ALLIANCEBERNSTEIN®

April 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 30 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	• Developed market interest rates sold off by 6-10 basis points during the week ended April 30, with UK gilts being the worst performer. 10-year Treasury bonds traded back to the middle of the 1-month range of 1.63%. • Risk assets traded mostly sideways with higher-quality issuers outperforming on upside earnings surprises with strong 2Q guidance. Net-net financial conditions moved slightly easier week over week. Volumes and flows were muted overall as it was a holiday-shortened week for many interest rate investors in the Asia-Pacific region. • The main event for the week was the April 28 FOMC meeting. The Fed delivered on market expectations with a very sanguine outcome—upgrading the language of the statement in light of the improved economic data, striking a more optimistic tone about the economic recovery from covid-19. The Fed did not hint at any imminent changes to either the buyback program or the interest rate policy. • 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. • Observable bid-offer spreads are in line with historical averages in on-the-run bonds. Transaction costs in off-the-run bonds are wider vs historical averages but have improved meaningfully over the past several weeks. • Federal Reserve bond purchases continue at $80 billion US Treasuries and $40 billion MBS per month.	
Investment Grade (IG) Corporates	**US IG** • The US IG cash bond market was quiet during the week ended April 30, with the index spreads closing 2bp wider week over week, moving back to YTD tight levels of 88bp.	Bid/ask conditions in the IG market are back to normal

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	• New issue supply underwhelmed expectations with only $17bn pricing. However, April supply of $130bn exceeded expectations, which were $100bn. • Technicals remain supportive. Dealers were net lifted of $3.2bn of risk. New issues were 3.5x oversubscribed on average (YTD average is 3x oversubscribed) despite pricing with little concession. • The positive momentum on flows continued with a $5.19bn inflow. Overnight flows from Asia remained relatively light and are expected to remain muted into the following week with Japan and Taiwan on holiday. • Looking ahead, $25-35bn in supply is expected next week. Supply expectations for May are $150bn, in line with the 5-year average. **Euro IG** • Spreads in the euro IG market were unchanged on average, with low volumes and flows somewhat skewed towards better selling during the week ended April 30. GBP-denominated corporates performed slightly better vs EUR-denominated, with spreads 1-2bp tighter led by the transportation and real estate sectors. • Tobacco underperformed as the US FDA is planning to ban menthol cigarettes. BAT is the most affected, but market reaction of ~5bp widening was rather muted. Other tobacco names experienced similar spread moves. • New issue supply was reasonably light due to Q1 earnings season at ~9bn EUR and ~0.3bn GBP. Deals came 2x to 4x oversubscribed and generally performed well in the secondary market. **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.	
High Yield (HY) Corporates	**US HY** • The US high yield market was largely uneventful during the week ended April 30. • $6.97bn in new issues priced across 13 deals, well below the YTD weekly average of $11bn. Deals continue to close with order books largely oversubscribed (2-6x). Performance was mixed in the secondary market. • The secondary market was quiet, with option adjusted spreads on the index ending the week 7bp tighter at 291 bp. The spread between CCC and BB-rated bonds was 4bp tighter to 287 bp. Energy outperformed amid positive earnings. **Euro HY** • The primary market remained in focus in the Euro HY market during the week ended April 30. Price action was mixed, with interest-rate	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

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<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td></td><td>sensitive, tighter-spread/longer duration BB-rated bonds generally underperforming. Most new issues performed well, coming at the tighter end of or inside initial price guidance, and trading up on the break. Secondary market activity has been muted.

CDX HY
CDX HY traded a touch better along with the macro tone during the week ended April 30. Flows were more bullish, but the index could not break $110.
Trading volumes began to normalize following the recently busy roll period.
Bid/ask spreads have declined to pre-crisis levels.</td><td>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>
<tr><td>Emerging-Market Debt (EMD)</td><td>Hard Currency EM
It was another sideways week in EM credit during the week ended April 30 as index spreads were unchanged, with high yield slightly outperforming investment-grade on the heels of a backup in core interest rates.
Peru was again the focal point, as the market shrugged off a poll showing the leftist candidate Castillo's lead expanding. Peru sovereign bonds were ~20bp tighter while corporate bonds traded up 2-5 points as valuations brought in investors.
Inflows were steady. Supply continued to pick up in the corporate space, with deals pricing with larger-than-average concessions as a sense of indigestion and relatively low cash levels allowed investors to be price sensitive.
Local Currency EM
The local EM rates market mostly tracked US Treasuries. Liquidity remains adequate but volatility is to be expected.</td><td>EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions</td></tr>
<tr><td>Asia</td><td>Asia Hard Currency
Asia credit spreads tightened 9bp during the week ended April 30, but the total return on the index was -0.01% as US Treasury yields backed up in a bear steepening fashion.
Huarong's USD bonds slumped, with bullet bonds shedding ~3-6 points on the week and perpetual securities off ~8 to 11 points after rating agencies downgraded the company on concerns over government support and refinancing risk. In contrast to earlier in April, the broader Asia credit market did not see further contagion from the Huarong weakness, and most sectors exhibited positive price action.
One exception was India, where bonds sold off as much as 20 to 30 bp due to the escalating pandemic situation at the beginning of the week, but recovered much of the losses to finish the week only ~5 to 15bp wider.
Asia Local Currency
Asian local currency bond performance was mixed, with lower-yielding bonds trading weaker with a steepening bias and higher-yielding bonds trading stronger after the dovish FOMC.</td><td>Liquidity conditions are normal for Asia credit

Liquidity conditions are normal for Asia local currency debt</td></tr>
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	• Korea Treasury bond yields steepened with long maturities selling off as much as 13bp, as the market struggles to digest a record pace of supply. • Thai government bonds outperformed the region with yields rallying by ~5 to 9 bp as the government slashed the country's 2021 economic growth forecast and reintroduced social distancing measures in response to resurgent covid cases.	
Securitized	**CMBS** • During the week ended April 30, CMBS technicals remained strong, as modest new issue and secondary supply was met with robust demand. Spreads in the secondary market were tighter week-over-week. Senior AAA-rated tranches tightened 3 bp, while A-rated classes tightened 5 bp. Demand remains strong throughout the capital stack. • While the pace of supply in the new issue market remains well below the pre-covid pace, issuance is becoming more regular and an additional two conduit deals are expected in the coming weeks. • Bid/offer spreads in AAA to A-rated CMBS 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 continues to lag the cash bond market. Recent vintage series continue to outperform seasoned vintages. Trading volume remains low, resulting in periods of limited liquidity. However, 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 eight deals for the week ending April 30, totaling $3.8bn across unsecured consumer, equipment, auto fleet and cell tower loan sectors. ABS year-to-date supply now stands at $79.9bn compared to $55.5bn recorded over the same period in 2020. • Indicative benchmark spreads tightened 1-3 bp across credit card ABS, 1-5 bp across prime auto, 0-1 bp across non-prime auto loans and 1-2 bp across equipment on the week. Strong technicals, driven by lack of secondary market supply and moderate primary market issuance, continue to support ABS spreads. • From a fundamental perspective, for the earnings season underway, major consumer ABS sponsors continued to report positive surprises. Sponsors have reported strong credit metrics due to stimulus and tax refunds with peak losses from the pandemic now projected to hit mostly in early 2022. **CRTs** • The week ended April 30 extended the CRT market rally of recent weeks. The market was generically 8 to 24 ticks higher week-over-	

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No new issues priced during the week.
Secondary market liquidity is robust and bid/ask spreads remain tight, 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 new issue market remained the focus of the CLO market during the week ended April 30. Demand for single A and lower-rated classes remains strong. AAA and AA-rated classes are the most difficult to place.
Supply in the CLO secondary market continues to trade well, with little supply to test the current trading levels. Any supply seems to be easily absorbed by the market.
Levels on the week stood at 110-113bp for AAA-rated spreads; AA-rated spreads at around 155bp; A-rated are 190bp; BBB-rated are 295bp; and BB around 625bp/par.
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 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.</td><td></td></tr>
<tr><td>Money Market</td><td>During the week ended April 30, T-bill yields ranged between 0% and 0.05%. Repo rates have been pinned near 0% and dipping into negative territory with increasing regularity.
Markets have been focused on any guidance from the Fed regarding tweaks to the Reverse Repo facility (RRP) rate (0%) or the Interest Rate on Excess Reserves (IOER, 0.10%), however an adjustment does not seem imminent. It is expected that as long as SOFR does not trade with negative yield (it has held steady at 0.01%) and the Effective Federal Funds Rate (FFE) does not trade below 0.05% for a prolonged period of time, the Fed is willing to keep RRP and IOER unchanged. It is worth noting that the FFE print on Friday fell to 0.05% after holding at 0.07% since February.
1-month LIBOR set at 0.107%; 3-month LIBOR set at 0.176%
Usage of the Fed Reverse Repo facility (RRP) has increased to $150-200bn per day.
Government money market funds had $53bn of inflows in the 7 days ended April 30. Prime funds had $2bn of inflows over the same period.</td><td></td></tr>
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<tr><td>US Municipals</td><td>The municipal market continued to see very light volumes in the secondary market during the week ended April 30, as the municipal/Treasury ratios remain historically rich and the market awaited the FOMC meeting.
As US Treasury yields moved up 5-7 bp on the week, municipals largely followed suit with the 5-year AAA-rated benchmark yield rising 7 bp, 10-year yield rising 6 bp and 30-year yield rising 4 bp.
Credit spreads continue to grind tighter and liquidity remains robust.
Odd lot discounts to round lot bid-side valuations are ~0.5 to 1.5 points, with the larger discounts reflecting the smallest sized pieces.</td><td></td></tr>
<tr><td>Canadian Market</td><td>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 BOC revised QE as expected, from $4bn to $3bn per week at the last BOC meeting. 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$245.8 billion to support liquidity in Government of Canada markets through April 21. Market participants will be watching economic data and statements from BOC officials to gauge whether or not the BOC will continue to reduce its QE in coming quarters. 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$17.5 billion in par value year to date through April 21 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.
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.</td><td>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 15 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 up and spreads can widen depending on market tone.</td></tr>
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	• Trading on an agency basis for high-beta issuers. • Liquidity has been improving temporarily in the aftermath of new corporate deals. 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 April 21), 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 will be a 30-year bond on June 2. There is expected to be some liquidity related to the auction on that specific day. Liquidity remains challenging as dealers hold very limited inventories in RRB securities.	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.

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