ALLIANCEBERNSTEIN®

May 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 7 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 lower than recent averages again in the week ended May 7 with much of Asia out on holiday. The developed market rates staged a rally with UK Gilts seen as the best performer rallying 7 bp. The market was very bearish heading into the BOE meeting on Thursday May 6. While the BOE was hawkish it was less so than the market was expecting hence the squeeze in duration and outperformance of the 5 year. • US Treasuries also rallied by 5 bp after a string of disappointing tier one economic data. ISM and Markit PMI surveys disappointed to the downside and the payroll number missed forecasts by 734k jobs. • There were several times throughout the week when the market experienced flash short covering and steepener stop outs, the most glaring of which occurred after the payroll report on Friday. • The weaker than expected US economic data also resulted in the market repricing the path of the official rates. The market is now pricing 12.5 bp (or half a hike) in 2022 and 54.7 bp (or over 2 hikes) through 2023. Prior to last week there was 75 bp of cumulative hikes priced through the end of 2023. The repricing of the FOMC OIS market also coincided with macro 5s30s steepeners being added to by institutional investors; reaching the technically important 150 bp steep target. • 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.	

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<tr><th>Sector</th><th>Liquidity Trading Comment</th><th>Bid-Ask Spreads</th></tr>
<tr><td>Investment Grade (IG) Corporates</td><td>US IG
The US IG cash bond market continued to trade sideways throughout most of the week ended May 7 but set new YTD tights on Friday reaching 87 bp (1 bp tighter WoW).
Supply picked up relative to the prior week, with issuers coming out of blackout and printing $28 billon. Technicals remain very supportive with deals 3.5x oversubscribed despite pricing with negative concession and bidding 1 bp tighter on average in the secondary market.
Investors still have cash on the sidelines and the positive momentum on flows continued with another $3.85 billion of inflows during the week.
Flows from Asia were relatively quiet at the beginning of the week but picked up in the latter half of the week as Asia returned from the holidays and became buyers of long-end paper (mainly driven by flows from Taiwan).
In the secondary market, dealers were lifted of another $1.9 billion of risk driven by better buying in the front end (this followed the $3.5 billion of paper they were net lifted last week). In line with the broader macro, we saw muted reactions in spreads following the very weak payroll data announced on Friday.
Looking ahead, supply is expected to pick up next week with the street calling for $40-45 billion.
Euro IG
Once again, EUR IG spreads were mostly unchanged amid low trading volumes during the week ended May 7. GBP corporates were also fairly stable.
The real estate sector outperformed again with some high beta names up to 5 bp tighter. Meanwhile, the oil sector underperformed with accounts selling risk to make room for the new dual-tranche issue from ENI.
Supply was reasonably light during the week at approximately €11 billion and book coverage was between 2x and 5x oversubscribed. Most new deals performed well in the secondary market ending the week 1-5 bp tighter.
The market saw AT1 supply from notoriously opportunistic issuers: DB and Santander. Neither of them have called their deals in the past when they viewed it to be uneconomical. Despite this, the market allowed these issuers to achieve aggressive pricing with minimal compensation for the increased extension risk that the new low reset deals possessed. Both deals performed in a lackluster fashion and were at/below reoffer.
REIT Preferreds
Liquidity in the REIT preferred market is typically limited under more normal conditions given the retail nature of the investor base.</td><td>Bid/ask conditions in the IG market are back to normal</td></tr>
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	• 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 May 7. • The focus largely remained on the primary market and the earnings season. The secondary market was quiet. • 13 deals priced in the primary market for a total of $10.73 billion. This is roughly in line with the YTD weekly average of $11.5 billion. The deals continued to close with books multiple times oversubscribed and trading up in the secondar market. • The index was 3 bp tighter, with spreads ending the week at 289 bp. CCC-BB were 17 bp tighter ending the week at 270 bp. Energy continued to outperform as commodities rallied. **Euro HY** • The primary market remained in focus in Euro HY during the week ended May 7. The secondary market has become increasingly muted. We've seen some selling to fund new issues but flows remained two way and—taken in aggregate—the price action was generally sideways. The primary market continues to see strong demand with economy reopening names performing outperforming. We expect the new issue calendar to continue to remain busy. **CDX HY** • CDX HY traded a touch better along with the macro tone during the week ended May 7. $110 is still the resistance level for CDX HY and CDX HY underperformed macro in the rally. • Trading volumes began to normalize following the recently busy roll period. • Bid/ask spreads have declined to pre-crisis levels.	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.
Emerging-Market Debt (EMD)	**Hard Currency EM** • EM credit was generally better bid throughout the week ended May 7, with index spreads grinding 5 bp tighter and reaching the weekly tights along with the rally in rates after the US payroll report. • El Salvador was in focus this week as bonds traded down 10 points on Monday following president Bukele's removal of the nation's top judges and attorney general. Later in the week, the curve re-traced 90% of the sell-off following several investor calls with the Minister of Economy in which concerns over losing a potential IMF program were sufficiently allayed. • Asian lifers continued to add across underperforming Latin America IG sovereigns such as Peru and Colombia while real money accounts who bought the Colombia new issue 2 weeks ago were happy to feed the demand.	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions

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	• Flows into the asset class picked up and we saw anecdotal evidence of buying programs across HY and IG. **Local Currency EM** • The local EM rates market mostly tracked US Treasuries. Liquidity remains adequate but volatility is to be expected.	
Asia	**Asia Hard Currency** • Asian primary issuance picked up slightly in the week ended May 7, with China issuers returning to the market. • With Japan out during the first three days of the week, the lack of US Treasuries in the Asia morning kept trading volumes low. • The China TMT sector traded tentatively on concerns of increased regulatory scrutiny onshore. • Indonesia High Yield prices were 1-4 points higher in the commodity space. **Asia Local Currency** • Asian local currency bond mostly grinded lower throughout the week ended May 7. • Malaysia 30-year bond auction on Friday saw good demand with the BCR (bid to cover ratio) of 2.433.	Liquidity conditions are normal for Asia credit Liquidity conditions are normal for Asia local currency debt
Securitized	**CMBS** • CMBS spreads were largely unchanged in the week ended May 7. 10-year AAA rated tranches tightened 1 bp, while BBB- tranches tightened 2 bp. The rest of the capital stack remained unchanged. • $1.4bn bonds were presented to the market for bid, which is in line with recent volumes. One conduit deal priced. All classes were oversubscribed and priced at or through initial guidance. The issuance calendar is expected to remain modest. The technical backdrop continues to be positive as manageable primary and secondary supply is met with robust demand. • Liquidity remains more than adequate. 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 lag the cash market. Most series and tranches widened during the week. Trading volume remains low, resulting in periods of limited liquidity. However, bid/offer spreads remain unchanged. **ABS** • The ABS primary market priced six transactions for the week ending May 7 totaling $2.5bn across credit card, whole business, railcar, aircraft, and unsecured consumer loan sectors. ABS year-to-date supply now stands at $82.5bn compared to $56.8bn recorded in 2020 over the same period. • Supply shortage remained the key driver for ABS spread tightening over this past week and BWIC (bid wanted in competition) volumes remained below average. The strong technicals have put ABS	

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	spreads back to the tights of the pre-pandemic expansion cycle across many sectors. AAA credit card ABS (3-year) narrowed by 1bp last week, back to swaps +6 bp, versus a range of 6-9 bp this year. Additionally, BBB subprime auto ABS (3-year) tightened by 5 bp on the week, back to swaps +65bp, breaking out of the 70-95bp range previously seen this year. Furthermore, 65bp is the all-time tight since tracking this benchmark spread series. • ABS spreads were able to tighten despite the volatility in underlying rates after the weaker non-farm payroll report. Just as the quarter-end supply pressure (rather than rates) was the main driver for ABS spread weakness in March, supply scarcity thus far in 2Q21 is driving the recovery of ABS spreads, with rates once again only a tangential factor. **CRTs** • The week ended May 7 saw the same themes extend from previous weeks in the CRT market. Supply was met by strong demand across the stack. $1.2 billion traded basically flat week over week in secondary trading. The one bright spot was mortgage insurer last cash flow tranches that continued to play catch up after lagging during late April's rally. Bonds in this space are up anywhere between 2-5 points since late April. • 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 7. All dealers are working several deals at once to clear them all. This dynamic has kept the primary market spreads artificially wide to where the secondary market is trading but as this supply is cleared, we should see primary spreads tightening and follow secondaries' lead. • CLO secondary market continues to trade well. Any supply, especially down the stack is being met with very strong demand and that has driven secondary spreads to decouple somewhat from those in the primary market. Secondary spread levels are now trading inside the primary clearing levels. • Levels on the week stood at 110 bp for AAA-rated spreads; AA-rated spreads at around 155 bp; A-rated at 190 bp; BBB-rated at 290bp; and BB around 615-625bp/par. • Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels.	

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	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 7. 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	• According to last week's refunding statement, Treasury plans to reduce their TGA (Treasury General Account) to $450 billion by the August 1 debt ceiling deadline. They plan on achieving this with net reductions in T-bill supply of about $150 billion by that deadline. • During the week ended May 7, we saw the first ever BSBY (Bloomberg Short Term Yield Index) swap vs SOFR trade in the market. BSBY is said to be a viable replacement benchmark to LIBOR. It incorporates the credit risk and term components that SOFR lacks. • 1-month LIBOR set at 0.098%; 3-month LIBOR set at 0.168%. • SOFR set at 0.01%. Fed Effective set at 0.06%. Repo rates were pinned at 0%. • Usage of the Fed Reverse Repo facility (RRP) continued at $150-200bn per day. • Government money market funds had $17bn of outflows in the 7 days ended May 7. Prime funds were flat over the same period.	
US Municipals	• The market continued to be flushed with cash although flows slowed substantially in the week ended May 7 as all in yields remain tight. • We continued to see strong demand in the primary market and low levels in secondary BWs (bid wanted). HY continued to have a strong bid with funds flush with cash and little new issuance. • Odd lot penalties remained consistent near their lows but started creeping up towards the end of the week.	
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$248.7 billion to support liquidity in Government of Canada markets through May 5th. 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.	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

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	• 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 (as of May 5th). 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. • 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) 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 5), indicating the impact is limited. It is widely expected that the BOC will end its Corporate Bond Purchase Program (CBPP) on May 25th 2021. "Corporate bond markets are functioning well and as a result tenders are being reduced." Similar to the provincial sector, dealers will aim to provide liquidity in favourable capital market conditions. **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.	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 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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