

Market Update – Fixed Income Trading Liquidity For the Week Ended 2 October 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	 Global developed market interest rates sold off 	Bid-offer spreads for
	during the week ended October 2, with US	on-the-run US
	government bonds the worst performer as yields	Treasuries has
	rose by more than 4 bp. Curves also steepened	improved significantly
	globally. Price action was volatile with many	and are in line with pre-
	geopolitical cross currents.	crisis conditions.
	 Federal Reserve bond purchases stand at \$80 bn 	
	US Treasuries and \$60 bn MBS per month.	Off-the-run Treasury
	 Liquidity in the TIPS market improved slightly as 	bonds that are not in
	investors bought 5-year TIPS on fiscal stimulus	cheapest-to-deliver
	hopes. The tone in the market improved and	futures baskets are still
	there was decent two-way interest with	trading with bid/ask
	meaningful trading volume.	spreads 2-3x wider than
	 Depth in the Treasury market—defined as the sum 	pre-covid-19 levels.
	of the three bids and offers by queue position,	
	using the top 3 bids and offers in 10-year Treasury	TIPs bid/ask is 1.5x
	notes, averaged between 8:30 and 10:30am daily	wider vs pre-crisis
	(Sourced from BrokerTec)—has recovered to	levels
	levels last seen before the covid-19 crisis.	
Investment	US IG	US IG spreads are
Grade (IG)	 US IG cash bond spreads tightened during the 	generically 2x wider vs
Corporates	week ended October 2, as the macro backdrop	normal market
	stabilized relative to the previous week. The index	conditions
	moved 6 bp tighter.	
	 Supply remained light with only \$16bn pricing 	AT1/Preferreds are 2x
	throughout the week. Technicals remain	wider vs normal market
	supportive with continued inflows, light supply	conditions
	expectations in coming weeks, and dealers	
	remaining light on risk.	
	 Engagement levels are lower than previous weeks, 	
	which can be seen in the primary market, where	
	books were only 2.7x oversubscribed this week vs	
	YTD average of 4x oversubscribed. Liquidity is	

For Investment Professional use only. Not for inspection by, distribution or quotation to, the general public.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	expected to continue to be thin heading into year end as dealers want to preserve the solid performance achieved YTD. • Despite the volatility seen in the previous week, the Fed purchases under the secondary market purchase program (SMCCF) remained light as they bought only \$70mn (\$14mn/day). This is 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.	
	 European IG There was a firm tone in the Euro IG market during the week ended October 2, as the technical picture helped the market perform even when the macro picture was softer intra-week. Selling risk remained fairly easy, while better-value issuers proved difficult to source. Supply continues to underwhelm and is more focused on "niche" areas like ESG-oriented and hybrid issuers, which is expected to continue. 	
	 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. 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. Trading volume is trending low since valuations continue to recover. 	
High Yield (HY) Corporates	 US HY The US high yield market was better bid during the week ended October 2 despite equity market volatility. \$5.5bn of new issuance priced across 9 deals. This is nearly half the 2020 weekly average of \$10.4bn. Most books were oversubscribed (5-6x) indicating that "real money" cash balances continued to be healthy. Expectations for supply for the coming week are similar. The HY index moved 29 bp tighter to 511 bp. This compares to March 23 wide levels of 1100 bp and 	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

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	pre-covid-19 tight levels of 341 bp on Feb 13 and	-
	recent tight levels of 472 bp on August 5.	CCC-rated and below:
	 The CCC-BB spread was 30 bps wider to 559 bp. 	1.5-2.5 points; 0 to 1pt
	This compares to April 6 wide levels of 1139 bp	vs normal
	and pre-covid-19 tight levels of 613 bps on	
	February 13. This widening was entirely due to	
	compositional factors, as call announcements	CDX HY bid/ask is 1-2x vs
	moved spreads.	normal conditions.
	Euro HY	
	During the week ended October 2, generally the	
	euro HY market was firm. The market has been a	
	"passenger" to macro markets, with lower-than-	
	average volumes going through the market, but	
	generally investors are putting cash to work.	
	The new issue market was active with deals	
	generally pricing at the tight end of guidance and	
	trading unchanged to higher.	
	 Overall it is easier to sell than buy risk. Investors 	
	are selectively searching for value and there is	
	more talk than action about the known unknowns	
	that lay ahead (elections, Brexit, covid	
	lockdowns/vaccines, fiscal stimulus, etc.).	
	 The technical backdrop remains supportive and 	
	although price action is expected to be "gappy"	
	around the many sources of risk/uncertainty,	
	investors seem well set up to buy the dips.	
	CDX HY	
	CDX HY traded firmly along with the broader	
	market during the week ended October 2.	
	The new HY 35 series that launched this week	
	traded well as expected as heavy long positions in	
	the previous series rolled to the newest series.	
	 Trading volumes picked up during the roll week. 	
	Bid/ask spreads have declined but remain elevated	
	relative to pre-crisis levels.	
Emerging-	Hard Currency EM	
Market Debt	The JPMorgan EMBI Global Diversified index	EM IG sovereigns are
(EMD)	spreads traded 5 bps tighter to a level of 430 bp	1.25-1.5x wider vs
	during the week ended October 2, with	normal market
	investment-grade bonds driving most of the move.	conditions
	The direction of risk was predominantly based on	
	fiscal stimulus headlines.	EM HY sovereigns are
	It was another slow week in the primary market	1.25-1.5x wider vs
	with only a few small deals pricing.	normal market
	Brazil has captured market attention on the back	conditions
	of headlines that they may use creative accounting	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	to get around spending caps to fund social	EM IG corporates are
	programs. Brazil's fiscal and debt trajectories will	1.25-1.5x wider vs
	be under the microscope going forward	normal market
	Argentina bonds stabilized, seeing a decent bid	conditions
	after experiencing post-restructuring declines.	
		EM HY corporates are
	Local Currency EM	1.25-1.5x wider vs
	Liquidity is close to normal.	normal market
		conditions
Asia	Asia Hard Currency	Asia IG credit is ~1 to
	Asia hard currency credit spreads ground tighter by	1.5x wider vs. normal
	2bp during the week ending October 2, in a market	market conditions
	largely inactive due to the Mid-Autumn Festival /	
	National Week holidays in the Greater China region	Asia HY credit is ~1.5 to
	5 issuers made a push to print deals ahead of these	2x wider vs. normal
	holidays, and they were collectively able to raise	market conditions
	USD 4.3bn via USD bond offerings	
	Markets were stable but liquidity was challenged	Asia local currency debt
	because a number of dealers and investors were out	is ~1 to 1.5x wider vs.
	on holidays	normal market
		conditions
	Asia Local Currency	
	 Asia local currency markets had a quiet week 	
	shortened by holidays	
	 Indian government bonds posted a modest rally of 	
	~5 to 10bps in a bull steepening fashion after the	
	government announced the updated 2nd half of	
	2020 borrowing calendar, which was left unchanged	
	from the previous target. This addressed the	
	market's fears about excessive supply.	
	 Malaysia government bonds bull steepened by ~5 to 	
	12bps, retracing some of the recent selloff, as	
	investors regained confidence after a strong 5-year	
	MGS auction and amid renewed expectations for	
	rate cuts on the back of the recent rise in local	
	COVID-19 cases	
Securitized	CMBS	
	CMBS spreads continued to grind tighter on average	
	volume during the week ended 2 October. With	
	only modest issuance expected in October, the	
	technical backdrop remains positive. Currently, 10-	
	year, AAA-rated bonds are hovering in the	
	swaps+90bps area. There continues to be	
	considerable price dispersion below the single-A-	
	rated class. Trading velocity in mezzanine classes has picked up, resulting in the gradual improvement	
	of bid/offer spreads in the A/BBB tranches. AAA	
	· · · · · · · · · · · · · · · · · · ·	
	bid/offer spreads have retraced the post-covid-19	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	widening, while AA/A and BBB-rated classes are	<u>.</u>
	moderating but remain approximately 2x their pre-	
	covid-19 levels.	
	In CMBX, there has been a small increase in trading	
	of more recent vintage mezzanine, however	
	volumes in series 6 remain light. With little new	
	relevant data to change fundamentals, levels tend to	
	follow the broader macro markets. Bid/offer	
	spreads are moderating, but remain wider than their	
	pre-covid-19 levels, with A.6, BBB6, and BB.6 at	
	approximately 2x their historical averages.	
	ABS	
	The ABS primary market priced five transactions for	
	the week ending October 2 totaling \$1.5bn across	
	unsecured consumer, solar, time share and servicer	
	advance ABS deals. ABS year-to-date supply now	
	stands at \$141.2bn compared to \$174.4bn recorded	
	in 2019 over the same time period.	
	Secondary market trading over the week took a	
	backseat given the deluge of new issue ABS supply,	
	as the volume of bids wanted and TRACE data have	
	fallen back to this year's seasonal levels, from the	
	spikes in March. Amid supply pressure, benchmark	
	ABS spreads widened 1 to 3bp across auto ABS on	
	the back of slightly weaker primary market prints,	
	while benchmark spreads across credit cards and	
	equipment ABS widened by 1bp in sympathy with	
	softer auto spreads.	
	In the week ahead, eight deals are premarketing for	
	a total of \$6.172 bn and three issuers that have filed	
	15G forms.	
	 CRTs There were no new issues during the week ended 	
	October 2, although there are several new issues	
	being discussed that should come to market before	
	the US election, depending on market conditions.	
	With the absence of primary market supply,	
	secondary market spreads were tighter during the	
	week, especially in investment-grade bonds.	
	Several sellers came to market with modest lists of	
	bonds that were easily absorbed amid good two-way	
	flow and spreads tightened. These bonds are	
	anywhere from 25 cents to a dollar higher versus	
	previous week marks.	
	Non-investment-grade bonds also had a good week	
	but that revolved around dealers clearing out	
	inventory in an efficient manner prior to quarter	
	Professional use only. Not for inspection by, distribution or quotation to, the	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	end. Investors bought last cash flow and B1 bonds at relatively generous levels. This highlights the cash on the sidelines that can support the market under the proper circumstances. • Liquidity remains robust in all subsectors within CRTs. Legacy Non-Agency RMBS	•
	Legacy RMBS have recovered back to pre-crisis 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	
	 The week ended October 2 was somewhat uneventful in the CLO market. Spreads at the top of the capital stack drifted slightly wider, continuing the trend from the previous week. It is becoming clear that supply in the market will continue at least until the US election in November. Primary market spreads started to leak wider after several days of the secondary market telegraphing that levels were overdone. Under current market conditions primary market supply is expected to be heavy in the coming weeks. Liquidity remains generous. Bid/ask spreads remain at or around to pre-crisis levels, but may come under pressure amid the supply dynamics mentioned above. 	
	 Agency MBS Bid/ask spreads in Agency MBS have returned to 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	 Government money market funds saw outflows of \$56bn in the 7 days ended October 2. Prime funds saw outflows of \$126bn over the same period, driven primarily by the much-anticipated exit of the Vanguard prime fund. Despite this, there was no pressure on short-maturity CP markets. The CP spread to T-Bills remains around 10 bp. LIBOR continues to hit new record lows, with 1-month LIBOR setting at 0.14% and 3-month LIBOR setting at 0.22%. 	

Liquidity Trading Comment	Bid-Ask Spreads
 The T-bill curve was unchanged week-over-week. 	•
Repo is trading at the top of its band, SOFR set at	
0.10%.	
 The municipal bond market traded with a weaker 	
tone during the week ending October2, as	
benchmark AAA-rated yields rose 2-5bp in sympathy	
•	
·	
•	
•	
•	
spreads drifted wider. With the lack of a stimulus	
bill, increased supply and fund outflows, investors	
have been selective in where they put money to	
work. Liquidity is beginning to wane a bit for lower-	
•	
·	5 1 11:1/ 1
	Federal: bid/ask typically
	+0.5 bp but for the long end of the curve, it can
	be more depending on
	volatility (risk off
	markets) and size
	outstanding. Off the run
- · · · · · · · · · · · · · · · · · · ·	Canadas can have a wide
· · · · · · · · · · · · · · · · · · ·	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\$137.5 billion to support 	
liquidity in Government of Canada markets since the	
purchase program started on March 27 through	
September 30.	
Dravincial	Drovincial concession of
	Provincial: concession of +1 bp and more on size >
	CAD 25 million,
	particularly at the longer
	end. In risk-off markets,
	 The municipal bond market traded with a weaker tone during the week ending October2, as benchmark AAA-rated yields rose 2-5bp in sympathy with US Treasury rates and mutual funds experienced their first outflows after 19 consecutive weeks of inflows. In general, secondary volumes remain muted as underwriters pull forward deals to October as many are gearing up for a potential bout of volatility around the US election and dealers are reluctant to use their balance sheets to warehouse risk heading into year end. As a result, the focus is almost entirely on the new issue calendar, with \$1bn+ deal sizes coming at concessions in order to get placed. The tone was apathetic in the high yield market, as spreads drifted wider. With the lack of a stimulus bill, increased supply and fund outflows, investors have been selective in where they put money to work. Liquidity is beginning to wane a bit for lowerrated issuers, and there is less depth than is typical. Odd lot liquidity has weakened slightly, with discounts to round lot bid side evaluations averaging around 1-2 points. Federal Liquidity is best in benchmark issues for block sizes of <=CAD25 million; liquidity has improved in off-the-run, high coupon bonds with Bank of Canada (BOC) bond buying. Comments by central bank Governor Macklem that the BOC will buy at least \$5 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\$137.5 billion to support liquidity in Government of Canada markets since the purchase program started on March 27 through

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	 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\$9.2bn in par value year to date through September 30 within their provincial buying program to support liquidity, but BOC participation has not been meaningful in this sector in recent weeks. 	liquidity is drying up and spreads can widen depending on market tone.
	 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. Trading on an agency basis for high-beta issuers. The market has improved in sectors such as banks and telecom companies. 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 30). BBB- bonds are trading by appointment unless there is a new issue. Real Return Bonds (RRBs) The C\$400 million RRB auction of the long Canada 0.5% Dec. 2050 on September 2 provided liquidity in the benchmark RRB bond. 	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 +20 to +25bp on BBB Dealers may refuse to bid in a risk off market with gaps in spreads.
	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 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.	Provincial RRBs trading by appointment only. Dealers do not hold these securities on their balance sheet.

The above is provided for informational purposes only. All information is unaudited and subject to change. Nothing provided herein is intended to be used for the purposes of making investment decisions.

The information contained here reflects the views of AllianceBernstein L.P. or its affiliates and sources it believes are reliable as of the date of this publication. AllianceBernstein L.P. makes no representations or warranties concerning the accuracy of any data. There is no guarantee that any projection, forecast or opinion in this material will be realized. **Past performance does not guarantee future results.** The views expressed here may change at any time after the date of this publication. This document is For Investment Professional use only. Not for inspection by, distribution or quotation to, the general public.

for informational purposes only and does not constitute investment advice. AllianceBernstein L.P. does not provide tax, legal or accounting advice. This information should not be construed as sales or marketing material or an offer or solicitation for the purchase or sale of any financial instrument, product or service sponsored by AllianceBernstein or its affiliates.

Note to US Mutual Fund Readers: Investors should consider the investment objectives, risks, charges and expenses of the Fund/Portfolio carefully before investing. For copies of our Prospectus or summary Prospectus, which contain this and other information, visit us online at www.alliancebernstein.com or contact your AB representative. Please read the Prospectus and/or summary Prospectus carefully before investing. AllianceBernstein Investments, Inc. (ABI) is the distributor of the AB family of mutual funds. ABI is a member of FINRA and is an affiliate of AllianceBernstein L.P., the manager of the funds.

Note to Readers in Canada: AllianceBernstein provides its investment-management services in Canada through its affiliates Sanford C. Bernstein & Co., LLC and AllianceBernstein Canada, Inc.

Note to Readers in Europe: This information is issued by AllianceBernstein Limited, 50 Berkeley Street, London W1J 8HA, it is for marketing purposes. Registered in England, No. 2551144. AllianceBernstein Limited is authorised and regulated in the UK by the Financial Conduct Authority (FCA) FRN 147956. **Additional Note to Readers in Austria and Germany**: Local paying and information agents: Austria—UniCredit Bank Austria AG, Rothschildplatz 1, 1020 Vienna; Germany—ODDO BHF Aktiengesellschaft, Bockenheimer Landstrasse 10, 60323 Frankfurt am Main.

Note to Readers in Switzerland: This document is issued by AllianceBernstein Schweiz AG, Zürich, a company registered in Switzerland under company number CHE-306.220.501. AllianceBernstein Schweiz AG is authorised and regulated in Switzerland by the Swiss Financial Market Supervisory Authority (FINMA) as a distributor of collective investment schemes. Swiss Representative & Swiss Paying Agent: BNP Paribas Securities Services, Paris, Succursale de Zürich. Registered office: Selnaustrasse 16, 8002 Zürich, Switzerland, which is also the place of performance and the place of jurisdiction for any litigation in relation to the distribution of shares in Switzerland. The Prospectus, the KIIDs, the Articles or management regulations, and the annual and semi-annual reports of the concerned fund may be requested without cost at the offices of the Swiss representative.

Note to Readers in Japan: This document has been provided by AllianceBernstein Japan Ltd. AllianceBernstein Japan Ltd. is a registered investment-management company (registration number: Kanto Local Financial Bureau no. 303). It is also a member of the Japan Investment Advisers Association; the Investment Trusts Association, Japan; the Japan Securities Dealers Association; and the Type II Financial Instruments Firms Association. The product/service may not be offered or sold in Japan; this document is not made to solicit investments.

Note to Readers in Australia and New Zealand: This document has been issued by AllianceBernstein Australia Limited (ABN 53 095 022 718 and AFSL 230698). Information in this document is intended only for persons who qualify as "wholesale clients," as defined in the Corporations Act 2001 (Cth of Australia) or the Financial Advisers Act 2008 (New Zealand), and is general in nature and does not take into account any person's objectives, financial situation or needs.

Note to Readers in Hong Kong: This document is issued in Hong Kong by AllianceBernstein Hong Kong Limited (聯博香港有限公司), a licensed entity regulated by the Hong Kong Securities and Futures Commission. This document has not been reviewed by the Hong Kong Securities and Futures Commission.

Note to Readers in Singapore: This document has been issued by AllianceBernstein (Singapore) Ltd. ("ABSL", Company Registration No. 199703364C). ABSL is a holder of a Capital Markets Services Licence issued by the Monetary Authority of Singapore (MAS) to conduct regulated activity in fund management and dealing in securities. AllianceBernstein (Luxembourg) S.à r.l. is the management company of the portfolio and has appointed ABSL as its agent for service of process and as its Singapore representative. This document has not been reviewed by the Monetary Authority of Singapore.

Note to Readers in Vietnam, the Philippines, Brunei, Thailand, Indonesia, China, Taiwan and India: This document is provided solely for the informational purposes of institutional investors and is not investment advice, nor is it intended to be an offer or solicitation, and does not pertain to the specific investment objectives, financial situation or particular needs of any person to whom it is sent. This document is not an advertisement and is not intended for public use or additional distribution. AllianceBernstein is not licensed to, and does not purport to, conduct any business or offer any services in any of the above countries.

Note to Readers in Malaysia: Nothing in this document should be construed as an invitation or offer to subscribe to or purchase any securities, nor is it an offering of fund management services, advice, analysis or a report concerning securities. AllianceBernstein is not licensed to, and does not purport to, conduct any business or offer any services in Malaysia. Without prejudice to the generality of the foregoing, AllianceBernstein does not hold a capital markets services license under the Capital Markets & Services Act 2007 of Malaysia, and does not, nor does it purport to, deal in securities, trade in futures contracts, manage funds, offer corporate finance or investment advice, or provide financial planning services in Malaysia.

Note to UK Readers: For Investment Professional use only. Not for distribution to individual investors.

The [A/B] logo is a registered service mark of AllianceBernstein and AllianceBernstein[®] is a registered service mark used by permission of the owner, AllianceBernstein L.P.

© 2020 AllianceBernstein L.P