

Market Update - Daily Fixed Income Trading Liquidity Update 22 May 2020

In the current markets, volatility has been elevated and liquidity has become reduced across many fixed income instruments including government bond markets. 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 towards the end of the New York trading day.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
US Treasuries	 The open-ended bond purchase program enacted by the US Federal Reserve (Fed) is having a positive effect on liquidity and market functionality. The Fed has reduced their purchases of US Treasuries to \$5bn per day during the week of May 26 (from \$6bn per day the week of May 18). This was in line with market expectations. Global rates markets continue to be dominated by supply, central bank actions, and re-opening proxies such as oil and/or vaccine developments. Fed funds markets are no longer pricing in negative rates through the 2021 maturity dates. In speaking engagements over the past week, the Fed has given rates investors clarity that negative interest rates are not planned to be used for at least the next year. 	Bid-offer spreads for on-the-run benchmark 2- through 10-year US Treasury notes has improved significantly and are in line with precrisis conditions. For the 30-year note, bid/ask is ~2x wider vs pre-crisis. Off-the-run Treasury bonds still trade significantly wider than on-the run bonds, but bid/offer has compressed. TIPs bid/ask is 2-3x wider vs pre-crisis levels
Investment Grade (IG) Corporates	 US IG US IG cash bonds stayed firm, particularly shortmaturity and high-beta bonds. A "beta compression" theme dominated this week (ending May 22). New issue supply slowed down compared to previous weeks, with \$50 bn in new issues coming to market during the week of May 18. Supply is expected to be lighter during the week of May 26. Bid/ask spreads remain wider than pre-crisis levels. 	US IG spreads are generically 3-4x wider vs normal market conditions AT1/Preferreds are 2-3x wider vs normal market conditions

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

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	European IG It was quiet on Thursday and Friday with holidays in Europe and long weekends in the US/UK. There continues to be dislocation in the markets with liquidity very thin in covid-19 exposed names or in the crossover space, where names can go from "bid-less" or "offer-less" very quickly and create large moves in either direction. Supply levels have been elevated in the European IG market, with both well-known and niche issuers continuing to tap primary markets. The decent uptick in primary market activity is diverting attention from the secondary market, causing liquidity to drop a bit there. Liquidity in the AT1 (subordinated financial) market remains incredibly technical and very bond-/issuer-specific. In spots such as core high-quality issuers, bid/offer spreads were back to pre-selloff levels, but in more niche and second-tier names where dealers have no agenda, it remains wide and subject to the whims of the macro tone. Volumes have been very low. USD-denominated AT1s are proving to be more liquid than EUR-denominated AT1s. REIT Preferreds Liquidity in the REIT preferred market is limited under more normal conditions but has improved from 1-1.5 months ago. 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 have	
	recovered a good amount.	
High Yield (HY) Corporates	 US HY The US high yield market remained firm into the end of the week (ending May 22) despite equities moderately selling off. Market strength is attributed to inflows (into both ETFs and open-end mutual funds) as well as an expected slowdown of new issuance. The high yield index hit a new post-covid-19 tight level this week of 681 bp (from prior tights set April 17 of 705). This compares to March 23 wide levels of 1100 bps. Pre-crisis tight levels were 341 bps set on February 13. The new issue market was again active, but more so 	Spreads are 0.75-1.25 point wider than normal times for BB-rated securities Spreads are 1.5-2 points wider than normal times for B-rated securities Spreads are 3 points wider than normal times for CCC-rated and below securities

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	in number of deals (20 this week) rather than amount issued (\$10.4 bn). Technicals remain strong as deals are being upsized, pricing has come at the tight end of the expected range, and deals have been multiple times oversubscribed and trading well in the secondary market. • Bid/ask spreads remain unchanged	CDX HY bid/ask is 2-3x vs normal conditions.
	 European HY Daily sentiment has dislocated somewhat between cash bonds and equities/the iTraxx Crossover index. After several weeks of outperformance in cash bonds, the market has begun to lag modestly. There has been no new issuance and overall secondary volumes have felt exceptionally light with a focus on credit-specific situations/earnings. Idiosyncratic risk is in focus as potential defaults/restructurings loom. Technicals remain broadly constructive, as flows are generally positive, investors are more conservatively positioned and primary issuance remains light. The market continues to see healthy two-way flows but bid/ask spreads remain elevated. 	
	 CDX HY CDX HY traded with a firm tone on May 22, but slightly underperformed stocks, CDX IG and high yield cash bonds. Bid/ask spreads have declined but remain elevated relative to pre-crisis levels. 	
Emerging- Market Debt (EMD)	 Hard Currency EM Dealers faced a squeeze in hard currency EM debt this week (ending May 22) as dealers with limited balance sheet continued to get further and further short. This drove spreads on the JP Morgan EMBI Global Diversified ~40 bps tighter. Index spreads closed the week at ~535bps which is ~190bps inside of the crisis wide levels and ~240bps wide to the YTD tight levels. On the supply front, another large-cap, below investment-grade issuer (Egypt) was able to price \$5bn with a >4x covered book, an indication of investor risk sentiment and further corroboration of the squeezed market. Taking stock of some of the largest movers, sub-Saharan Africa (SSA) was up 10 points in the last week with SSA oil exporters ~30pts off crisis lows. PEMEX was up ~10pts in the last week and ~20pts 	EM IG sovereigns are 1.5x wider vs normal market conditions EM HY sovereigns are 2x wider vs normal market conditions EM IG corporates are 2x wider vs normal market conditions EM HY corporates are 3x wider vs normal market conditions

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	off the late April fallen angel lows. Costa Rica was up 8 points in the last week, ~15 points off crisis lows, and Brazil was up 8pts in the last week, ~15 points off crisis lows. • Liquidity continues to improve as transaction costs have slightly narrowed over the last week.	
	 Local Currency EM Local EM rates continue to trade well, converging towards low developed-market rates. Liquidity is close to normal 	
Securitized	 CMBS The markets in both CMBS and CMBX appeared to stall heading into the Memorial Day holiday weekend. Traders had limited appetite to add risk, resulting in a stagnant market. Most transactions that occurred in the cash market were at the top of the capital stack which remains well supported. In both CMBS and CMBX, liquidity remains fragile. Bid/offer spreads in CMBS remain unchanged. AA/A and BBB bid/offer spreads remain at approximately 3x and 4x pre-COVID levels. Transaction volume in CMBX series 6 was average, resulting in little price movement since Tuesday's close. Single A, BBB- and BB prices were unchanged, +0.25 points and +0.50 points respectively. Bid/offer spreads for A.6 is ~2x, BBB6 is ~2 x and BB.6 ~4x the normal bid/offer spread. 	
	 ABS The ABS primary market priced three transactions totaling to \$1.5bn during the week ending May 22 across equipment, prime auto loan and subprime auto loan sectors. This brings the year-to-date issuance to \$66.0bn compared \$104.9bn over the same period last year. All the new issue deals were well-subscribed and most priced at the lower end of the initial price guidance range. There is one securitization pre-marketing for the short post-holiday week beginning May 26 (Santander Auto Receivables), and three subprime auto lenders have filed "15G" forms, signaling potential future issuance. ABS indicative benchmark spreads saw relatively strong performance across most sectors. Spreads for credit cards and senior notes of prime auto loan ABS were 5bp and 15bp tighter over the week, respectively. Senior tranches of subprime auto loan 	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	ABS moved 5bp tighter, while subordinated tranches	
	of both prime and subprime auto loans were 10bp	
	tighter. Alternatively, one sector that has been	
	lagging any tightening in spreads is rental car ABS,	
	and on Friday evening Hertz filed for chapter 11	
	bankruptcy.	
	On a separate note, the Federal Reserve announced	
	additional details around their TALF program this	
	week. The first loan subscription date will be June	
	17, 2020 and the first loan closing date will be June	
	25, 2020. Under current plans, loan disbursements	
	will only occur through September 30, 2020.	
	CRTs	
	The CRT market continues to plug along. The wall of	
	money looking to invest in the space seems to be	
	driving spreads tighter. This technical seems to have	
	moved in one direction since early April.	
	Investment-grade rated last cash flow bonds seem	
	particularly well bid. Spreads have tightened the	
	most in these bonds, which ended the week in the	
	low 300 bp range. Newer vintage last cash flow	
	bonds that do not have the benefit of the	
	investment-grade rating are not far behind. They are	
	currently trading in the 400-500 bp range.	
	Equity tranches are trading in the 800-1100 bp	
	range. B1 bonds with some credit enhancement are	
	at the tighter end of that range and older Bs that	
	represent the 0-100 slice of 2015 and 2016 deals	
	trade just north of 1000 bp.	
	While bid/ask spreads have come in measurably	
	since the peak of the crisis, they were unchanged	
	week over week.	
	Legacy Non-Agency RMBS	
	Legacy RMBS continues to trade through the recent	
	crisis. Since January spreads have widened from ~	
	200bp to now in the 1000 bp range, but demand for	
	the sector never really faded.	
	CLOs	
	Primary market issuance is the real news in the CLO The approximate plant and the property of the pr	
	market. The new issue calendar has opened up for	
	top- and mid-tier managers.	
	With AAA-rated tranche spreads well inside 200 bp	
	for better enhanced deals, it makes sense for	
	managers to tap the market. At the same time,	
	these levels are still historically wide, making AAA-	
	rated CLO tranches very attractive for banks, money	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	managers, and insurance company investors alike.	•
	The AA- and A-rated tranches have also been	
	oversubscribed on these new deals.	
	The BBB- and BB-rated tranches have been retained	
	by managers as the market for these securities has	
	not come back. Too many questions remain about	
	loan rating downgrades and how far up the stack	
	that will affect losses and in turn spreads.	
	Bid/ ask spreads on AAA/AA/A rated bonds have	
	come back to normal; mezzanine bid/ask remains	
	elevated at roughly 2x normal.	
	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	1-month LIBOR set at 0.174% and 3-month at	
	0.369%. Prime money market funds saw \$11bn of	
	inflows during the 7 days ending May 21, which has	
	been driving 3-month LIBOR lower. Government	
	money market funds saw outflows.	
	 Repo continues to trade within a corridor of 0- 	
	0.10%.	
	The Fed minutes reiterated that they are unlikely to	
	employ negative interest rates, and an IOER (interest	
	rate on excess reserves) rate adjustment seems off	
	the table.	
US Municipals	The municipal market tone continues to be strong,	
	with benchmark yields trading 2-5bp tighter each	
	day during the week ended May 22.	
	Most new issuance this week was 7-12x	
	oversubscribed, showing the amount of demand and cash on the sidelines.	
	 One state with notable outperformance is California, 	
	which has seen spreads tighten significantly – from	
	+30 to 35 bps to +0 to 15 bp, seemingly in	
	anticipation of expected coupon reinvestments in	
	June.	
	The first true muni high yield deal came to market	
	this week, and it was well received, trading up	
	significantly on the break. Generically, despite some	
	signs of life, high yield munis are still in price	
	discovery mode with many sellers feeling sticker	
	shock on some bid levels vs evaluations, and not	
	trading.	
	Odd lot liquidity remains challenged compared to	
	historic averages. There was a marginal decrease in	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	odd lot penalties during the week ending May 22,	•
	but they remain generically in a 1-3 point range	
	below round lot bidside evaluations for high quality	
	bonds. For context, high grade odd lots typically	
	trade 0.10-1 points below round lot bidside	
	evaluations under more normal market conditions.	
Canadian Market	 Federal Liquidity is best in benchmark issues for block sizes of <=CAD25m; limited liquidity in off-the-run, high coupon bonds but the Bank of Canada buying program is helping liquidity in the sector. 	Federal: bid/ask typically +1 to +2bp but for the long end of the curve, it can be more depending on volatility
	Provincial	
	Liquidity is best in benchmark bonds from Quebec,	Provincial: concession of
	Ontario and British Columbia	+1 to +2bp and more on
	Concessions are requested so dealers will take less- liquid positions.	size > CAD 25m,
	liquid positions. • Very limited secondary-market liquidity in oil-	particularly at the longer end
	generating provinces (Newfoundland, Alberta,	enu
	Saskatchewan) with Western Canadian Select oil	Large bid/ask spread on
	price trading at low levels.	BBB- corporates, which
	Most dealers will not bid on off-the-run, high	are trading by
	coupon provincial issues, they will do agency trades.	appointment in many
	The Bank of Canada's C\$50bn buying program of	cases and as wide as 25
	provincial debt should support liquidity.	bp in certain cases.
	IG Corporates	Provincial RRBs trading
	Limited liquidity; many dealers are maintaining low	by appointment only.
	balance sheet inventories, so will not provide bids in	Dealers do not hold
	many sectors.	these securities on their
	 Trading on an agency basis for high-beta issuers. The 	balance sheet.
	market has improved in sectors such as banks.	
	The Bank of Canada's buying program of corporate	
	debt (5 years or less) should support liquidity in that	
	market for BBB and higher-rated securities. BBB-	
	bonds are trading by appointment.	
	Real Return Bonds (RRBs)	
	The official announcement of a \$400mn RRB auction	
	of the long Canada 0.5% Dec. 2050 on May 27	
	should support liquidity in the benchmark RRB bond.	
	The program to purchase Government of Canada	
	securities in the secondary market – the	
	Government Bond Purchase Program or GBPP –	
	should help liquidity since it will include RRBs. The	
	program begins on May 27. The BoC will be buying,	
	once per quarter in a reverse auction format, up to	
	\$100m notional each of the 7 Canada RRBs from	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	2021 to 2047 in the secondary markets.	

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 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