

Market Update –Fixed Income Trading Liquidity For the Week Ending 24 July 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	 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 committed to purchasing a minimum of \$80bn US Treasuries and \$40bn MBS every month, with possibilities to increase should circumstances change for the worse. The week ending July 24 was characterized by the continuation of the multi-week bull flattening move in global rate curves, a function of: (1) the covering of both investors' short duration positions and curve steepening positions; and (2) significant buying of 30-year US treasuries by non-US investors. TIPS, particularly 10-year maturities, continue to perform well. Market depth, which is the sum of the three bids and offers by queue position, using the top 3 bids and offers in 10-year Treasury notes, averaged between 8:30 and 10:30am daily and sourced from BrokerTec data is about 95% of its pre-Covid19 levels. 	Bid-offer spreads for on-the-run US Treasuries has improved significantly and are in line with precrisis conditions. Off-the-run Treasury bonds that are not in cheapest-to-deliver futures baskets are still trading with bid/ask spreads 2-3x wider than pre-covid-19 levels. TIPs bid/ask is 1.5x wider vs pre-crisis levels
Investment Grade (IG) Corporates	 US IG US IG cash bonds performed well during the week ending July 24, supported by a stable macro tone and another strong week of inflows met with quiet supply. Both primary and secondary market flows were quiet ahead of Q2 earnings and as summer sets in. The Fed's weekly report showed that the Fed purchased \$620mn or \$125mn/day for its secondary market purchase program (SMCCF) between July 15 and 21. The purchase pace continues to be slower than the market expected since market conditions 	US IG spreads are generically 2x 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
	 continue to improve. The primary market was quiet, with only \$7bn in new issues coming to market between July 20-24, which continues to help market technicals. Demand was less robust than previous months now that valuations have recovered materially. Bid/ask spreads remain wider than pre-crisis levels. 	
	 European IG It was extremely quiet once again during the week ended July 24 with a trickle of primary issuance retaining the market's focus. The market was very technical in spots with covid-19-related credits feeling a little more pressure. Away from that, the market seems to be in the heart of low summer activity. 	
	 REIT Preferreds Liquidity in the REIT preferred market is limited under more normal conditions but has improved from 2-3 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 continue to recover. 	
High Yield (HY) Corporates	 US HY The US High Yield market was firm again during the week ended July 24, supported by strong technicals. The market remained unchanged on Thursday and Friday when equities sold off. "Real money" investors remain better buyers as cash continues to enter the market via coupons, calls and tenders. New issues were again manageable last week, with \$4.935bn of bonds coming to market, across 9 deals. This is well below the \$10bn/week average for 2020. Deals coming with above-market coupons are faring particularly well. New deals remain well supported, with most multiple times oversubscribed and priced at the tight end of initial price guidance. 	Spreads are 0.75-1.25 point wider than normal times for BB-rated securities Spreads are 1-1.5 points wider than normal times for B-rated securities Spreads are 1.5-2.5 points wider than normal times for CCC- rated and below securities CDX HY bid/ask is 1-2x vs
	 The index spread was 52 bps tighter on the week, to 504 bp, setting new tight levels since the March selloff. This compares to March 23 wide levels of 1100bp and pre-covid-19 tight levels of 341 bp on Feb 13. 	normal conditions.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	 Euro HY Volumes remain light amid the summer lull in activity. Investors have been hesitant to put cash to work in those issuers that are most heavily exposed to covid-19, but still putting cash to work elsewhere. The primary market is beginning to slow down as performance for new deals has started to be more lackluster. Overall underlying technicals still feel constructive, but investors are becoming increasingly selective/defensive. 	
	 CDX HY CDX HY traded better along with macro tone during the week ended July 24. Trading volumes are trending lower now that summer illiquidity has begun to kick in. Bid/ask spreads have declined but remain elevated relative to pre-crisis levels. 	
Emerging- Market Debt (EMD)	 Hard Currency EM Hard currency EM debt spreads tracked global macro risk during the week ending July 24 as spreads on the JP Morgan EMBI Global Diversified Index moved tighter by 12 bps, closing the week at a 4-month tight level of 447 bp. ETFs helped drive the most recent rally, as they aggressively requested offers and re-priced risk tighter. Thin summer liquidity coupled with a relatively quiet week in the primary market further exacerbated the grind tighter in spreads as investors had difficulty sourcing supply attractive corporate bonds. Local Currency EM Liquidity is close to normal. 	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
Asia	Asia Hard Currency Asia hard currency credit spreads tightened on the back of strong buying interest from Chinese banks, regional insurers as well as global asset managers in the week ended July 24. In the primary market, 12 issuers raised USD 5.5bn last week, with two-thirds of the supply coming from investment-grade issuers. Liquidity was stable, but dealers became somewhat stretched as buyers outnumbered sellers. Asia Local Currency	Asia IG credit is ~1 to 1.5x wider vs. normal market conditions Asia HY credit is ~1.5 to 2x wider vs. normal market conditions Asia local currency debt is ~1 to 1.5x wider vs. normal market conditions

Sector	Liquidity Trading Comment	Bid-Ask Spreads
Securitized	 Asia local currency debt liquidity functioned as normal for the most part during the week ended July 24. Indonesia government bonds staged a sharp rally, with the 10-year on-the-run bond breaching the key psychological support level of 7% and settling at 6.85% towards the end of the week China government bonds also gained about 10bps on the week, supported by improving liquidity conditions after the tax payment period	Bid-Ask Spreads
	until trading volumes increase or risk-taking returns. Bid/offer spreads remain mostly unchanged. A.6 is ~2x, BBB6 is ~3 x and BB.6 ~4x the normal bid/offer spread. ABS The ABS primary market priced eight transactions for the week ending July 24 totaling \$5.6bn across private credit student loan, franchise, equipment, prime auto loan, auto leases, PACE (property assessed clean energy), unsecured consumer and commercial loans. ABS year-to-date supply now stands at \$95.1bn compared to \$136.7bn recorded in 2019 over the same time period. The new issues saw solid oversubscription levels and for the most part priced at spreads through the initial guidance range. The secondary market continues to see good twoway flows, with liquidity and price execution notably tiered by sponsor name. Indicative spreads were unchanged on the week.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	On the TALF front, the volume of loans requested for the July 21, 2020 subscription date totaled \$984mn, with the bulk of the requests for small business (\$453mn) followed by CMBS (\$331mn) and student loan ABS (\$200mn).	
	 CRTs The CRT market has underperformed broader risk markets recently as several large sellers have taken profits amid the post-crisis rally. Two parts of the CRT market where the supply/demand imbalance is particularly challenged are B2 and fixed severity deals. 	
	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 Significant size has been passing through the CLO market at or around the recent tight spread levels. The top of the CLO stack in particular shows little sign of wear with all this recent volume. Demand remains quite high as most people see the CLO market as having only recovered 60-70% of what it gave up during the crisis. Bid/ask spreads are all but back to normal, pre-crisis levels. 	
	 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	 There were no liquidity issues of note in the repo markets for the week ending July 24. Government money market funds saw outflows of \$3.5bn in the 7 days ending July 24. Prime funds saw outflows of \$266mn in the same time period. The commercial paper supply technicals continue to keep the spread to T-bills narrow at ~10 bps. 3-month CP is printing in the 0.22-0.24% range. 1-month LIBOR set at 0.17% and 3-month LIBOR set at 0.27%. SOFR set at 0.10% 	
US Municipals	The municipal market continued its firm tone last week with benchmark AAA-rated yields lower by 2-4	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	 bps across the curve, despite yields hovering around all time low levels. Lipper reported another \$2.1 bn of flows into municipal mutual funds, which flipped the year-to-date totals back into positive territory. This coupled with strong seasonal reinvestment proceeds from coupons and maturities that peak in July and August has left many participants searching for opportunities to put cash to work. New issue supply remains very manageable especially in light of the increased issuance of taxable municipals, leaving demand high for the taxexempt deals that come to market. New issue deals remain significantly oversubscribed across the credit spectrum, with mid-grade and high-yield deals the most sought after as investors hunt for additional yield High grade odd lot discounts are around 0-1.5pt below round lot bid-side evaluations and high yield odd lots are generally receiving bids 2-4 points below round lots. 	
Canadian Market	Federal Liquidity is best in benchmark issues for block sizes of <=CAD25mn; liquidity has improved in off-therun, high coupon bonds with Bank of Canada 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.	Federal: bid/ask typically +1 bp but for the long end of the curve, it can be more depending on volatility (risk off markets) and size outstanding.
	 Provincial Liquidity is best in benchmark bonds from Quebec, Ontario and British Columbia Concessions are requested so dealers will take less- liquid positions. Secondary-market liquidity in oil-generating provinces (Newfoundland, Alberta, Saskatchewan) has improved with WTI over US\$40 per barrel. 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\$5.8bn in par value year to date within their provincial buying program to 	Provincial: concession of +1 bp and more on size > CAD 25mn, particularly at the longer end

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	support liquidity.	
	 IG Corporates Limited liquidity, particularly during risk-off trading days; 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 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- corporates are trading by appointment in many cases, particularly in the energy sector. Inventories are reduced and dealers are not looking to increase their BBB- exposure with reduced trading activity in July
	However, the central bank has bought a relatively small amount of corporate securities to date (C\$130mn par), indicating the impact is limited. BBB-bonds are trading by appointment unless there is a new issue. The corporate calendar is expected to be light in July, another factor that could be a detriment to corporate market liquidity. Real Return Bonds (RRBs)	Provincial RRBs trading by appointment only.
	 The last C\$400mn RRB auction of the long Canada 0.5% Dec. 2050 on May 27 supported liquidity in the benchmark RRB bond for a limited period. 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 began on May 27. The BoC bought a total of C\$700m with C\$100m per line of the 7 Canada RRBs from 2021 to 2047. Even with the central bank 	Dealers do not hold these securities on their balance sheet.
	buying net C\$300m of Canada RRBs, liquidity remains challenging as dealers hold very limited inventories, if any, of these RRB securities. The next auction will be held in September. Trading a block can only be done on an appointment basis.	

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