High Yield Strategy

Portfolio Trading Impact on Liquidity

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Ex-energy BBs re-testing all-time tights from May 2007

HY market turned active over the last few sessions as investors were grappling with the potential impact of the virus outbreak in China and amid a hot primary market. Spreads widened 10bps over the last two days to finish at 350bps as 10yr rates rallied 10bp. The index turned flat total returns over the week and trailed broader credit.

Winners of the last several months – energy, cyclicals, lower quality – all saw some softness, which remained modest against their recent gains. Loans were helped by lower weight in energy, while IG was propped up by a meaningful rally in Treasuries.

Within sectors, capital goods and energy lost 80bps and 60bps respectively in total returns this week. Capital goods segment was impacted by a 6pt decline in Bombardier bonds, following further negative guidance from the issuer. Energy names struggled over the past couple of sessions on a sharp drop in crude prices. Healthcare was the largest gainer, adding 35bps in returns this week driven by a couple of distressed names.

About $13.3bn new issues were priced over the past week, of which $8.2bn were bond refinancing transactions and $4.6bn in loan-for-bond refies; the pipeline shows another $1.1bn in refi-deals this week. On the demand side, we had $2.4bn in calls/tenders and $0.6bn in net retail inflows and $0.9bn net buying from dealers adding to a net $3.9bn of net cash. For next week we estimate $3.1bn in call/tenders and $0.3bn in coupons. Our February issuance estimate is $15bn, following what is shaping up as the busiest January ever with current pace pointing to a $31bn tally for the full month.

What do we think here

The relentless rally has pushed certain segments of the HY market close to all-time tights. In BBs, the ex-energy index is now at 169bps, matching its May 2007 all-time low level of 170bps. In single-Bs, the ex-energy part of the market is about to break into-two handles, with current spreads at exactly 300bps. In 2006-2007, this category has consistently bottomed out at around this level as well, although the low print is still 30bps away. So while HY spreads at these levels could still appear technically interesting to IG folks, it is primarily because their own market is even more overpriced than HY is. From an absolute return HY investor standpoint these spread levels make little sense.

Our research from last week has highlighted how hiding in high quality today is offering little downside protection given extremely tight spreads. Our preference remains to be underweight overall HY beta primarily by underweighting its highest quality segments, and tightest sectors such as healthcare, gaming, real estate, food, and cable. BBs healthcare in particular is currently trading at 140bps, which is the tightest spot in all of HY. On the other side of this, we recommend holding a meaningful cash position, barbelled with overweights in credit risk (CCCs), cyclicals (all sectors away from these five), duration (4..6yr segment), and liquidity risk (smaller cap structures). Our model portfolio is presented in Figure 5 and features a 0.90x beta vs H0A0 and +48bps in OAS.

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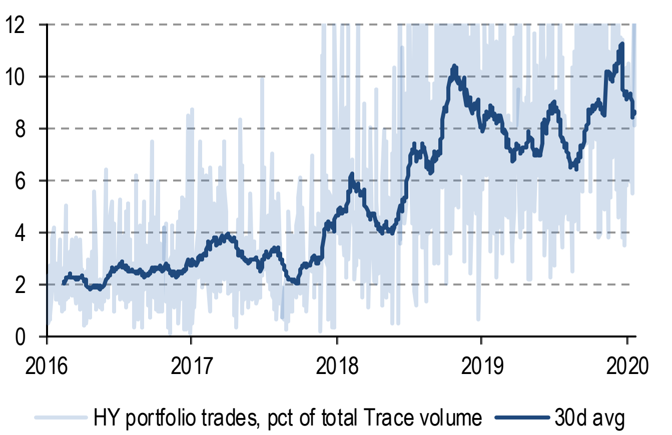
Portfolio Trading Impact on Liquidity

Portfolio trading – a type of transaction where baskets of bonds trade as a single lot at a single pre-agreed upon price and terms – has been a growing element in credit market ecosystem for a number of years now. The underpinning factors behind this development are: (1) growth in acceptance of credit ETFs as a preferred vehicle for institutional portfolio risk management; (2) growing share of passive investors in credit; and (3) development of technology systems that allow for instantaneous pricing of baskets of securities. These factors appear ubiquitous and structural to us, in other words, this is not a fad that comes and goes from time to time only to be forgotten. So we need to have a good handle on understanding the long-term effects of this development on the HY market liquidity environment.

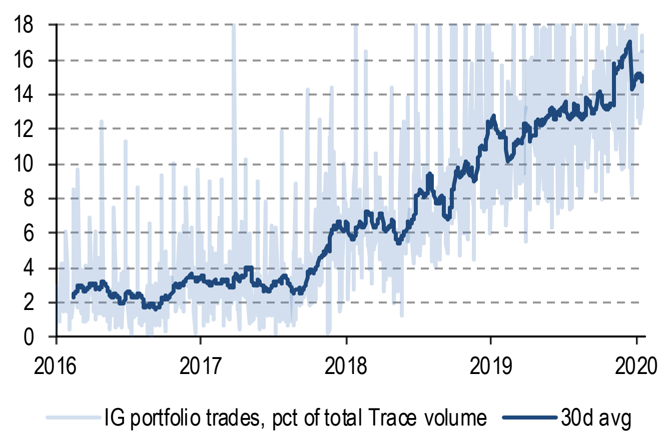
We show our estimates of this trend in Figure 1 for HY and Figure 2 for IG below. To arrive at these figures, we take the count of all instances where transaction-level Trace data has multiple cusips registered to have traded at the exact same moment, down to a millisecond. While this approach does not guarantee absolute purity of data in a sense that a dealer could have filed multiple unrelated transactions in one lot with a single timestamp, this is the best we currently have at our disposal. We also think that while such instances are possible and even probable to be infiltrating the data from time to time, we doubt they are pervasive enough to have set the trends visible in both charts.

Figure 1: HY portfolio trades, as a share of total HY Trace trading volume
Portfolio trades defined as 15 HY cusips traded in a single lot



Source: BofA Global Research

Figure 2: IG portfolio trades, as a share of total IG Trace trading volume
Portfolio trades defined as 50 IG cusips traded in a single lot



Source: BofA Global Research

For HY, we have decided to use the minimum of 15-cusip lots as the threshold of what we consider a portfolio trade; in IG such threshold was set at 50 cusips. In both asset classes we exclude retail-sized prints from the consideration. These assumptions are based on anecdotal evidence from our conversations with traders and PMs, combined with what we though should be marginally small contribution to overall volumes in earlier years. In other words, these thresholds were set in such a manner so that the data for years 2016-2017 would show only a rounding error contribution to the broad market activity levels, as we know was the case back then.

Based on these assumptions, we estimate that 8-10% of the HY bond trading volume today is being done via such single-lot basket trades; it grows to 15% if we were to accept the minimum of 10 cusips transacted simultaneously. In IG, the proportion stands at around 15% and is not particularly sensitive to modest changes in lot-size assumptions.

We further show that trading in major HY ETF shares consistently represented 15%-plus of overall HY Trace trading volume over the past year (Figure 3), having peaked at over 25% on several occasions in recent months.

So HY ETFs, with less than $50bn in AUM or 3% of market size are consistently responsible for 15-25% of trading volumes in their shares; these are mirrored in 8-10% contribution to bond volumes through bond portfolio trading. Their share of trading tends to jump around market reversal points, such as early 2016, late 2018, and in June 2019. In other words, when liquidity conditions are most constrained and yet they matter the most, ETFs – and by extension portfolio trading – steps in to take the void. The other side of this coin is that a 3% market-share segment is effectively setting the price on a $1.2trln asset class.

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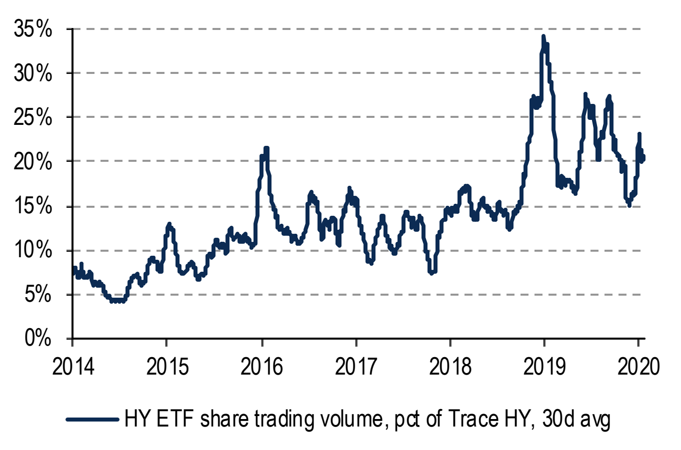
Our data also shows that the rise of ETF in portfolio management, coupled with growth in portfolio trading, have contributed positively to the cost of trading. To arrive at this conclusion, we examine the data in the Figure 4, which plots *effective* HY bid-ask spreads. Note the word effective here; we make an attempt to measure actual realized bid-ask spread based on actual institutional-sized transactions in HY, as opposed to quotes which often have no executable depth and are realistically one-sided, dependent on market conditions.

To alleviate these shortcomings, we measured actual transactions registered in Trace, where any dealer buys a security from a customer and any dealer sells the same security to a customer. We limit these transactions to be within three days of each other, regardless of the order (i.e. dealer buys first, sells second or the other way around). We chose transactions based on their time proximity, i.e. the preference is given to those done back-to-back.

Figure 3: HY ETFs combined share trading volume, pct of Trace HY
ETFs included are HYG, JNK, SHYG, SJNK



Source: BofA Global Research

Figure 4: Effective realized bid-ask spreads in HY
Trace prints where any dealer buys a cusip and sells it to any client within 3 days

Source: BofA Global Research

The rationale behind this approach is that by following the trail of all the millions of institutional-sized dealer-to-customer transactions in Trace every year, we can compute the effective or realized bid-ask spread on those transactions as a function of difference in price where a dealer has purchased a security and where he/she sold it. Unfortunately the data would not allow us to limit this dataset to a particular dealer being on both sides of a given trade, which would be ideal. However we do not find this data availability constraint to be debilitating to our purposes as trade information is being disseminated nearly instantaneously. This means that the knowledge of one dealer transacting on one side of a given trade has an impact on behavior of other market participants involved in the same trade.

So Figure 4 shows that effective bid-ask spreads are currently oscillating at around 0.25-0.35 dollar price points in HY, which is close to their multi-year lows. At peak market stress points in early 2016 and late 2018 such bid-asks increased to 0.40-0.45pts range; in earlier periods, they were as high as 0.5pts. Whether or not all this improvement is a function of the rise of ETF and portfolio trading is hard to prove conclusively either way. However, given that these two developments are arguably the most meaningful ones to have taken place in the HY liquidity landscape in recent years, we have to assume their impact is present and meaningful too.

So far, this is all good news. Whether you are a passive or active investor in HY, you benefit from being able to manage your portfolio risk efficiently, in meaningful sizes, and with transaction costs under control.

What are the potential side effects of these developments? The first is what we mentioned earlier – the fact that a 3% segment of the market effectively sets the price for the $1.2trln asset class, particularly around meaningful market turning points. And while this may sound like inefficiency in and of itself, we think it comes as the natural tradeoff to being able to trade in size.

In fact, active portfolio managers can turn these externalities around and look for opportunities created by such apparent inefficiencies. For example, HY ETFs tend to be highly concentrated in large capstructures with a meaningful tilt towards higher quality. HYG is weighted 79% in the top quartile largest HY capital structures, with the rest being filled with names closer to the median size. Smaller capstructures are completely out of its reach. Likewise, this fund has a 55% weight in the largest BB-rated capstructures, whereas the normal market weight of that category is closer to 40%.

So when the next episode of volatility comes and HYG comes under significant selling pressure by all those using it to manage risk exposures to HY, we can confidently count on the brunt of its impact to be felt in large-sized BB names. This comes contrary to what one would expect to happen if investors had a practical choice to actively manage their HY portfolio risks. This segment would then experience a meaningful price impact for no other reason but its liquidity-provision characteristics. This observation fits our existing positioning recommendations well in that we think these areas of HY provide some of the poorest risk-return tradeoffs in our market.

Recommended positioning

We refresh our existing positioning in Figure 5 below with no particular changes introduced this week as we remain comfortable with all our existing views. Our goal is to reduce overall portfolio beta to meaningfully under 1x (currently at 0.90x) while not giving up on yield opportunities. Portfolio beta is measured based on weekly excess return of each component against H0A0 going back to Jan 2010.

We achieve this goal by a meaningful underweight stance in higher quality coupled with a significant position in cash and some overweight in lower quality. We continue to like the “two-corners” positioning, where we underweight short-duration large-sized BBs in defensive sectors against an overweight in effectively every other sector, single-Bs, long-duration, smaller-sized capstructures. We stick with our higher quality energy BB overweight view , although this position felt heavy this week on the back of meaningful drop in oil and natural gas prices. We remain underweight healthcare BBs as the tightest segment in US HY and overweight in chemical single-Bs based on unusually wide 200bps gap they have to respective BBs.

Figure 5: Summary of our recommended positioning

Index market value (MV) is scaled to $1bn; delta MV column adds up to zero, i.e. model portfolio value is also $1bn

	Index %	Index MV	Delta %	Delta MV	OAD	OAS	YTW	Price	Beta
Cash	0.0%	0	15.0%	150	1.0	43	1.98	101.7	0.00
BBs	49.4%	494	-10.0%	-100	3.7	197	3.71	105.1	0.89
Bs	38.8%	388	0.0%	0	2.9	350	5.26	102.5	0.98
CCCs	11.8%	118	2.5%	25	2.9	984	11.48	84.4	1.33
Two corners									
BBs Cable/Media	6.4%	64	-3.0%	-30	3.4	167	3.46	105.2	0.87
BBs Gaming	1.1%	11	-3.0%	-30	4.2	166	3.28	109.2	0.83
BBs Real Estate	3.5%	35	-1.0%	-10	3.7	165	3.37	106.0	0.60
BBs Healthcare	4.5%	45	-1.0%	-10	3.1	142	3.21	106.6	0.74
BBs Food Producers	1.1%	11	-1.1%	-11	3.2	167	3.36	106.6	0.71
Bs Capital Goods	2.2%	22	1.5%	15	2.8	348	5.11	103.1	0.87
Bs Chemicals	1.2%	12	1.0%	10	3.1	434	6.07	101.5	0.95
Bs Autos	1.7%	17	1.0%	10	3.0	365	5.37	101.5	0.96
Bs Retail	2.3%	23	2.0%	20	3.5	360	5.37	101.5	0.78
Bs Telecoms	4.0%	40	1.7%	17	3.5	326	4.94	106.2	1.19
BBs.OAD:0..2yrs	13.8%	138	-2.0%	-20	0.9	129	2.90	103.4	0.29
BBs.OAD:4..6yrs	13.1%	131	2.0%	20	4.9	235	4.14	105.7	1.01
Bs.OAD:0..2yrs	12.8%	128	-2.0%	-20	1.0	229	4.04	103.2	0.34
Bs.OAD:4..6yrs	9.4%	94	2.0%	20	4.6	465	6.47	99.9	1.19
Largest Issuers	90.8%	908	-10.0%	-100	3.9	272	4.18	103.5	0.83
Smallest Issuers	7.1%	71	10.0%	100	2.9	475	6.33	100.1	0.43
High quality energy overweight									
BBs ex-Energy	43.4%	434	-5.0%	-50	3.6	177	3.50	105.9	0.84
BBs Energy	6.0%	60	5.0%	50	3.9	346	5.21	99.7	1.21
Capital allocation cycle underweigths									
HY Healthcare	10.1%	101	-3.0%	-30	2.7	290	4.83	103.1	0.83
HY Technology	4.5%	45	-2.0%	-20	2.9	273	4.38	103.1	0.89
Valuations-driven adjustments									
Bs Chemicals	1.2%	12	2.0%	20	3.1	434	6.07	101.5	0.95
BBs Healthcare	4.5%	45	-2.0%	-20	3.1	142	3.21	106.6	0.74
H0A0 (benchmark)			-0.6%	-6	**3.3**	**349**	**5.23**	**101.1**	**1.00**
Portfolio vs benchmark		**1,000**		**0**	**-0.3**	**+48**	**+0.46**	**-2.0**	**-0.10**

Source: BofA Global Research

HY Market Performance Recap

Across sectors, capital goods and energy underperformed the broad index by 80bps and 60bps respectively while healthcare outperformed by 30bps.

Figure 1: Rating agency HY actions and related performance this week

Issuer Name	Agency		New	Old	L3mo[1]	Country	Industry	Total Debt	Bond ID	OAS	vs. Bmrk[2]	L1wk[3]	L3mo[4]
Rating Actions													
Bombardier Inc	Fitch	▼	CCC+	B-	1x▼	CA	Capital Goods	10,369	BBDBCN 7.875 2027	707	361	165	4
XPO Logistics Inc	S&P	▼	BB *	BB	3x▼	US	Transportation	7,310	CNW 6.7 2034	408	62	-49	-87
Safeway Inc	Moody's	▲	B2	B3	1x▲	US	Retail	3,000	SWY 7.25 2031	441	95	-13	-96
Delphi Technologies PLC	Moody's	▼	B1	Ba3	2x▼	GB	Autos	1,621	DLPH 5 2025	589	394	52	51
PDC Energy Inc	S&P	▲	BB	BB- *+	2x▲	US	Energy	1,291	PDCE 5.75 2026	415	69	13	-128
Unit Corp	Fitch	▼	CC *-	CCC+ *-	10x▼	US	Energy	800	UNTUS 6.625 2021	7419	6445	1527	4427
American Woodmark Corp	Moody's	▲	Ba1	Ba2	1x▲	US	Real Estate	714	AMWD 4.875 2026	187	-8	-20	-61
McClatchy Co/The	S&P	▼	CC *-	CCC-	6x▼	US	Cable/Media	667	MNI 9 2026	950	-24	-64	132
Safeway Inc	Moody's	▼	B3	B2	1x▲	US	Materials	616	HL 6.875 2021	529	-445	-13	-83
Hecla Mining Co	Moody's	▲	B3	Caa1		US	Materials	616	HL 6.875 2021	529	-445	-13	-83
Forum Energy Technologies Inc	Moody's	▼	B2	B1	1x▼	US	Energy	466	FET 6.25 2021	1023	677	-44	-647
Defaults													
Outlooks													
WESCO Distribution Inc	S&P	▼	BB *-	BB		US	Capital Goods	973	WCC 5.375 2021	349	154	1	251

Note: column L3mo1 measures the cumulative rating actions by notches per issuer within the last 3-month window. Empty value under the column indicates either no rating actions (excluding outlook) or the cumulative rating actions netted out for the issuer within the period. The performance metrics are based on the bond with biggest notional under each ticker and benchmarked against the quality-specific subindex (ex. H0A1 for BBrated bonds). L1wk3 and L3mo4 measure the spread changes for the week and the last 3-month.

Source: BofA Global Research, Fitch, Moody's, S&P

The underperformance of capital goods was mostly contributed by Bombardier (almost 20% weight in the HY capital goods subindex) as the market reacted to its lower-than-expected FCF. As shown in Figure 1 below, Fitch also downgraded the issuer from B- to CCC+ following its large sustained negative FCF. The downgrade was the first action from agencies within the last 3-month window. The issuer's benchmark bond due 2027 widened by 165bps for the week, currently 361bps wider than H0A2.

Unit Corp contributed most to the decline in energy. The issuer has seen 10 notches cumulative downgrade from the agencies within last 3-months. More recently, Fitch downgraded Unit Corp to CC from CCC+ on the back of the issuer's heightened refinancing and liquidity risks. Its benchmark bond due 2021 is trading at 47 cents on the dollar and is currently part of a proposed debt exchange offer.

Distressed healthcare names such as Mallinckrodt (MNK 5.75 2022, 5.625 2023, 5.5 2025) and Community Health (8% of HY healthcare subindex) gained over the week, contributing to the visible outperformance of the broader sector.

On a separate note, the HY market seems to be looking through the coronavirus outbreak in China, at least so far. As headlines comparing the outbreak this time with the 2003 SARS outbreak going viral, there're a couple key differences. The first one being the geographic spread of the current outbreak is primarily within Wuhan vs most of the 2003 SARS confirmed cases were in Beijing, a much bigger GDP contributor to China economy. The second one is the response time from the government: Beijing is much more responsive with protocols this time around while in 2003, it took 5 months for actions to be taken.

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