

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.

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 flattering includes be which market printing of slobal.	
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.	

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 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 a head of month end. New issue supply came at the higher end of expectations
with an outflow of \$1.1 bn.

Sector	Liquidity Trading Comment	Bid-Ask Spreads
Sector	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 nonfinancials (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.	Bid-Ask Spreads
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%. 	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
	 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. 	CCC-rated and below: 1.25 points which is in line with normal market conditions

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		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+. 	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.
	 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. 	
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,	

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	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 vestment Professional use only. Not for inspection by, distribution or quotation to, the	

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	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	

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	 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	Federal	Federal: bid/ask was at
Market	 Liquidity is best in benchmark issues for block sizes of <cad25 \$1bn="" \$2.5bn="" \$2bn="" \$3.5="" \$4bn="" \$5bn="" (boc)="" (qe)="" a="" adjust="" adjusted="" amounts="" and="" are="" as="" at="" bank="" be="" between="" bn="" bond="" bonds.="" canada="" continue="" during="" easing="" ending="" for="" government="" initially="" into="" is="" it="" its="" li="" liquidity.<="" longer="" margin="" market="" match="" maturing="" maturities="" million.="" month="" month.="" moving="" necessary.="" not="" of="" over="" per="" period,="" phase,="" primary="" purchase="" purchases="" quantitative="" range="" reduced="" reinvestment="" replace="" secondary="" should="" so="" solely="" support="" target="" that="" the="" this="" to="" total="" unduly="" volatile.="" which="" will=""> 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. </cad25>	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-therun, 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-therun benchmark Canadas with wider bid-ask compared to
	Provincial Liquidity is best in benchmark bands from Quebes Ontario	normal market
	 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. 	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	markets, liquidity is drying up and spreads
	run/high coupon provincial bonds. The end of the GBPP will	can widen depending
	not support liquidity. Provincial bond liquidity was negatively	on market tone.
	affected by big 6 banks' fiscal year end, resulting in reduced	on market tone.
	liquidity.	BBB- corporates are
	inquiaity.	generally trading by
	IG Corporates	appointment,
	The latest Bank of Canada research highlights the limited	particularly in the
	liquidity in Canadian corporate bond markets, which can	energy sector.
	impact pricing; many dealers are maintaining low balance	Inventories are
	sheet inventories, so may not provide bids in some sectors.	reduced and dealers
	Trading is on an agency basis for issuers affected by mergers	are not looking to
	and acquisitions.	increase their BBB-
	The Bank of Canada had a buying program (focused on	exposure. Dealers may
	securities of 5-years or less) to support liquidity for corporate	refuse to bid in a risk
	bonds rated BBB and higher. As expected, the BOC has ended	off market with gaps in
	this Corporate Bond Purchase Program (CBPP) in May 2021.	spreads.
	Dealers indicated that there was reduced liquidity during the	
	last week of October due to the big 6 banks' fiscal year end,	Provincial RRBs trading
	where trading volumes were limited amid caps on inventories.	by appointment only
		and activity is rare.
	Real Return Bonds (RRBs)	Dealers do not hold
	The program to purchase Government of Canada securities in	these securities on
	the secondary market – the Government Bond Purchase	their balance sheet.
	Program or GBPP – was discontinued on October 27 for RRBs.	Bid ask is not a reliable
	Trading in Canada RRBs has shown a continued lack of liquidity across the RRB curve.	indicator for trading.
	 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.	

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