AllianceBernstein®

October 2021

Market Update – Fixed Income Trading Liquidity
For the Week Ended 29 October 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 October 29, developed market interest rates rallied and curves flattened. It was an extremely volatile week in global rate markets, especially in the front end of curves. Stock markets digested the bond market volatility well with the S&P 500 closing at all-time highs on October 29 on the back of robust Q3 earnings. • The developed market interest rate complex has been twisting flatter in recent weeks. The continuation of the broader global market themes that are causing extreme curve volatility and flattening include: hawkish market pricing of global Central Banks, the Bank of England's chief economist making the November meeting live for a hike, and a hawkish Bank of Canada on Wednesday Oct 27 hinting at hikes in "middle quarters of 2022". The amount of FOMC hikes and timing of those hikes have been pulled forward, adding to the flattening pressure. • Inflation expectations have been moving higher globally as seen in the price action in breakevens. • On the supply front the demand for US Treasury supply has been robust this month with mid-month October 3y, 10y, and 30y US Treasuries clearing with strong end user demand stats. There has also been solid overseas demand into USD-denominated bonds with the Japanese Ministry of Finance data showing inflows to the US bond market in 7 of the last 8 weeks. Demand for 30-year US Treasuries from liability-driven investors has been strong with pension funding status improving markedly on the back of strong equity market performance. • On the global supply front, UK Gilts have also been in focus. On Wednesday Oct 27 the UK Debt Management Office announced they will be reducing Gilt sales by £57.8bn over 2021-2022. 30-year Gilts closed lower by 24bps on the week.	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	• One part of the US curve that has seen lackluster auction demand and sloppy trading has been 20-year maturities. Liquidity is becoming challenged in the 20-year point of the curve—not as much as in February 2021 but the 20s30s US Treasury curve inverted this week. • Transaction costs as measured by bid-to-offer spreads have widened in the long end of the US Treasury curve from 1 tick wide to 1+ ticks wide amid recent volatility. Importantly, this widening is not due to dealer balance sheet constraints. • Observable bid-offer spreads are in line with historical averages in the most liquid bonds. Transaction costs in off-the-run bonds are wider but have improved meaningfully since late February. Nominal Treasury bid-ask spreads are trading in line with recent historical averages of 3/8 to 1/2 tick wide in 5-year notes, 1/2 tick wide in 10-year notes, and between 1/2 to 1 tick wide in 30-year notes depending on the size (a tick is 1/32 of a percent). • Liquidity in terms of market depth in on-the-run 5-year and 10-year Treasuries has improved 80-90% from the challenges seen in February 2021. Market depth in the 30-year part of the curve has improved ~80% since February. • In TIPS, on-the-run bond bid-offer spreads are 1-2 ticks wide during the most liquid parts of the day; off-the-run bonds in 5-10 year maturities are ~2-3 ticks wide; longer-maturity TIPS are trading 6-7 ticks wide. • Federal Reserve bond purchases continue at $80 billion US Treasuries and $40 billion MBS per month.	
Investment Grade (IG) Corporates	**US IG** • The US IG credit market began the week ended October 29 trading sideways, but softened in the latter half of the week, particularly in the 30-year part of the curve, following the continued US Treasury curve flattening and the 20/30s US Treasury curve inverting. The index closed 1 bp wider week-over-week. • Contributing to softer technicals in long-maturity bonds was slower buying from Asia and from domestic insurance investors ahead of month end. • New issue supply came at the higher end of expectations of $15-20 bn. Deals were 2.7x oversubscribed and continued to price with little to negative concession, signaling investors still have cash on the sidelines. • Secondary market flows remain positioning-driven. The positive momentum on flows took a pause during the week with an outflow of $1.1 bn. • Supply is expected to pick up with $100-125 bn expected for the month of November.	Bid/ask conditions in the IG market are back to normal

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	EUR IG • During the week ended October 29, non-financial euro IG bonds remained immune to the interest rate/equity volatility and as such ended the week broadly unchanged to a touch wider. Demand in 3-6 year maturities was firm after the interest rate moves as more bonds were lifted into positive yielding territory. • Financials saw a bit more weakness in line with the broader market weakness, with some capital structure decompression. Bond from the periphery underperformed, with spreads 0-10bp wider and AT1s anywhere from unchanged to 1 point lower. The market also obtained 3Q results from banks, which were generally good with tailwinds from provision releases. • Finally, the week saw the primary market pick up with ~EUR 20bn in new issues, heavily skewed towards financials. This imbalance led to significantly larger book coverages for non-financials (3.3x) vs financials (1.9x), although new issue premia were generally low, ranging from 0-10 bp and performance leaving little signs of indigestion. **REIT Preferreds** • Liquidity in the REIT preferred market is typically limited under more normal conditions given the retail nature of the investor base. • 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.	
High Yield (HY) Corporates	**US HY** • The US HY market traded sideways during the week ended October 29. Index spreads ended the week 2 bp wider at 287 bp. The CCC-BB spread difference was 8 bp tighter to 327 bp. • The primary market slowed ahead of earnings with $4.3 bn pricing across 6 deals. New issues generically garnered modest oversubscription (1-3x) with Hexaware being an exception. Hexaware priced a $1.01bn, secured, 5-year non-call 2 deal at 5.375%. Initially whispered at high 5s to 6% yield, the deal tightened significantly with $7.8 bn in orders (7.7x oversubscribed) and traded up in the secondary market to yield 4.71%. **CDX HY** • CDX HY traded weaker, underperforming the macro tone during the week ended October 29. Flows continued to be two-way, but leaned toward selling vs equities and investment grade. • Daily trading volumes were above average.	Bid/ask spreads vary by issuer but generically: BB-rated securities: 0.75 point, which is in line with normal market conditions B-rated securities: 0.75 point, which is in line with normal market conditions CCC-rated and below: 1.25 points which is in line with normal market conditions

Sector	Liquidity Trading Comment	Bid-Ask Spreads
		CDX HY bid/ask is in line with normal conditions.
Emerging Market Debt (EMD)	**Hard Currency EM** • Volatility continued in EM credit during the week ended October 29 as the choppy move in developed market interest rates along with inconsistent month end demand led the index to close unchanged. Under the hood, generic high yield bonds "dragged their feet", but there was a bounce in some of the largest underperformers from the previous few weeks, such as Ghana and El Salvador. • Supply picked up as several Latin America deals priced with ~15-25 bp of new issue premium and well subscribed order books but weak price action on the break with secondary markets repricing to the primary market.	EM IG and HY sovereigns and EM IG and HY corporates are back to normal market conditions
Asia	**Asia Hard Currency** • Asia credit spreads tightened 4bp during the week ended October 29, but the index total return ended the week essentially flat. • Primary markets remained active with 11 deals pricing for a total of USD 5.9 billion. As in the prior week, issuance was focused on high quality issuers in the investment grade sector, but there were also a couple high-yield and non-rated deals from non-China issuers. • The China high yield property sector had a poor week, dropping 4.2% at the index level as sentiment took another turn for the worse, driven by Modernland's default on offshore debt and Kaisa's credit rating downgrade to CCC+. **Asia Local Currency** • Asia local interest rates generally sold off in a bear-flattening move, led by the ~20-50bp repricing of the Australian government bond yield curve where inflation surprised to the upside and the RBA skipped their buyback operations for yield curve control – a stark contrast to the US Treasury market where the yield curve bull-flattened. • Malaysia government bonds bear-flattened ~8-20bps ahead of the 2022 budget announcement on Friday as the market began to price in faster policy normalization on the back of the country's vaccine progress and activity pickup. • October month-end marked the official date for China's entry into the FTSE WGBI index, and robust inflows have been cited; China government bond yields closed the week about 2-4bp stronger, bucking the regional selloff trend.	Liquidity conditions are normal for Asia hard currency IG credit. HY liquidity is more challenging especially in China HY with spreads 1.5x wider than normal. Liquidity conditions are normal for Asia local currency debt.
Securitized	**ABS** • The ABS primary market priced fourteen transactions for the week ending October 29 totaling $6.9 bn across aircraft, equipment, containers, device payment, unsecured consumer,	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	fleet, prime and non-prime auto loan sectors. ABS year-to-date supply now stands at $226.4 bn compared to $163.2 bn and $207.1 bn recorded over the same period in 2020 and 2019, respectively. • Indicative benchmark ABS spreads remained unchanged during the week. There was a touch of weakness in the primary market, but the secondary market continues to be robust amid low supply. • On October 26, 2021 S&P lowered rating on SLMA 2008-3 A-3 notes to 'D' from 'CC' and removed them from CreditWatch negative. The action was taken by the rating agency after the class was not repaid by its legal final maturity date of October 25, 2021. **CMBS** • CMBS new issue supply remains abundant, particularly in the single asset/single borrower market. Over $9bn of single asset/single borrower deals priced during the week. Numerous property types were represented, including industrial, multifamily and data center. The first conduit CMBS transaction since late September also priced. Most classes were multiple times oversubscribed and priced tighter than initial guidance. Issuance is expected to remain robust throughout November before slowing down as year-end approaches. Bid/offer spreads have retraced all post-COVID widening. • The top of the capital stack continued to outperform the bottom in most CMBX series. AAA-rated tranche spreads were unchanged to 1bp tighter, while BBB- were unchanged to 31bp wider week-over-week. Seasoned mezzanine series, specifically series 6 and 7, continue to perform worst on a spread basis. While trading volume is moderate, bid/offer spreads remain unchanged and have retraced all the post-COVID widening. **CLOs** • New issue CLO supply remains abundant, with numerous issuers coming to market during the week ended October 29. Despite the deluge of new issues, spreads remained firm. Generic primary market clearing levels on the week stood at roughly 110-120 bp for AAA-rated spreads; AA-rated spreads at around 160-165 bp; A-rated at 195-205 bp; BBB-rated at 295-310 bp; and BB-rated at 615-650 bp. • Liquidity remains robust in the CLO market. Bid/ask spreads remain at or around pre-crisis levels. **RMBS** • During the week ended October 29, non-qualified mortgage (non-QM) deal spreads continued to widen. The AAA tranche	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	of the most recent non-QM deal from a benchmark issuer was priced at N+90bp. Similar bonds were trading at N+60bp at the beginning of September. Historically, non-QM and SFR (single family rental) securitization spreads have closely tracked each other, as both are short duration assets with limited price appreciation potential due to the call provision. Amid the widening in non-QM securities, the basis between SFR and non-QM has widened to 20bp from ~2bp in early September. • The M1, M2, B1 and B2 tranches from the most recent GSE low-LTV STACR CRT deal priced at 80bp, 150bp, 340bp and 750bp, respectively. The M1 and M2 tranches were 15bp wider and 15bp tighter respectively than the prior low-LTV GSE CRT deal. The B1s and B2s widened materially relative to the previous transaction and were 35bp and 200bp wider, respectively. The wider levels on the B bonds were likely to compensate investors for the 5 year call on the new issue deal that was not present in the earlier transaction. • October has been as busy a month for new issues as expected. Nearly $22bn priced across sectors this month, of which $6.1bn priced during the past week alone. This makes October the third highest month of issuance in 2021 after June and September. **Agency MBS** • Bid/ask spreads in Agency MBS remained well supported, given the Fed purchases of $40bn per month. Bid/offer spreads remain tight in the sector. Current coupon bonds are trading at 0.5-1 tick wide and the rest of the coupon stack is wider by 3-4 ticks. Higher coupons trade less frequently.	
Money Market	• During the week ended October 29, the Fed Reverse Repo facility (RRP) usage was ~$1.5 trn. • 1-month LIBOR set at 0.081%; 3-month LIBOR set at 0.141%. • SOFR reverted back to 0.05% after GSE cash left the repo markets. • Effective Federal Funds Rate set at 0.08%. • The US Treasury is likely to run out of cash to meet obligations at the newly perceived "X-date" of December 3. The US Congress must raise or suspend the debt ceiling to avoid default. All December maturities have widened, currently trading at 6-9 bps. • Government money market funds had $31 billion of inflows in the week ended October 29. Prime funds had $2bn of outflows over the same period.	
US Municipals	• During the week ended October 29, municipals underperformed US Treasuries across the yield curve, most notably in long maturities. On the week, high-grade benchmark yields were 2-4 bp higher in shorter maturities and	

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	4bp lower in long maturities. Municipals continue to lag Treasury moves. • Supply of tax-exempt bonds was low during the week and expected to be low in the first week of November. There was more primary market activity in the taxable and corporate segments, with two larger deals pricing to strong demand. The expectation is for taxable primary market activity to be higher into the end of the year driven by an increase in taxable advance refunding deals. • Odd-lot discounts to round lot bid-side evaluations are approximately 1 point for odd-lots of 5k-15k size and 0.25 points for odd-lots of 100k+.	
Canadian Market	**Federal** • Liquidity is best in benchmark issues for block sizes of <CAD25 million. The Bank of Canada (BOC) is ending quantitative easing (QE) and moving into the reinvestment phase, during which it will purchase Government of Canada bond solely to replace maturing bonds. The Bank will adjust its purchases to match maturities over a longer period, so that its purchases are not unduly volatile. The target range for total purchases will initially be between $4bn and $5bn per month and will be adjusted as necessary. Primary market purchase amounts will be reduced to a total of between $1bn and $2bn per month. Total secondary market purchases will be reduced to a range of between $2.5bn and $3.5 bn per month. This should continue at the margin to support market liquidity. • The latest BOC balance sheet shows that the central bank continued to support liquidity in Canadian markets (as of October 27). The Government Bond Purchase Program (GBPP) has resulted so far in $286.417 bn in net buying (assets minus liabilities minus position at the start of the QE in March 2020). • Liquidity is better in on-the-run benchmark Canadas. In the aftermath of the central bank ending QE, market liquidity was limited; for example, the bid-ask in 2-year Canadas moved from 1 cent to 5 cents reflecting high volatility in the week of the banking industry fiscal year end combined with dealers reduced risk appetite. **Provincial** • Liquidity is best in benchmark bonds from Quebec, Ontario, and British Columbia. • Depending on market tone, concessions may be requested in order for dealers to take less-liquid positions. • Most dealers will not bid aggressively on off-the-run, high coupon provincial issues but will favor agency trades. • The central bank does not provide a back stop to the provincial sector.	Federal: bid/ask was at 4 cents in the 10-year area, but for the long end of the curve, it remains relatively wider at 12 cents given its higher volatility. For example – the latest ultra-long Canada 2064 bid-ask is at 30 cents, reflecting its liquidity issues given this is not a benchmark. Off-the-run, high coupon Canadas were reported to have limited liquidity given small outstanding size in these securities. In the aftermath of the BOC decision, liquidity was mainly in on-the-run benchmark Canadas with wider bid-ask compared to normal market conditions. Provincial: concession reported to be above average on size > CAD 25 million, particularly in longer maturities in normal market conditions. In risk-off

Sector	Liquidity Trading Comment	Bid-Ask Spreads
	• Liquidity is better in on-the-run, current coupon bonds in the provincial sector. Some dealers may refuse to bid on off-the-run/high coupon provincial bonds. The end of the GBPP will not support liquidity. Provincial bond liquidity was negatively affected by big 6 banks' fiscal year end, resulting in reduced liquidity. **IG Corporates** • The latest Bank of Canada research highlights the limited liquidity in Canadian corporate bond markets, which can impact pricing; many dealers are maintaining low balance sheet inventories, so may not provide bids in some sectors. • Trading is on an agency basis for issuers affected by mergers and acquisitions. • The Bank of Canada had a buying program (focused on securities of 5-years or less) to support liquidity for corporate bonds rated BBB and higher. As expected, the BOC has ended this Corporate Bond Purchase Program (CBPP) in May 2021. • Dealers indicated that there was reduced liquidity during the last week of October due to the big 6 banks' fiscal year end, where trading volumes were limited amid caps on inventories. **Real Return Bonds (RRBs)** • The program to purchase Government of Canada securities in the secondary market – the Government Bond Purchase Program or GBPP – was discontinued on October 27 for RRBs. Trading in Canada RRBs has shown a continued lack of liquidity across the RRB curve. • Finance Department documents indicate that Canada will issue only C$1 billion in RRBs in the current fiscal year with four auctions. This will result in net negative supply (BOC buying program plus maturities less new supply). • The next RRB auction on December 1 will most likely be a re-opening of the RRB Canada 2054 bond. The central bank was not able to complete its $280mn RRB target purchase program in September showing challenging liquidity in Canadian RRB markets from tenor of 2041 to 2050. • The end of the GBPP will not support liquidity; dealers are trading RRBs by appointment only as they hold limited inventories in RRB securities.	markets, liquidity is drying up and spreads can widen depending on market tone. BBB- corporates are generally trading by appointment, particularly in the energy sector. Inventories are reduced and dealers are not looking to increase their BBB- exposure. Dealers may refuse to bid in a risk off market with gaps in spreads. Provincial RRBs trading by appointment only and activity is rare. Dealers do not hold these securities on their balance sheet. Bid ask is not a reliable indicator for trading.

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 should not be construed as advice.

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.