ALLIANCEBERNSTEIN

May 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 14 May 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	• Volumes were robust during the week ended May 14 with 10-year US Treasury rates breaking through 1.7% early in the week. The move higher in rates was driven by (1) improved covid recovery in Core Europe and the UK, with those duration markets underperforming and (2) the US Core CPI print that came in higher than expected. Price action in TIPS over the week was quite substantial, with 5-year real yields trading to all-time low levels and inflation break evens trading higher across the curve. Despite the interest in inflation measures and flows into inflation products, the depth of liquidity for TIPS has not improved very much. Full bid-offer for liquid on-the-run bonds is 4 ticks wide, in line with historical averages; large block trades are best done on days of Fed purchase operations, indicating that central bank support is still very much needed for liquidity in this market. • 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** • US IG cash bond market spreads remained resilient throughout the week ended May 14 despite the macro volatility. The index set new YTD tight spread levels on Friday reaching 86 bp (1 bp tighter week-over-week). • As expected, supply picked up relative to the prior week, with $45 billion in new deals pricing. Concessions picked up slightly (2.2 bp on average) but demand remains strong with deals 3.5x	Bid/ask conditions in the IG market are back to normal

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	oversubscribed on average. Short maturity bonds remained well bid. • Following the interest rate selloff after the latest CPI data release, flows from Asia into longer-maturity bonds returned during the latter half of the week, along with US insurance investors. • Beta compression remains a theme with high-beta bonds outperforming higher-quality. Positive momentum on flows continued during the week with another $1.8bn inflow. • In the week ahead, supply is expected to be $25-30 billion. **Euro IG** • Euro IG remained resilient through most of the equity and interest rate volatility during the week ended May 14. Euro IG spreads were 4 bp wider on average and GBP corporates were 3 bp wider on average. Trading volumes were relatively low as parts of Europe were out Thursday for a holiday, with flows modestly skewed towards better sellers, but ended the week more balanced. • Nissan underperformed during the week after reporting underwhelming operating profit guidance for the next twelve months due to reduced production caused by chip shortages. Nissan bond spreads ended the week as much as 15bp wider. • Supply was reasonably light during the week at approximately €11 bn and £0.65 bn, with low book coverage between 1x and 3x and mixed performance 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** • US high yield market spreads were 14 bp wider week-over-week to 303 bp amid the equity market volatility during the week ended May 14. • The secondary market was moderately active. There was short duration selling by "real money" investors to fund new issues as well as selling by ETF arbitrage investors. Price action remained orderly throughout the week and the market began to be quoted higher on light volumes towards the latter part of the week. • 18 deals priced in the primary market for a total of $13.225 billion. Demand for new issues remained healthy with most books 3-4 times oversubscribed. • Atlantica Sustainable priced a green bond during the week. Despite being a first-time issuer in the HY market, the deal saw 4bn in demand for only 400mn of bonds and traded up in the secondary market.	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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	• The CCC-BB spread was 11 bp wider ending the week at 281 bp. **Euro HY** • The Euro HY market was weaker during the week ended May 14, with the primary market still in focus. The secondary market was marked lower with broader macro volatility and some selling pressure to fund the new issue calendar, but there was still good two-way flow at lower levels, particularly towards the end of the week as markets recovered. • The primary market continues to see strong demand with good subscription levels, deals pricing at the tight end of initial guidance, and trading above reoffer. The new issue calendar is expected to slow in coming weeks, but should pick up in June. **CDX HY** • CDX HY traded lower along with the macro tone during the week ended May 14. It traded with less volatility during the macro sell-off, but upside also seemed caped during the rally. • Trading volumes began to normalize following the recently busy roll period. • Bid/ask spreads have declined to pre-crisis levels.	CCC-rated and below: 1.5points which is in line with normal market conditions CDX HY bid/ask is in line with normal conditions.
Emerging-Market Debt (EMD)	**Hard Currency EM** • EM credit was volatile during the week ended May 14, with index spreads widening a few basis points following renewed inflation fears and subsequent choppy global macro risk. Volatility was exacerbated by ETF sellers, as EMB traded at a discount to NAV for the first time since early March. • Demand from Asian life insurance companies remained strong, providing an offset to retail and ETF selling. **Local Currency EM** • The local EM rates market mostly tracked US Treasuries. Liquidity remains adequate but volatility is to be expected. • Flows into local currency bonds accelerated as valuations and relatively stable core interest rates have brought in some marginal demand.	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Asian primary issuance at 8.7 bn was dominated by high yield issuers during the week ended May 14. Market indigestion saw 80% of these issuers underwater by week’s end. • Indonesia’s holiday left a hole in buying interest and sovereign and quasi-sovereign debt widened by 5-10bp • China HY property was softer due to the deluge of supply and some idiosyncratic concerns. **Asia Local Currency** • Increasing covid outbreaks continue to weigh on risk assets. Multiple market holidays in the region (Indonesia, Malaysia,	Liquidity conditions are normal for Asia credit Liquidity conditions are normal for Asia local currency debt

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	Singapore, India) at the end of the week meant less conviction and rates generally drifted higher. • Malaysia 30-year bond auction on Friday saw good demand with the BCR (bid to cover ratio) of 2.433.	
Securitized	**CMBS** • Despite the volatility in macro markets, CMBS performed well during the week ended May 14. The top of the capital stack remained mostly unchanged, while single A through BBB-rated tranches continued to grind tighter by 5-10 bp. • The technical backdrop remains positive. Dealer balance sheets remain light and new issuance is met with robust demand. One new conduit deal priced, with most classes oversubscribed and many pricing through initial guidance. • 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 continues to see technical factors in various series and tranches drive price behavior, rather than fundamentals. Generally, the top of the capital stack fared better than mezzanine classes week over week. Trading volume remains low, yet 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 seven transactions for the week ending May 14 totaling $4.7bn across rental car fleet, private credit student loans, prime and non-prime auto loan sectors. ABS year-to-date supply now stands at $88.7bn compared to $58.9bn recorded in 2020 over the same period. The forward calendar has nine deals totaling $7.3bn currently in pre-marketing • Benchmark ABS spreads continue to linger at cyclical tight levels. However, private credit student loan benchmark ABS spreads widened 10bp across senior tranches and tightened 5-10bp across subordinated tranches, recalibrating to new issue pricings on the week. The driver was a spike in primary market supply with Nelnet's 2021-A $4bn transaction backed by consolidation and in-school loans acquired from Wells Fargo. The deal size is unprecedented, particularly in the private credit student loan ABS sector, where the largest transaction in recent years was SMB 2021-A at $1.2bn and the average deal size in 2021 thus far is tracking $625mn. **CRTs** • The week ended May 14 saw the same themes extend from previous weeks in the CRT market. Supply was met by strong demand across the stack. $1 billion traded basically flat week over week in secondary trading.	

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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 May 14. • The CLO secondary market continues to trade well. Any supply, especially down in the capital stack is being met with very strong demand. Secondary market spread levels continue to trade inside the primary market clearing levels. • Levels on the week stood at 110 bp for AAA-rated spreads; AA-rated spreads at around 160 bp; A-rated at 185 bp; BBB-rated at 285bp; and BB around 600 bp/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. Bid/offer spreads improved in the week ended May 14. 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	• 1-month LIBOR set at 0.0975%; 3-month LIBOR set at 0.14963%, a new record low. • SOFR set at 0.01%. Fed Effective set at 0.06%. Repo rates were near/at 0%. • Usage of the Fed Reverse Repo facility (RRP) increased to approximately $175-240bn per day. $241bn on Friday was the highest since March 2020 quarter end, which was due to illiquidity during the pandemic • Government money market funds had $4bn of outflows in the 7 days ended May 14. Prime funds were roughly flat over the same period.	
US Municipals	• Municipal bonds were 1bp wider in short maturities and 5bp wider in longer maturities during the week ended May 14 as the market experienced some selling pressure after the CPI numbers were released mid-week, sending US Treasury yields higher. Despite higher yields and near all-time low municipal/Treasury ratios, the municipal selloff events have been short lived so far this year because of the strong technical backdrop. • Spread compression and outperformance continues in high yield, also driven by a combination of robust fund inflows and light new issuance.	

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	• Odd lot penalties remain near their lows in the 0.5 to 0.75 point range, but have averaged closer to 1 point during weaker trading sessions.	
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 $3 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$251.7 billion to support liquidity in Government of Canada markets through May 14th. 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 Bank of Canada's Provincial Bond Purchase Program (PBPP) has ended. BOC bought a total of $17.6b in their provincial buying program to improve liquidity. Therefore, the central bank does not provide a back stop to the provincial sector anymore. **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) has supported liquidity for corporate bonds rated BBB and higher. However, the central bank has bought a relatively small amount of corporate securities to date (C$210 million par as of May 14), indicating the impact is limited. It is widely expected that the BOC will end its Corporate Bond Purchase Program (CBPP) on May 25th 2021Similar to the provincial sector, dealers will aim to provide liquidity in favorable capital market conditions.	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. BBB- corporates are trading by appointment, particularly in the energy sector. Inventories are reduced and

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	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). • In the aftermath of the feral budget there were indications that Canada will issue only C$1 billion in RRBs in the current fiscal year. This will result in net negative supply (BOC buying program less new supply). The next RRB auction will be a 30-year bond on June 2. There is expected to be temporary liquidity related to the auction on that specific day. Liquidity remains challenging as dealers hold very limited inventories in RRB securities.	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.