

## Market Update – Fixed Income Trading Liquidity For the Week Ended 5 March 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 March 5, global rates were mixed, with	
	German bunds and UK gilts staging a 4-5bp rally, while US Treasury	
	yields sold off by 15 bp in a bear steepening move.	
	<ul> <li>Financial markets remain optimistic on the reopening trade. Friday</li> </ul>	
	saw the release of a stronger-than-expected February US	
	employment report. The \$1.9trn fiscal spending bill has passed in	
	the US Senate and moves back to the House of representatives for	
	voting on Tuesday. Covid-19 vaccination rates continue to pick up	
	globally in developed markets and case numbers are falling.	
	<ul> <li>Rate volatility as measured by the MOVE index was lower by 8% on the week.</li> </ul>	
	<ul> <li>The market continues to push back on the Fed stance of being on</li> </ul>	
	hold until 2023. Rate futures have pulled forward the first 25bp of	
	Fed tightening to December 2022 (up from the first quarter of	
	2023) and the second to June 2023 (up from fourth quarter of 2023).	
	Fed leadership continued to indicate their desire to let current	
	reflation dynamics play out in the market, provided that the rise in	
	yields does not cause a disorderly tightening in financial conditions.	
	Federal Reserve bond purchases continue at \$80 billion US	
	Treasuries and \$40 billion MBS per month.	
	In the coming week, the market will have to contend with \$120bn	
	of US Treasury supply in 3-year, 10-year and 30-year maturities.	
	Market participants are looking to the 10-year auction to alleviate	
	some of the specialness of the 10-year in the repo markets.	
	Liquidity conditions remain choppy with bid-offer spreads varying	
	widely – particularly around Fed Chair Powell's remarks on	
	Thursday.	
	<ul> <li>While transaction sizes are smaller than they were a few</li> </ul>	
	weeks ago, the observable bid-offer has been in line with	
	historical averages in on-the-run bonds for most of the	
	trading session – with the exception of the episodic	
	volatility around Powell's event on Thursday.	

o Transaction costs in off-the-run bonds remain stubbornly wide vs. historical averages. But there has been some improvement in bid-offer spreads - from 12-13 ticks at the February 26 wide levels to 4-5 ticks on March 5, compared with just 2 ticks prior to the current liquidity deterioration earlier in February (a tick is 1/32 of a point).  O Deep off-the-run bonds where the Fed SOMA (System Open Market Account) holds nearly 70% of the outstanding issue (the capped amount) are less liquid than other bonds as they are no longer eligible for Fed buybacks.  Depth in on-the-run cash 5-year and 10-year Treasuries has improved by 40-45% from the worst levels on February 26.  Investment Grade (IG)  The US investment-grade cash bond market drifted wider throughout the week ended March 5, with the index closing 6bp wider week-over-week. The move wider escalated in the latter half of the week with the index closing 40p wider on Friday.  Supply stole the spotlight with \$67bn pricing during the week, overwhelming expectations of \$40bn.  The technicals remain supportive, as the market was able to digest the large supply with deals still well oversubscribed despite pricing with minimal concessions. There were signs of supply indigestion towards the latter half of the week with deals beginning to price with larger concessions and lackluster performance on the break.  With the sell-off in interest rates and Treasury curve steepening, credit curves remain flat. The market received another inflow of \$5.2 bn; Asia investors remained better sellers.  Supply for the week ending March 5 is expected to be \$50bn+, with the wildcard being the anticipated supply from telecom companies following the results of the c-band auction announced last week.  Euro IG  The euro IG market had a volatile week ended March 5, with eyes remaining fixed on interest rates. The sector continues to demonstrate a resilience to the volatility with price action and liquidity fairly benign on both weaker/stronger days.  After a lighter start to the year, there	Sector	Liquidity Trading Comment	Bid-Ask Spreads
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REIT Preferreds  • Liquidity in the REIT preferred market is typically limited under		<ul> <li>The euro IG market had a volatile week ended March 5, with eyes remaining fixed on interest rates. The sector continues to demonstrate a resilience to the volatility with price action and liquidity fairly benign on both weaker/stronger days.</li> <li>After a lighter start to the year, there was heavier supply during the week with ~20bn EUR coming to market, with deals materially less oversubscribed compared with prior weeks. New issue premium crept up and performance on the break was mixed.</li> <li>After a robust week last week, AT1/corporate hybrids began to take their cue from equities and liquidity felt thin, but better than in the US Treasury market.</li> </ul> REIT Preferreds	

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	<ul> <li>Dealers are only providing balance sheet capacity on select issuers,</li> </ul>	
	so for many issuers, trades must be done on an agency basis;	
	trading is therefore limited.	_
High Yield	US HY	Bid/ask spreads
(HY)	Once again, the high yield market traded in line with the interest	vary by issuer but
Corporates	rate move. The index spread was flat during the week ended	generically:
	March 5 at 325 bp. The move down in dollar price in rate-sensitive	
	bonds in the latter half of the week was orderly. Most selling later	BB-rated
	in the week was driven by ETF arbitrage investors; HYG reached a	securities: 1
	40bp discount to NAV on Thursday.	point, which is in
	The new issue calendar was largely unphased by rate-induced  velocities £11,215 by priced across 18 deals, in line with the 2021.	line with normal
	volatility. \$11.215bn priced across 18 deals, in line with the 2021	market conditions
	average weekly issuance of \$11.1bn. Books continue to be largely oversubscribed (3-8x). Deals mostly traded up 1-3 points on the	B-rated securities:
	break. Higher-quality, longer-maturity bonds were no exception.	1 point, which is
	The spread between CCC and BB-rated bonds was 6bp tighter to	in line with
	312 bp.	normal market
	312 υμ.	conditions
	Euro HY	Conditions
	During the week ended March 5, it was a benign trading week in	CCC-rated and
	euro HY. Secondary market activity was not overwhelming and the	below: 1.5points
	reaction to interest rate volatility was rather contained. There has	which is in line
	been some pressure on larger-cap, BB-rated issuers with higher	with normal
	spread duration as well as some large-cap tighter-spread single-B-	market conditions
	rated non-cyclical issuers. But overall selling has not been	
	overwhelming and appears to be mostly ETF-driven. Flows have	CDX HY bid/ask is
	been negative, so investor cash balances appear to be eroding on	in line with
	the margin. "Real money" investor involvement seems limited and	normal
	forced selling seems limited as well.	conditions.
	CDX HY	
	<ul> <li>CDX HY traded better with stocks, finishing the week ended March</li> </ul>	
	5 60 cents higher and outperforming cash for the first time in a long	
	while.	
	Trading volumes were above recent averages, as is typical in	
	periods of macro volatility.	
Farancia	Bid/ask spreads have declined to pre-crisis levels.  Head Common as 500.	
Emerging-	Hard Currency EM	EMIC and UV
Market Debt (EMD)	<ul> <li>For the second week in a row EM Credit played second fiddle to core interest-rate volatility during the week ended March 5 as the</li> </ul>	EM IG and HY sovereigns and
(CIVID)	JPM EMBI Global Diversified Index widened only 4bp. Under the	EM IG and HY
	hood, there were bouts of EM high yield selling by hedge funds and	corporates are
	ETFs, while investment-grade bonds continued to face pressure	back to normal
	from selling by the Asia buyer base.	market conditions
	<ul> <li>EPFR flow data showed a small outflow from EMD overall; within</li> </ul>	market conditions
	that, hard currency outflows of ~\$2bn were the largest seen since	
	March2020.	
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Sector	Liquidity Trading Comment	Bid-Ask Spreads
	Local Currency EM	
	The local EM rates market mostly tracked US Treasuries or German	
	bunds. Liquidity is adequate but volatility is to be expected.	
Asia	Asia Hard Currency	Asia hard
	Primary market activity slowed in Asia credit index during the week	currency IG and
	ended March 5, with \$4bn issued, down from ~8bn the prior week.	HY credit is back
	Nearly all new issues were trading "under water" by the end of the	to normal
	week.	conditions.
	Investment grade spreads outperformed high yield amid the	However, interest
	weaker macro sentiment and interest rate volatility.	rate volatility may
	China IG (+2 to 3 bp) held in better than India IG (+10 to 15bp)  during the great land area is (India bish violate held in better than	cause pressure
	during the week. Indonesia/India high yield held in better than	points to appear.
	China HY property, which was hurt by concerns that China's	
	reflation trade may face increasing headwinds as well as challenges	Asia local
	within Local Government Financing Vehicles (LGFVs) in certain provinces.	currency debt is
	provinces.	back to normal
	Asia Local Currency	market conditions
	Global interest rate pressures weighed on Asia local currency bond	market conditions
	yields.	
	Concern over China LGFVs as well as allusion to gradual stimulus	
	reduction during the annual National People's Congress on	
	Thursday/Friday weighed on China risk assets, with the CSI stock	
	index down 3% on the week, although interest rates were stable.	
	Another weak Indonesia auction on Tuesday saw sustained	
	pressure on Indonesia government bonds, with 10-year yields now	
	above 6.7%.	
Securitized	CMBS	
	<ul> <li>During the week ended March 5, for the second week in a row,</li> </ul>	
	CMBS shrugged off broad market volatility to remain little changed.	
	Secondary market flows were modest, with approximately \$2bn	
	bonds presented to the market for bid, \$1bn fewer than the	
	previous week. One new issue priced, and some classes widened 2-	
	5bp in order for the deal to clear the market.	
	CMBX performance was mixed week-over-week. Recent vintage	
	series generally outperformed more seasoned vintages. Flows	
	were concentrated at the top of the capital stack. Mezzanine	
	tranches continue to trade sluggishly on limited volume.	
	Liquidity remains robust for AAA to A-rated CMBS classes while     bid/offer spreads for BBB rated classes remain approximately 2y	
	bid/offer spreads for BBB-rated classes remain approximately 2x their pre-covid-19 levels. On average, CMBX bid/offer spreads	
	remain unchanged, with CMBX A.6, BBB6, and BB.6 bid/offer	
	spreads approximately 2x their historical averages.	
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	ABS	
	The ABS primary market priced eleven deals for the week ending	
	March 5 totaling \$8.7bn across aircraft lease, railcar, container,	
	unsecured consumer, private credit student loan and prime and	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	non-prime auto loan sectors. Year-to-date ABS supply now stands	
	at \$45bn compared to \$43.7bn recorded over the same period in	
	2020. For the first time this year, issuance has surpassed the 2020	
	issuance tally, over the same year-to-date period. The second half	
	of March and first half of April is when the initial COVID-19	
	outbreak interrupted ABS issuance last year.	
	This year, quarter-end funding is expected to be heavy and the	
	2021 issuance pace will likely surpass 2020's pace. The current	
	March supply total for 2021 at \$8.7bn already exceeds the full	
	month March 2020 supply of \$7.2bn.	
	Indicative benchmark spreads in the secondary market remained	
	largely unchanged at/near cyclical tight levels during the week.	
	There are nine ABS deals totaling \$5.5bn that are in pre-marketing	
	for the week ahead.	
	CDT-	
	<ul> <li>CRTs</li> <li>The week ended March 5 was another where the CRT market had</li> </ul>	
	difficulty finding footing. Certain profiles – such as investment-	
	grade and short, extension-protected high WAC deals continued to	
	trade well, but anything exposed to a meaningful slowdown in	
	prepayment speeds and therefore a duration extension continued	
	to be weak.	
	Dealers have made some progress clearing out inventory and that     should improve the technical picture going forward Volumes were	
	should improve the technical picture going forward. Volumes were	
	down vs the average of the prior two weeks as investors got used	
	to the new normal of slower speeds in the sector. Below investment-grade last cash flow bonds were down around 0.5	
	points, B1 bonds down ~1 point and B2 bonds down anywhere from	
	3-5 points.	
	<ul> <li>Freddie Mac placed a 1.2bn new issue last week, with some</li> </ul>	
	difficulty. Pricing was widened from the initial guidance, even with	
	an M2 tranche that was investment-grade rated by S&P. The bonds	
	traded poorly on the break. Genworth is marketing a second MI	
	CRT deal in as many weeks. The deal is small and expected to price	
	during the week of March 12.	
	Secondary market liquidity remained challenged last week.	
	Motivated dealers were willing to engage buyers that were looking	
	for cheap bonds.	
	<ul> <li>Bid/ask spreads widened a bit but remain around pre-covid levels.</li> </ul>	
	Legacy Non-Agency RMBS	
	Legacy RMBS continue to trade well. After having widened to the  1000 1300 by range in March 2020, agreed a requirement trading.	
	1000-1200 bp range in March 2020, spreads are currently trading inside 200 bp discount margin.	
	CLOs	
	New issue (including refi/resets) continued to be the focus of the  CLO market during the week and ad March E. The level of activity.	
	CLO market during the week ended March 5. The level of activity seems to be accelerating given the large number of deals. Deals are	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	<ul> <li>getting done, but it appears that subscriptions are waning.</li> <li>Managers seem willing to accept marginal spread concessions to get deals done or to upsize deals.</li> <li>AAA-rated spreads for top-tier managers are in the 100 bp area; AA-rated spreads are around 140bp; A-rated are 165bp; BBB-rated are 290-300bp; and BB around 600-650bp.</li> <li>Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels.</li> </ul>	
	Agency MBS	
	<ul> <li>Bid/ask spreads in Agency MBS remain well supported, given the Fed purchases of \$40bn per month. Bid/offer spreads for current coupon bonds are trading at 1-1.5 ticks wide and the rest of the coupon stack is wider by 3-4 ticks.</li> </ul>	
Money Market	<ul> <li>An emergency measure put in place during the pandemic to unconstrain dealer balance sheets and improve liquidity by excluding cash and treasuries from the SLR (supplementary leverage ratio) calculation expires March 31st. This has the market concerned about liquidity dislocations around quarter end.</li> <li>The Treasury General Account (TGA) continued to fall during the week ended March 5. The passing of the \$1.9trn fiscal stimulus is expected to result in a near-term T-bill supply increase and a widening of the bill curve.</li> <li>SOFR set at 0.02%. Repo and T-bills continue to trade towards the lower bound of the corridor.</li> <li>Effective Federal Funds Rate set at 0.07%</li> <li>1-month LIBOR set at 0.106%, while 3-month LIBOR set at 0.183%.</li> <li>Government money market funds had \$4bn of outflows in the 7 days ended March 5. Prime funds had \$4bn of outflows over the same period.</li> </ul>	
US Municipals	<ul> <li>After last week's sharp negative move, investors in the municipal market used the higher yields to add risk and put excess cash to work during the week ended March 5. The market had a constructive tone all week which seemed to improve as the days wore on, despite periods of US Treasury weakness. For the week, benchmark AAA-rated yields were 6bp lower for 2-year maturities, 8bp for 5-year, and 3bp for 10- and 3-year maturities. ETF buying leant further support towards the end of the week.</li> <li>In the higher-yielding part of the market, conditions tightened with limited offerings as fund outflows stabilized and turned positive. Most higher-beta issuers were trading unchanged to within 5bp of prior week's levels. New issues in the high yield space saw strong subscriptions and follow through once freed up to trade.</li> <li>Overall, liquidity was back to strong conditions seen prior to the recent rate sell-off, with most block trades receiving bids through prior evaluations. Odd-lot discounts to round-lot bid side evaluations were generally 0.25 to 1.25 points depending on size.</li> </ul>	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
Canadian	Federal	Federal: bid/ask
Market	<ul> <li>Liquidity is best in benchmark issues for block sizes of &lt;=CAD25</li> </ul>	was at least 5
	million. Comments by central bank Governor Macklem that the BOC	cents in the 10-
	will buy at least \$4 billion of Canadian government bonds per week	year area, but for
	until the recovery is well underway should continue to support	the long end of
	market liquidity. The fact that the BOC will buy more bonds at the	the curve, it
	long end of the curve should support liquidity at the 30-year part of	remains relatively
	the yield curve.	wider at 15 cents
	The BOC has purchased C\$217.7 billion to support liquidity in	given the recent
	Government of Canada markets through March 3.	higher volatility.
	Liquidity at the end of February was limited/difficult with dealers	Off the run, high
	avoiding taking positions in Canadas as volatility resulted in losses,	coupon Canadas
	limiting their risk taking on their balance sheet.	were reported to
		have limited
	Provincial	liquidity in this
	Liquidity is best in benchmark bonds from Quebec, Ontario and	high volatility
	British Columbia.	period with much
	Depending on market tone, concessions may be requested in order	wider bid-ask
	for dealers to take less-liquid positions.	given small
	Most dealers will not bid aggressively on off-the-run, high coupon	outstanding size
	provincial issues, they will do agency trades, even with the Bank of	in these
	Canada's buying program of provincial debt.	securities.
	The BOC has purchased C\$16.7 billion in par value year to date	
	through March 3 within their provincial buying program to support	Provincial:
	liquidity. The BOC has cut their maximum weekly take out to	concession
	\$350mn from \$500mn and the buying program is done only once	reported to be
	per week. Dealers expect this purchase program to mature on May	above average on
	7, 2021.	size > CAD 25
	A continued rise in crude oil prices from current levels could help	million,
	liquidity in provinces where oil revenues will be pushed upward –	particularly at the
	Alberta, Saskatchewan and Newfoundland.	longer end. In
		risk-off markets,
	IG Corporates	liquidity is drying
	The latest Bank of Canada research highlights the lack of liquidity in	up and spreads
	Canadian corporate bond markets, which can impact pricing; many	can widen
	dealers are maintaining low balance sheet inventories, so will not	depending on
	provide bids in many sectors.	market tone.
	<ul> <li>Trading on an agency basis for high-beta issuers.</li> </ul>	
	The Bank of Canada's \$10bn buying program (focused on securities)	BBB- corporates
	of 5-years or less) should support liquidity for corporate bonds	are trading by
	rated BBB and higher. However, the central bank has bought a	appointment,
	relatively small amount of corporate securities to date (C\$210	particularly in the
	million par as of March 3), indicating the impact is limited. The BOC	energy sector.
	has announced that they will cut the maximum size of their tenders	Inventories are
	under the purchase program, reducing the max amount to C\$50mn	reduced and
	from C\$100mn previously	dealers are not
	Recent conversations with the deputy BOC governor indicated that	looking to
	they view the bond-buying program as a "back-up" facility. They do	increase their
Familian	not see a current need to intervene to provide liquidity to the BBB- estment Professional use only. Not for inspection by, distribution or quotation to, the gene	BBB- exposure.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	corporate market. Based on lack of intervention and deputy	Dealers may
	governor comments it is expected the program will be cancelled on	refuse to bid in a
	May 7, 2021.	risk off market
		with gaps in
	Real Return Bonds (RRBs)	spreads.
	The program to purchase Government of Canada securities in the	
	secondary market – the Government Bond Purchase Program or	Provincial RRBs
	GBPP – should help liquidity since it includes RRBs.	trading by
	<ul> <li>Trading in Canada RRBs continues to show a lack of liquidity.</li> </ul>	appointment
	Trading a block can only be done on an appointment basis.	only. Dealers do
	Of note, the last \$300mn auction of RRB 0.5% Dec 2050 was done	not hold these
	on February 10. On that day the central bank was not able to buy	securities on their
	its maximum of 6 Canada RRBs for a total of \$450mn with a target	balance sheet.
	of \$75mn per line item (from 2026 to 2047 maturities). In	Bid-ask is not a
	December, the BOC bought net \$34mn in RRBs compared with	reliable indicator
	\$122mn in February (BOC buying program less new supply).	for trading.
	<ul> <li>Liquidity remains challenging as dealers hold very limited</li> </ul>	
	inventories in RRB securities.	

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