spreads to grind tighter.
The key story during the week was Credit Suisse’s exposure to Archegos Capital Management, which drove CS senior debt wider by 13-17bp and AT1 debt down 2.5 to 4points. Outside of CS, there was limited impact on the broader market.
New issue supply was lighter with ~5.4bn EUR and 0.65bn GBP coming to market during the week. Deals generally performed well in the secondary market, ending the week 4 to 8 bp tighter. 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 US high yield market option-adjusted spreads were 21bp tighter to 302bp during the week ended April 2. The secondary market was firm, with buying in the latter half of the week, largely driven by ETF arbitrage investors, as HYG traded at a 40-50bp premium to NAV
There continues to be 2-way Portfolio Trading activity, as investors see this as one of the best ways to tap market liquidity.
Aside from interest rates, investors continued to focus on new issue market activity, with ~$8.885bn of new issuance pricing across 14 deals. Order books were modestly (1.5-3x) oversubscribed, and performance was mixed in the secondary market.
The week ended the busiest new issuance quarter on record, topping 2Q 2020, with $14bn notional pricing. Just over three quarters of this new issuance was refinancing. CDX HY CDX HY traded better along with the macro tone during the week ended April 2. Non-dealer positioning was net long, leading to strong performance of the new series—HY36—which began trading. The tone in CDX HY was positive, as it traded at a premium to NAV for the first time YTD.
Trading volumes were high amid the roll period.
Bid/ask spreads have declined to pre-crisis levels.</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>
</table>

Sector	Liquidity Trading Comment	Bid-Ask Spreads
Emerging-Market Debt (EMD)	**Hard Currency EM** • It was an uneventful holiday-shortened week ended April 2 as the JPM EMBI Global Diversified Index spreads closed unchanged.	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Trading volumes were relatively light due to the Easter holidays, but month end rebalancing kept flows and liquidity ample during the week ended April 2. Primary market issuance picked up slightly, with $6.8bn coming to market up from $5.3bn the prior week. Spreads tightened 7bp over the week, but the selloff in US Treasuries resulted in a total return loss of -0.15%. • From a sector perspective, China asset management companies were challenged during the week as one issuer delayed the release of their financials. The China property sector bounced from the prior week's poor performance. **Asia Local Currency** • Asian local currency bond yields were generally higher on the back of higher global core yields. • FTSE released their Fixed Income Country Classification Announcement on March 29, with the key takeaways that: (1) China will be included at a 5.25% weighting with a surprisingly long phase in period of 36 months vs 12 months expected; (2) Malaysia was removed from the watchlist and commended for its effort to enhance liquidity, a positive surprise with most investors expecting the country to remain on the watchlist; (3) India has been put on the watchlist for potential inclusion in the WGBI EM GBI index. While not a popular index, this is a positive gesture that could pave the way for inclusion in other more widely-used indices. • On March 30, Indonesia saw the weakest government bond auction demand in recent memory. However, announcement of a smaller 2Q issuance target later in the week lifted sentiment and bonds rallied to close the week.	Asia hard currency IG and HY credit is back to normal conditions. However, interest rate volatility may cause pressure points to appear. Asia local currency debt is back to normal market conditions
Securitized	**CMBS** • During the week ended April 2, the markets for both CMBS and CMBX traded sluggishly, as investors settled in for quarter end and the holiday weekend. Spreads were mostly tighter week-over-week in both market segments, albeit on unimpressive trading volume. Expectations for significant new issuance remain low. Lack of issuance and robust investor demand continue to form a strong technical backdrop for the market. • Bid-offer spreads remain unchanged with AAA to A-rated CMBS classes having retraced their post-covid-19 widening, while bid/offer spreads for BBB-rated classes remain approximately 2x their pre-covid-19 levels.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	• CMBX bid/offer spreads remain unchanged, with CMBX A.6, BBB-.6, and BB.6 bid/offer spreads approximately 2x their historical averages. **ABS** • The ABS primary market priced no deals for the week ending April 2, closing out the quarter with year-to-date supply at $60bn compared to $47bn recorded over the same period in 2020. • Given the holiday weekend, volumes dropped by 40% during the week. Indicative benchmark ABS spreads remained relatively unchanged on the week with credit cards -1bp tighter and subprime auto 1-2bp tighter for the top of the capital stack and subordinates -5bp tighter. • In the week ahead, there are five deals pre-marketing totaling $4.6bn across the whole business, prime auto and equipment ABS sectors. **CRTs** • The week ended April 2 was another uneventful week in the CRT market, with many investors on holiday. The market was unchanged week over week. • Secondary market liquidity seemed to improve as quarter end passed and dealers took opportunities to increase their balance sheets during the shortened week. Dealers seemed increasingly comfortable positioning bonds. • Bid/ask spreads widened a bit but remain around pre-covid levels. **Legacy Non-Agency RMBS** • 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. **CLOs** • The CLO market during the week ended April 2 was quiet from a supply perspective. Supply from bid wanted lists was anemic due to the shortened week. Focus remained on the new issue market which continued to see new deals as well as refinancings and resets. • Levels on the week stood at 110-112bp for AAA-rated spreads; AA-rated spreads at around 165-170bp; A-rated are 175-180bp; BBB-rated are 305-310bp; and BB around 650-675bp (most issued with original issue discount). • Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
Money Market	• During the week ended April 2, SOFR continued to set at 0.01%. The Effective Federal Funds Rate set at 0.07%. • In advance of the long weekend, government money market funds had $13bn of outflows in the 7 days ended April 1. Prime funds had $11bn of outflows over the same period. The outflows were likely to keep cash liquid for Friday usage given banks were open, but funds were closed.	
US Municipals	• The week ended April 2 was quiet due to the holidays, but the market continued to exhibit a strong tone. New issuance was lighter but the deals that did come were met with double digit oversubscriptions on average. As has been the case, the lower the quality and wider the spread, the more in-demand the deal seemed to be. As a result, liquidity conditions have been strong with odd lots typically receiving bids within a point of round-lot bid side evaluations.	
Canadian Market	**Federal** • Liquidity is best in benchmark issues for block sizes of <=CAD25 million. 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$233.8 billion to support liquidity in Government of Canada markets through March 31. Many dealers are expecting the Canada buying program could be reduced to $3bn per week at the next BOC meeting on April 21. According to the latest BOC research, Federal debt is the most liquid sector within the Canadian fixed income markets. **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$17.3 billion in par value year to date through March 31 within their provincial buying program to support liquidity. The BOC has cut their maximum weekly take out to $350mn from $500mn and the buying program is done only once per week. Dealers expect this purchase program to mature on May 7, 2021. • 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.	Federal: bid/ask was at 3 to 5 cents in the 10-year area, but for the long end of the curve, it remains relatively wider at 12 cents given the recent higher volatility. Off the run, high coupon Canadas were reported to have limited liquidity in this high volatility period with much wider bid-ask given small outstanding size in these securities. Provincial: concession reported to be above average on size > CAD 25 million, particularly at the longer end. In risk-off markets, liquidity is drying

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	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 $10bn 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$240 million par as of March 31), indicating the impact is limited. The BOC has announced that they will cut the maximum size of their tenders under the purchase program, reducing the max amount to C$50mn from C$100mn previously • Based on lack of intervention and BOC comments it is expected the program will be cancelled on May 7, 2021. **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. • Trading in Canada RRBs continues to show a lack of liquidity. Trading a block can only be done on an appointment basis. • Of note, the last $300mn auction of RRB 0.5% Dec 2050 was done on February 10. On that day the central bank was not able to buy its maximum of 6 Canada RRBs for a total of $450mn with a target of $75mn per line item (from 2026 to 2047 maturities). In December, the BOC bought net $34mn in RRBs compared with $122mn in February (BOC buying program less new supply). • The next RRB auction is expected to be in the late April-June time frame so supply remains limited in RRB markets in 2021. Liquidity remains challenging as dealers hold very limited inventories in RRB securities.	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 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. Bid-ask is not a reliable indicator for trading.