

## Market Update – Fixed Income Trading Liquidity For the Week Ended 25 September 2020

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	<ul> <li>Global developed market interest rates rallied, and</li> </ul>	Bid-offer spreads for
	yield curves flatted globally in the week ended	on-the-run US
	September 25. Concerns about a second	Treasuries has
	lockdown in parts of Europe and the UK amid	improved significantly
	growing infection rates both in Europe as well as	and are in line with pre-
	some US states prompted a sharp selloff in risk	crisis conditions.
	assets, compounded by an uncertain backdrop	
	surrounding the upcoming US election and	Off-the-run Treasury
	contentious political environment.	bonds that are not in
	<ul> <li>The most important theme in the market last</li> </ul>	cheapest-to-deliver
	week was that probability of another tranche of	futures baskets are still
	fiscal stimulus being passed pre-election drifting	trading with bid/ask
	lower despite the expiration of many government	spreads 2-3x wider than
	benefits. There are concerns that monetary	pre-covid-19 levels.
	support has peaked for the time being, as central	
	bankers continue to call for more fiscal measures	TIPs bid/ask is 1.5x
	and the next FOMC meeting comes post-election	wider vs pre-crisis
	on November 5.	levels
	<ul> <li>Investors unwound many post-covid-19 recovery</li> </ul>	
	trades, including covering of short duration	
	positions and a reduction in curve steepening	
	trades. Inflation breakevens fell and swap spreads	
	widened, especially in the long end, as reduced	
	probability of fiscal stimulus meant less	
	government supply to fund it.	
	<ul> <li>There were no meaningful changes on the liquidity</li> </ul>	
	front in nominal bonds from the prior week	
	though volumes were low. Federal Reserve bond	
	purchases stand at \$80 bn US Treasuries and \$60	
	bn MBS per month.	
	<ul> <li>Liquidity in the TIPS market was impaired as</li> </ul>	
	reduced fiscal stimulus expectations led to a	
	selloff. The selling became one-sided at points	

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Sector	Liquidity Trading Comment	Bid-Ask Spreads
	and bid/offer spreads on off-the-run bonds	•
	widened a couple ticks and depth dropped.	
Investment Grade (IG) Corporates	<ul> <li>US IG underperformed stocks during the week ended September 25, with cash bond spreads moving wider. The index moved 12 bp tighter, as market sentiment took a sharp turn mid-week, with \$35bn of supply in just 2 days and ETF outflows.</li> <li>There is still demand for IG paper, as the market saw inflows during the week, but demand is not as robust as seen in the last few weeks as investors are now more cautious.</li> <li>Dealer willingness to take on risk is low, adding further to the "gappy" moves to find clearing levels.</li> <li>The Fed's latest weekly report showed that Fed</li> </ul>	US IG spreads are generically 2x wider vs normal market conditions  AT1/Preferreds are 2x wider vs normal market conditions
	purchases slowed even further from the previous week, buying only \$45 million for its secondary market purchase program (SMCCF). This is the second-lowest week of purchases yet and remains at levels well below the pace when the program began when the Fed bought an average of \$1.4bn/week for the first seven weeks.  • Bid/ask spreads remain wider than pre-crisis levels.	
	<ul> <li>European IG</li> <li>Despite the shift in sentiment during the week ended September 25, liquidity remained reasonable. Although the market was softer, it seemed that the IG credit and AT1 markets were being led lower by other markets, as opposed to being the source of the pain. There was only modest cash raising activity (unlike March), which was easily absorbed by buyers/the ECB, keeping liquidity fairly reasonable. One emerging theme is that "the street" is increasingly reluctant to take risk heading into year end, a trend that is expected to continue.</li> </ul>	
	REIT Preferreds  • Liquidity in the REIT preferred market is typically limited under more normal conditions given the retail nature of the investor base. Current liquidity is better than in March and April but is still not back to normal.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	<ul> <li>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.</li> <li>Trading volume is trending low since valuations</li> </ul>	
High Viold (HV)	continue to recover.	Pid/ack caroade yary by
High Yield (HY) Corporates	<ul> <li>Secondary market trading was choppy during the week ended September 25 amid equity market volatility. Most of the selling of risk in the secondary market was from ETF arbitrage/debt-equity sellers with "real money" investors on the sidelines. While the headline number for outflows was large at \$4.9bn, only \$600mn was from mutual funds and most of the ETF outflows were believed to be from arbitrage investors and not retail driven.</li> <li>Compared with prior weeks, the new issue calendar was light, with \$6.75bn in new deals pricing. All 12 bonds were priced at the tight end of initial price guidance, with all but 3 deals oversubscribed.</li> <li>The lack of consequential selling by "real money" investors and their participation in new issues indicates that cash balances are still supportive to</li> </ul>	Bid/ask spreads vary by issuer but generically:  BB-rated securities: 0.75-1.25 points, which is 0-0.25pt wider versus normal market conditions  B-rated securities: 1-1.5 points; 0 to 0.5pt wider vs normal  CCC-rated and below: 1.5-2.5 points; 0 to 1pt vs normal  CDX HY bid/ask is 1-2x vs
	the market.	normal conditions.
	<ul> <li>Euro HY</li> <li>During the week ended September 25, it was a week of pricing lower on little volume. There was not much actual selling from "real money" investors, with most selling pressure led by ETFs and retail investors.</li> <li>CDS also underperformed as there was a sizeable amount of long risk positions in "XOVER" index unwind rather than rolling into the new contract which began trading last week. But this index flow also did not seem indicative of "real money" investors rushing to reduce risk, as most of the derisking via XOVER was reportedly led by CTAs (commodity trading advisers).</li> <li>Taken altogether, the underlying market technical still seem firm as cash balances built over the past couple months have put investors in a comfortable spot to withstand volatility and near-term outflows (which occurred for the first time in months last week).</li> </ul>	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	The new issue market was slower, with only 3	210110110
	"niche" deals coming to market.	
	All-in-all the ability to transact in the euro HY	
	market seems healthy but overall volumes are on	
	the light side for September.	
	CDX HY	
	<ul> <li>CDX HY traded weaker along with the broader</li> </ul>	
	credit market during the week ended September	
	25. Investor positioning in CDX HY leans toward	
	long, which led to negative technical on the	
	current series ahead of "roll week", as the current	
	series is expected to be for sale against the new	
	series 35 launching on September 28.	
	<ul> <li>Trading volumes have picked up as the market</li> </ul>	
	heads to the roll.	
	Bid/ask spreads have declined but remain elevated	
	relative to pre-crisis levels.	
Emerging-	Hard Currency EM	50.4.1C
Market Debt	EM credit had its worst week since the beginning	EM IG sovereigns are
(EMD)	of the covid-19 crisis as global macro risk moved	1.25-1.5x wider vs
	lower amid concerns over new lockdowns, some	normal market conditions
	questionable messaging from Fed speakers and	conditions
	consensus forming that another fiscal stimulus	EM HV coversigns are
	deal in the US won't get done until after the US election. The JPMorgan EMBI Global Diversified	EM HY sovereigns are 1.25-1.5x wider vs
	index spreads widened 30 bp on the week.	normal market
	Decompression continued to be the theme, with	conditions
	high yield index spreads wider 60 bp in the past 2	conditions
	weeks, while investment grade index spreads were	EM IG corporates are
	15 wider.	1.25-1.5x wider vs
	ETFs were trying to sell bonds throughout the	normal market
	week, with 2 days of ~250mn outflows, the largest	conditions
	combined outflows since March; active managers	
	were also net sellers of risk.	EM HY corporates are
		1.25-1.5x wider vs
	Local Currency EM	normal market
	Liquidity is close to normal.	conditions
Securitized	CMBS	
	CMBS spreads widened modestly on healthy trading	
	volumes during the week ended 25 September.	
	Levels held for most of the week before softening as	
	the weekend approached. 10-year AAA-rated bonds	
	were 3 bps wider, while A-rated bonds were 5 bps	
	wider. Approximately \$2bn of bonds were out for	
	bid, nearly double the amount versus the prior	
	week. No new issues priced, and only modest	
	issuance is expected in October.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
Jedio	<ul> <li>Liquidity at the top of the capital stack remains strong and is improving in mezzanine tranches. Bid/offer spreads remain the same: AAA bid/offer spreads have retraced the post-covid-19 widening, while AA/A and BBB-rated classes remain approximately 2x their pre-covid-19 levels.</li> <li>In CMBX, there has been a small increase in trading of more recent vintage mezzanine, however volumes in series 6 remain light. Levels ended the week softer in conjunction with other risk assets. Despite light flows, bid/offer spreads are moderating, with A.6 and BBB6 at approximately 2x and BB.6 at ~2x their pre-covid-19 levels.</li> </ul>	
	<ul> <li>The ABS primary market priced eight transactions for the week ending September 25 totaling \$7.3bn across container, private credit student loan, equipment, auto fleet, lease and prime auto loan ABS deals. ABS year-to-date supply now stands at \$139.5bn compared to \$174.4bn recorded in 2019 over the same time period.</li> <li>ABS investor appetite remains unquenchable as evidenced in the upsizing of deals and final pricing prints at or through the initial guidance range. Indicative benchmark ABS spreads remained largely stable on the week with 2-5bp of tightening in private credit student loan and 1 bp of tightening in fixed credit card ABS spreads.</li> <li>In the week ahead, four deals are premarketing for a total of \$1.4 bn and 4 issuers that have filed 15G forms as we head into a new quarter.</li> </ul>	
	<ul> <li>CRTs</li> <li>A new issue STACR deal (STACR 2020-HQA4) priced on Monday during the week ended September 25. The deal was significantly oversubscribed at ~10x. Last cash flow (LCF) bond spreads were 315bp and B1 bond spreads were 525bp. Dollar prices on the LCF bonds traded up 20 ticks on the break and B1 bonds up roughly one point.</li> <li>Secondary market spreads were marginally wider during the week ended September 25.</li> <li>Liquidity remains robust in all subsectors within CRTs. With quarter end approaching, there was some dealer selling, particularly of 2018 LCF and B1 bonds which they had built positions in.</li> </ul>	

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	Legacy Non-Agency RMBS	-
	<ul> <li>Legacy RMBS have recovered back to pre-crisis</li> </ul>	
	levels. After having widened to the 1000-1200 bp	
	range in March, spreads are currently trading at or	
	around 200 bp discount margin currently.	
	CLOs	
	Spreads at the top of the CLO capital stack drifted	
	wider in sympathy with the underlying loan market	
	during the week ended September 25. Spreads were	
	at a post-crisis tight in the low L+120 range in	
	secondary trading roughly two weeks ago and have	
	moved to the high 130s or low 140s for top tier	
	managers. Second and third tier managers are	
	trading 10-25 bps behind that level. Mezzanine debt	
	has held up in the face of AAA widening. Primary	
	market spreads are still printing in the low to mid	
	700bp range/par which is unchanged over the last	
	two weeks.	
	Liquidity remains robust. Bid/ask spreads are at or	
	around to pre-crisis levels.	
	Agonou MPS	
	<ul> <li>Agency MBS</li> <li>Bid/ask spreads in Agency MBS have returned to</li> </ul>	
	pre-crisis levels, driven tighter by the combination of	
	Fed buying and increased investor interest. Bid/offer	
	for lower coupon bonds is just ½ of a tick wide.	
Money Market	Headlines around prime funds converting to	
iviolicy ividiket	government money market funds spurred ~\$11bn in	
	outflows from September 16 to September 24 (per	
	ICI data). Recent outflows are not material relative	
	to the ~\$730bn market size. Government money	
	market funds saw inflows of \$10 billion in the 7 days	
	ended September 24. The much talked about	
	widening in the commercial paper space has not yet	
	materialized, and in fact CP continues to tighten	
	with the T-bill curve. 3-month LIBOR set an all-time	
	low level on September 25 of 0.22%. There is no	
	pressure on issuance with plenty of demand for	
	paper. Some highly rated CP is trading through T-	
	bills and prime funds have been in the Treasury	
	markets due to lack of CP spread. There has been	
	heavy buying across the entire T-bill curve. T-bills	
	have tightened 2-3 bps week-over-week, with some	
	off-the-run issues 5 bp tighter. With government	
	stimulus still in gridlock this reduces the probability	
	of increased T-bill supply and therefore widening of	
	the curve.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
US Municipals	The municipal bond new issue calendar began to	·
	weigh on the high-quality segment of the market	
	during the week ending September 25. With	
	expectations of a heavy October, pre-election,	
	recent issuers are returning to the primary market.	
	Despite increased primary issuance, secondary	
	market volumes are low, with flows remaining	
	positive overall, indicating limited need to raise cash	
	and investors waiting for primary issuance to put	
	their cash/coupons to work.	
	<ul> <li>There was continued weakness in the high yield</li> </ul>	
	market, with 4 recent speculative deals not getting	
	done. Some benchmark spreads such as Illinois or	
	Buckeye are wider by 30 to 40 bps.	
	<ul> <li>Odd lot penalties have been creeping up, with</li> </ul>	
	discounts to round lot bid side evaluations averaging	
	around 0.5-2 points but benchmark levels continue	
	to remain relatively stable.	
Canadian	Federal	Federal: bid/ask typically
Market	Liquidity is best in benchmark issues for block sizes	+0.5 bp but for the long
	of <=CAD25 million; liquidity has improved in off-	end of the curve, it can
	the-run, high coupon bonds with Bank of Canada	be more depending on
	(BOC) bond buying. Comments by central bank	volatility (risk off
	Governor Macklem that the BOC will buy at least \$5	markets) and size
	billion of Canadian government bonds per week	outstanding. Off the run
	until the recovery is well underway should continue	Canadas can have a 10
	to support market liquidity. The fact that the BOC	bp bid-ask given small
	will buy more bonds at the long end of the curve	outstanding size in these
	should support liquidity at the 30-year part of the	securities.
	yield curve.	
	The BOC has purchased C\$132.5 billion to support	
	liquidity in Government of Canada markets since the	
	purchase program started on March 27 through	
	September 23.	
	Provincial	Provincial: concession of
	Liquidity is best in benchmark bonds from Quebec,	
	Ontario and British Columbia.	+1 bp and more on size > CAD 25 million,
		particularly at the longer
	<ul> <li>Concessions are requested so dealers will take less- liquid positions.</li> </ul>	end. In risk-off markets,
	Secondary-market liquidity in oil-generating	liquidity is drying up and
	provinces (Newfoundland, Alberta, Saskatchewan)	spreads can widen
	has improved with WTI around US\$40 per barrel.	depending on market
	Most dealers will not bid aggressively on off-the-run,	tone.
	high coupon provincial issues, they will do agency	tone.
	trades, even with the Bank of Canada's buying	
	program of provincial debt.	
	program or provincial dest.	
		<u> </u>

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	<ul> <li>The BOC has purchased C\$8.8bn in par value year to date through September 23 within their provincial buying program to support liquidity, but BOC participation has not been meaningful in this sector in recent weeks.</li> </ul>	
	<ul> <li>IG Corporates</li> <li>Limited liquidity, particularly during risk-off trading days can impact pricing; many dealers are maintaining low balance sheet inventories, so will not provide bids in many sectors.</li> <li>Trading on an agency basis for high-beta issuers. The market has improved in sectors such as banks and telecom companies.</li> <li>The central bank has bought a relatively small amount of corporate securities to date (C\$150 million par), indicating the impact is limited. The central bank did not buy additional bonds in recent weeks (as of September 23). BBB- bonds are trading by appointment unless there is a new issue.</li> </ul>	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 estimate bid/ask could be as high as +20bps on BBB Dealers may refuse to bid in a risk off market with gaps in spreads.
	<ul> <li>Real Return Bonds (RRBs)</li> <li>The C\$400 million RRB auction of the long Canada 0.5% Dec. 2050 on September 2 provided liquidity in the benchmark RRB bond for a limited period in the benchmark RRB bond.</li> <li>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 program began on May 27. The BOC bought a total of C\$700mn with C\$100mn per line of the 7 Canada RRBs from 2021 to 2047. Even with the central bank buying net C\$400mn of Canada RRBs, liquidity</li> </ul>	Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet.
	remains challenging as dealers hold very limited inventories, if any, of these RRB securities. Trading a block can only be done on an appointment basis.	

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