Quarterly Update – Analysis

First State Investments

High Yield

First State Investments High Yield

Q3 2019 | Co-Portfolio Managers: Matt Philo & Jason Epstein

Analysis: Why High Yield? Why Now?

In our Quarterly Commentary for Q2'19 and prior quarters we have made the following claims:

- 1. We continue to view our High Yield composites as attractive in the absolute, and as the best relative value in all of Fixed Income, due to the following:
 - Relatively high current income
 - Default adjusted yields and spreads that overcompensate for estimated default risk, in each of our high yield composite portfolios
 - Relatively low interest rate sensitivity
- 2. In our cumulative High Yield investment experience, we have yet to experience a market environment where we think our investment process can't identify a fully diversified High Yield portfolio that overcompensates for estimated default risk; the current market posing no exception.
- 3. We don't fear market volatility or downside corrections; we calmly welcome the opportunities they present.

The following is an objective analysis that endeavors to defend, each of the statements above, drawing on the cumulative analyses of our ongoing work at 'FSI' and some carefully cited studies, and market observations from outside parties. One critical caveat: when we talk about "High Yield" we are referring to the overall High Yield market, but only in terms of the opportunity it presents using our investment process:

Disciplined
Time-tested
Contrarian, by nature

In setting out to support our strongly held views, which seem contrary to the consensus view of a majority of institutional investors, we are aware that everyone, including ourselves, are constantly challenged to avoid one of the most common human tendencies: confirmation bias.

"Faced with the choice between changing one's mind and proving that there is no need to do so, almost everyone gets busy on the proof."

– John Kenneth Galbraith

Analysis: Why High Yield? Why Now?

Executive Summary:

The full "Analysis: Why High Yield? Why Now?" endeavors to defend our consistent views of recent Quarters:

- ► We continue to view our High Yield composites as attractive in the absolute, and as the best relative value in all of Fixed Income.
- ► Our High Yield Composites all present spread premiums that comfortably overcompensate for our estimates of annual default risk, for each portfolio holding.
- ▶ We don't fear market volatility or downside corrections; we calmly welcome the opportunities they present.

This Credit Cycle in Numbers

Since 2009: non-financial US corporate debt has increased by +\$4.3trln, representing +66% of its initial size; on both measures, new records relative to the two previous credit cycle peaks in 2000, and 2008. Among the top contributors of overall debt growth in recent years:

- 1. The <u>Leveraged Loan Market</u> has increased in size by 70-75% since the end of 2013, recently surpassing the size of the U.S. High yield Market. We believe the overall risk of the loan market has increased this cycle as a result of this rapid growth, the prevalence of Loan-Only financings, and ever weaker "covenant light" protections.
- 2. The explosive growth of the <u>Private Debt Market</u> has likely cannibalized some corporate issuer demand from the high yield market; especially financings for LBOs. BofA estimates the private debt market is now approaching the size of the U.S. high yield market at \$1trln; having grown by over 70% over the past three years alone. Meanwhile, the private debt markets offers *virtually zero* secondary market liquidity.
- 3. <u>BBB Corporates</u>, the lowest-rated segment of U.S. investment grade corporates, increased to record size during this credit cycle: in the absolute (\$2.3trln), as a percent of IG (60%), or as a percent of HY (220%).

The Summary Case for U.S. High Yield

As a result of the dramatic growth of these other risk credit markets, we observe the High Yield market has been spared its typical influx of the weakest quality new issuance during this great credit boom. In fact, public <u>High Yield</u> is the only U.S. credit sector with a **negative** growth rate over the past three years, (as well as the last, nearly six years).

Importantly, we observe that the average credit quality of the High Yield market is meaningfully stronger than historic credit cycle norms.

The High Yield Market, as represented by the ICE BofAML US High Yield Constrained Index (HUCO), offers a Spread to Worst (STW) in excess of +400 bps, while the average single-B credit's STW is closer to +450 bps.

As a result, from the perspective of our disciplined investment process, the High Yield market currently offers the **best relative value** in all of Fixed Income:

<u>Valuation</u>: our High Yield Composites all present spread premiums that comfortably overcompensate for our estimates of annual default risk, for each portfolio holding,

<u>Income Yield Advantage</u>, over most other liquid, fixed income alternatives; providing an attractive, default adjusted "wind at our back."

Simple, is Good: our portfolios employ no leverage and typically present solid trading liquidity.

<u>The Contrarian Risk Rotation</u>: **Most importantly**, our disciplined investment process forces us to be CONTRARIAN "lenders" relative to the short-term, and long-term credit cycle. We capitalize "CONTRARIAN" because we believe it represents the Critical, Differentiating Advantage of our Investment Process: relative to other high yield managers AND relative to most of the "illiquid" investment strategies, that populate like deer during every bull market in credit. It's also the reason we can say, "*We don't fear market volatility or downside corrections; we calmly welcome the opportunities they present.*"

Big Picture

The market backdrop, in our opinion, presents two primary, diametrically opposed fundamentals:

#1: On the one hand, in our opinion, Global Central Banks (GCBs) will continue massive monetary stimulus. We do not believe GCBs have the will, or even the ability to reverse this course of action. While we are not "fans" of the great monetary experiment, we respect its power, and note that the old-school strategy of simply avoiding financial market risk, in anticipation of a cyclical correction has become both a losing strategy (over the past decade, or two), and a real-world, career hazard. *Note: we'll summarize our outlook for GCBs as an "appendix" at the end of this Analysis.*

#2: At the same time, in our opinion, financial markets are presenting growing speculative excesses; in some market segments, more than others. Ironically, High Yield corporate bonds exhibit low speculative excesses compared to other fixed income credit segments. "Ironically" because the broad market opinion which we hear in the marketplace, is that High Yield corporate bonds represent a prime example of market excess, and under-compensated credit risk.

Reviewing the Current State of the Financial Markets:

The financial markets, in general, and fixed income credit, in particular. The initial material that follows are direct excerpts from an excellent research study: "High Yield Strategy: Where We Are In This Credit Cycle" by Oleg Melentyev, CFA, Credit Strategist, Bank of America Securities (13 September 2019).

Note: With the exception of "titles" and "subtitles," all emphasis is ours (bold, underline and italics).

{Direct excerpts, begin}

This credit cycle in numbers

Figure 1 measures growth in non-financial US corporate debt in each of the past three credit cycles. Since 2009, the Nonfinancial US Corporate Debt group has added +\$4.3trln in new debt, representing +66% of the initial size. These figures set new records on both scales.

Importantly, the chart also shows that growth in debt has resumed in recent months, following a short pause after the market dislocation inQ4 2018. Corporations owe \$475bn more today than they did at this point last year.



Figure 1: US non-financial corporate debt, trailing 12 mo change US\$bn

Source: Bofa Merrill Lynch Global Research, Federal Reserve

Figure 2 provides an asset class breakout of overall debt growth in recent years, where the top contributors were private debt, public IG, and broadly syndicated loan markets. The only asset class with a negative growth rate over the past three years was public High Yield.

The private debt market is now approaching \$1trln in size, having grown by over 70% over the past three years alone. This rate exceeds the peak growth levels of ANY US credit asset class that we have data on over the past 25 years. We define private debt as any form of debt outside of public bond markets, broadly syndicated loans, and loans held on bank balance sheets. This broad definition includes segments such as direct lending and middle-market loans.

The exact size of this asset class is impossible to establish as the information is mostly private by definition. We estimate its size by starting with overall US non-financial debt stock as reported by the Fed's Flow of Funds and exclude known public debt segments (bonds, syndicated loans and bank-held loans).



Figure 2: US non-financial corporate debt, 3yr growth rate pct

Late-cycle signs of exuberance

The prevalence of extremely low yields is pushing investors to take on extraordinary risks along the following four axes:

Duration risk

Figure 3 shows record long duration of the ICE BofAML Global Bond Market Index (GBMI), coincident with record-low yields.



Figure 3: Global bond market effective duration, years

Source: BofA Merill Lynch Global Research, ICE Data Indices, LLC

Credit risk

There are multiple ways to show how investors are taking on exceedingly high credit risk, with just the two of them shown in Figure 4 and Figure 5. **Figure 4** depicts growth in the BBB segment, which we have covered extensively here. To summarize, BBBs have grown to record size in absolute sense (\$2.3trln on non-financial DM USD BBB bonds), as a percent of IG (60%), or as a percent of HY (220%).

Figure 4: US non-financial corporate BBBs, pct of HY



Source: BofA Merill Lynch Global Research, ICE Data Indices, LLC

On the debt leverage size, **Figure 5** goes on to show that the HY market currently measures 5.0x in total debt/EBITDA, an elevated level for this point in the credit cycle. Recall that each previous peak in leverage in 1991, 2001, and 2009 was achieved as a function of EBITDAs dropping 20-30% in a recessionary environment. If an event like that were to take place at current debt levels, we would be looking at leverage jumping to 6-7x matching and even exceeding peaks of the previous credit cycles.





Source: BofA Merill Lynch Global Research, ICE Data Indices, LLC

Liquidity risk

The inflow of \$4.3trln into US corporate credit during this credit cycle was accommodated by a well-oiled new issue machine, which has no equivalent on the other side. Of this total, \$1trln is now in private debt, which offers virtually zero secondary market liquidity.

Fx Risk

US credit markets are a direct beneficiary of very strong foreign flows seeking positive yields. A sharp move in currencies could trigger such foreign flows to exit the US credit market nearly simultaneously, in our view.

{Direct excerpts, End}

Briefly reviewing Anecdotes of Potential Market Excesses, from our Q2'19 commentary:

Re: U.S. Equities:

J.P. Morgan estimates that *active equity managers account for just 20% of U.S. Equity AUM*, and the rotation from Active to Passive continues!

- J.P. Morgan Equity Strategy and Quantitative Research, 28 June 2019

Re: Fixed Income ETF's:

"The amount of money in *fixed-income exchange-traded funds passed\$1 trillion* last month...Just 20 years ago, bond ETFs didn't even exist...

- WSJ: 01-Jul-2019, 'Bond Exchange-Traded Funds Pass \$1 Trillion in Assets'

Re: Negative Yielding Bonds:

"The universe of *negative-yielding bonds...pushing the total past \$13 trillion* for the first time...Some 40% of global bonds are now yielding less than 1%, according to data compiled by Bloomberg...It's not just sovereign debt. In the investment-grade market, negative-yielding debt now comprises almost a quarter of the total."

- Bloomberg: 20-Jun-2019 'The World Now Has \$13 Trillion of Debt With Below-Zero Yields'

Re: Negative Yielding 'Junk Bonds':

"Central bankers hinting at more monetary stimulus have depressed yields so much that *even some European junk bonds* trade at levels where investors have to pay for the privilege of holding them."

- Bloomberg News: 20-Jun-2019 'The World Now Has \$13 Trillion of Debt With Below-Zero Yields'

Re: Morningstar Change to U.S. Bond Fund Classification:

"With little fanfare, many traditionally safe investment-grade bond funds have been edging into more complex corners of fixed income. The goal: to eke out returns in today's low-interest-rate world...many relatively straightforward U.S. bond funds have increased their holdings of lower-rated bonds, emergingmarket debt and other securities to juice returns...The trend led Morningstar Inc. to change how it classifies U.S. bond funds."

- Bloomberg News: 05-Jul-2019 'Bond funds drift into risky debt'

Re: Fixed Income 'Quant Strategies':

"Hedge funds, investment banks and sovereign wealth funds are racing to discover *the next big thing in fixed income... carving up corporate bonds into behavioural traits* such as value and momentum in the search for alpha, these math wizards are hoping to disrupt the established giants of the trillion-dollar credit market." — Bloomberg News: 09-Jul-2019 'The New Quant Billions Are Hiding in the Bond Market'

And just one update from the steady stream of recent "compensation schemes":

Re: "Collateralized loan obligations -- typically chock-full of broadly-syndicated debt -- are increasingly being stuffed with private loans made to highly leveraged medium-sized companies with limited access to bank financing. Known as middle-market CLOs, the asset class has ballooned to \$57 billion, from just \$20 billion six years ago." -- Bloomberg News: 09-Jul-2019 'CLOs Stuffed Full of Private Debt to Risky Companies Are Booming'

Why?

Why has High Yield been the only asset class with a negative growth rate over the past three years? (We have also, previously pointed out that U.S. High Yield has also experienced negative cumulative asset growth since 2013; nearing 6 years).

While, elsewhere since 2009: non-financial US corporate debt has increased by +\$4.3trln, representing +66% of its initial size; on both measures, new records relative to the two previous credit cycle peaks in 2000, and 2008.

We believe a number of factors account for the U.S. high yield corporate bond market's lack of growth:

- Most important, in our opinion: until recently, non-investment grade corporate issuers were favoring the leveraged loan market over the high yield bond market. Bank of America and JP Morgan estimate the cumulative growth rate of the leveraged loan market, since the end of 2013 as +75% and +70%, respectively.
- Brad Rogoff, at Barclays has highlighted the growth of "loan only" capital structures as one of the many factors that has increased credit risk in the loan market. Loan-only issuers continue to make up the majority of the market on an issuer basis and now represent 61% of the index." Brad also points out that 55% of 1st lien-only issuers have no bonds outstanding, when excluding issuers with second lien loans. Finally: "Per S&P LCD, 34% of first-lien loans issued this year have no debt cushion beneath them. That rate is a record high and up from 29% in 2018." Anecdotally, we recall a similar trend of loan only financing pre-GFC; and, one of the most prevalent underwriters... Lehman Brothers.
- The aforementioned explosive growth of the private debt market has also probably cannibalized some corporate issuer demand from the high yield market; especially financings for LBOs. If BofA's estimate is accurate, the private debt market is now approaching the size of the U.S. high yield market at \$1trln; having grown by over 70% over the past three years alone a rate exceeding the peak growth levels of any US credit asset class that BofA has data on over the past 25 years. Preqin has estimated the private debt market was \$457bln year-end, 2013; suggesting that segment has grown ~+100% over that longer time frame.
- Investor appetite has seemed voracious for BBB corporates, empowering the growth of the lowest-rated segment of IG corporates: By BofA's measurement, to record size in the absolute (\$2.3trln), as a percent of IG (60%), or as a percent of HY (220%). This explosive growth of BBB corporates may have cannibalized High Yield demand, to some degree, from both crossover, and structured product buyers.

Despite all their very real imperfections (read on!) the Bloomberg composite ratings for the ICE BofAML US High Yield Master II Index (HOAO) shows the opposite trend of the 'IG' corporate market. The lowest rated tranche of the High Yield index, CCC-rated credits, currently account for "just" 12% of the index market value; versus 18% at the end of 2013.

	2013	3Q'2019
BB	44%	49%
В	38%	39%
CCC	18%	12%
Total	100%	100%

US High Yield Master II Index Increased Credit Quality since 2013

Source: Bloomberg & ICE BAML

We have this much in common with Moody's/S&P/Fitch: We believe the High Yield market was spared its typical influx of the weakest quality new issuance during this great credit boom, due to lower underwriting standards in the aforementioned credit markets.

The record long Duration of the ICE BofAML Global Bond Market Index (GBMI), which is coincident with record-low yields is another significant differentiator versus the High Yield market. For example, the ICE BofAML BBB US Corporate Index (COA4) Duration-to-Worst is 7.4 yrs., versus 3.5 yrs. for the ICE BofAML BB US High Yield Constrained Index (HUC4). We won't opine on "NIRP" except to assume/pray that financial black-hole is much less likely in the U.S. than some commentary seems to suggest.

We simply can't improve on Oleg Melentyev's succinct summary of Liquidity risk, so we'll quote him, once again: "The inflow of \$4.3trln into US corporate credit during this credit cycle was accommodated by a well-oiled new issue machine, which has no equivalent on the other side. Of this total, \$1trln is now in private debt, which offers virtually zero secondary market liquidity."

Current Fixed Income, Credit Market Valuations

U.S. High Yield

The High Yield Market, as represented by the ICE BofAML US High Yield Constrained Index (HUCO), as of Oct-31-2019, offered: Yield to Worst = 5.89%, Spread to Worst = +430, DTW = 3.2, Avg. Price = \$99.09.

Since Inception, at FSI, the Spread-to-Worst of this Index has ranged, as follows:

STW graph Since Inception



Source: FSI, BoAM

Index spreads traded in a subdued STW range between 325 to 415 bps until the late-2018 sell-off in Nov/Dec; driven by a plummet in crude oil prices. From our Q4'18 commentary:

"WTI crude oil declined from its multi-year high of early Oct to within less than \$1 of the Jan. 20, 2016 low of \$41.48/ bbl. This proved somewhat disruptive ("like a dog in an outhouse"), driven by WTI crude oil's precipitous decline from \$73/bbl 10/03/2019 to \$45/bbl on 12/26/2018...The equity markets felt similar to the correction in the first quarter of 2018, UNTIL all financial markets hit the liquidity 'air pocket' known as December... Time will tell, but we are confident the month of December was a function of indiscriminate/undifferentiated selling across the Energy sector, during the least liquid trading month of the year. Obviously, we attempted to take advantage of that inefficiency, primarily through relative value swaps within our overall sector holdings."

In short, we welcome price volatility in the high yield market, and the market's sharp rally back in Q1'19 seemed probable, given the lack of meaningful trading volume in December. YTD 2019, in general, has offered index spreads trading in a more volatile, and higher range; between high 300bps to high 400 bps.



STW of US High Yield (HUCO) - 2019

Source: FSI & BoAML

The summary of:

High Yield's attractive relative value, from the perspective of our disciplined investment process, is clear, to us:

- (1) Valuation: our High Yield Composites all present *spread premiums* that comfortably *overcompensate for* our estimates of annual *default risk*, for each portfolio holding,
- (2) Current Income: *an income yield advantage* over most other, *liquid* fixed income alternatives; providing an attractive, default adjusted "wind at our back."
- (3) a YTD Increase in Spread Volatility that presents additional total return opportunities, following our Investment Process,
- (4) Simple, is Good: our portfolios employ no leverage and typically present solid trading liquidity;

With the caveat that, in any meaningful credit market correction, trading liquidity can disappear quickly — another, market anomaly that inevitably offers net-positive, additional total return opportunities during the ensuing market inefficiencies.

Our confidence in our ability to successfully navigate any financial market environment is not the hubris of two Co-PM's that happen to have strong, recent performance. In reality, we drive each other to remain focused on the downside, always. Our confidence comes from a hard earned, position of strength: ► Conviction that our investment process, properly implemented has long proven its greatest value in market corrections; leading to relative outperformance, with less volatility than the broad market, and manager peers, and ► Most importantly, hard-earned confidence in our entire Team of investment partners who empower our investment process to outperform, due to their extreme diligence and thoughtful, cohesive teamwork.

Other Risk Credit Markets:

The following simple summary highlights select market strategies on which we will comment, briefly:

October 31, 2019

Ticker	Yield	STW	DTW	Gov't	\$T	Name
HUC0	5.9	430	3.2	1.6	1.20	ICE US HY Cnst
HUC1	4.2	255	3.5	1.6	0.59	ICE BB Cnst
HUC2	6.2	458	2.9	1.6	0.47	ICE B Cnst
HUC3	12.2	1060	3.0	1.6	0.14	ICE CCC Cnst
HUC4	5.0	342	3.2	1.6	1.06	ICE BB-B Cnst
JVC4	4.8	327	1.9	1.6	0.43	ICE 1-5Yr BB-B
JPM LL	6.3	487	3.0	1.5	1.15	Lev Loans
COA4	3.2	147	7.4	1.8	3.67	US IG BBB
COAO	2.9	115	7.5	1.8	7.31	US IG (A3)
HEOO	3.2	378	3.3	-0.6	0.29	EU HY (Ba3)
EMGB	4.5	312	7.7	1.4	1.07	EM Govt (Baa3)
EMIB	3.1	165	5.5	1.4	1.14	EM IG (Baa3)
EMHB	6.9	536	3.5	1.5	0.49	EM HY (Ba3)

Source: BoAML & JPMorgan

High Yield Tranches based on Rating Agencies:

The U.S. High Yield market, as represented by the ICE BofAML US High Yield Constrained Index (HUCO) exhibits the following "rating tranche" weights: HUC1 (BB) = 49%, HUC2 (B) = 39%, and HUC3 (CCC) = 12%. In the next section of this Investment Thesis we'll bluntly explain these metrics are meaningless in our Investment Process, except as they may effect a trading technical; e.g. forced selling by a competitor due to a rating downgrade.

E.g. Currently, Ford Motor is rated Ba1/BBB-, by Moody's and S&P, respectively and accounts for 50 bps of the US 'IG' Index as represented by the ICE BofAML US Corporate Index (COAO). Should Ford be downgraded below BBB- by S&P, it would become part of the High Yield Indexes; 3% the size of HUCO, but "Constrained" to 2%. In such an event, it is likely sellers would be more motivated than buyers, resulting in technical selling pressure.

Finally, as you'll see, below, our Broad High Yield composite's positioning between "rating tranches" is significantly different, depending on which rating agency you ask.

In reality, we categorize risk based on a proprietary methodology that the senior portfolio managers of the team have stood by through multiple, full credit cycles. Based on our critical, real-world metrics we are roughly 15% underweight both "relative safety" and "relative risk" compared to a "normal" portfolio positioning versus the overall High Yield market. As a result we are roughly 30% overweight "relative average risk" credits, solely as a residual of following our fundamental, bottoms-up investment process.

U.S. Leveraged Loans

We already highlighted areas of concern regarding the average credit quality of Leveraged Loans: the *prevalence of Loan-Only financings, the rapid growth of that market, weak "covenant light" protections, etc.* However, our Investment Process finds strong relative value in select leveraged loans, such that they comprise 5-8% of our High Yield composites. Broadly speaking, we obviously find the majority of the best relative values that "fit" our Investment Process, in High Yield bonds. We'll have more to say about the Loan market in future Commentaries.

U.S. Investment Grade Corporates

We highlighted the explosive growth in BBB-rated credits that has driven the growth of the U.S. Investment Grade market. We are not predicting the likelihood or magnitude of future 'IG' downgrades to 'HY' although we don't believe it's a "non-issue" as some broker dealers will argue. The larger BBB issuers include the likes of Ford, General Electric, General Motors, etc. If we thought Ford fit our Investment Process at +365 bps we would own the name. However, GE now offers less than the minimum, required spread our investment process requires of crossover credits that warrant our strongest Risk Group rating. Additionally, we doubt our fundamental credit research could reach positive conviction regarding GE's financial subsidiaries.

European High Yield Corporates

We have EU exposure in Yankee Bonds: dollar denominated bonds of EU based corporates. In general, non-USD, EU Corporates, as represented by the ICE BofAML Euro High Yield Index (HEOO) present an easy pass from out Investment Process perspective: for too many reason to get into this month.

Emerging Market Fixed Income

We don't invest in EM Sovereign debt, we see no value in EM IG corporates, and broadly speaking, we view HY EM corporates as, (1) rich, and (2) jurisdictionally difficult. While not entirely fair, we think of EM HY as *Chinese property companies, Russian banks and Brazilian natural resources*. We would find the analysis of the first two ~ impossible, and the third "untimely." Put more simply, we are aren't interested in jurisdictions where we would not look forward to the local bankruptcy law. The majority of EM Corporates are outside our Team's "comfort zone."

THE HOME STRETCH

All that remains of our Investment Case for High Yield are brief reviews of the critical, differentiating Fundamentals of our FSI HY Investment Process.

We'll conclude by highlighting the most powerful, natural advantage of our Investment Process. An advantage unavailable via private credit funds, or most of our high yield peers.

RATING AGENCIES

Some unsolicited advice: If your corporate bond manager spends much time talking about the major credit agency risk metrics, find a new corporate bond manager.

In our Q4'18 commentary we made the subtle observation that: "For over 20 years we have found BOTH {Moody's and S&P} ≈ useless as credit risk assessments. HOWEVER, "useless" can be very "useful" since a large number of high yield managers (aka competitors) put significant weight on "official" ratings. The more other investors make investment decisions based on Moody's and/or S&P ratings, the greater our chance of identifying mispriced credit risk.

The following chart makes a number of salient points regarding "risk ratings": Beginning with the rating agency metrics, and provides a segue to our proprietary FSI Risk Group ratings.

	RATING AGENCIES			
Broad High Yield Composite	Moody's Ratings (MDY)	S&P Ratings (S&P)	!!! MDY – S&P	
BB	33%	50%	-17%	
В	58%	46%	+12%	
ССС	9%	4%	+5%	
	100%	100%		

	'FSI'
Broad High Yield Composite	FSI Proprietary Risk Groups
1	15%
2	72%
3	13%
	100%

HUCOUS High Yield Constrained INDEX	Moody's Ratings (MDY)	S&P Ratings (S&P)	!!! MDY – S&P
BB	42%	53%	-11 %
В	43%	38%	+5%
CCC	15%	9%	+5%
	100%	100%	

Source: FSI, Moody's, S&P, and BoAML

Whenever we compare the rating metrics in this chart we always notice a significant divergence between the Moody's and Standard & Poor's ratings of the credits in our model portfolios; in this case our Broad High Yield Composite. Admittedly, we've made little effort to be "experts" in either rating agency's methodology/logic. We simply find the constant divergence somewhat entertaining, and revealing.

It's hard to miss the rating differentials between BB-rated credits of ~17%. S&P rates 50% of our portfolio's market value as BB, and only 4% as CCC. Moody's ratings suggest much higher default risk with just 33% of the portfolio rated BB, while the CCC-rated weight is more than twice as great. In other words. S&P rates just 50% of our Broad High Yield portfolio below BB, while Moody's analysis rates 67%, of the same portfolio below BB. Our term for that is statistically significant.

We have also included the Moody's and S&P ratings for the overall High Yield market, as represented by the ICE BofAML US High Yield Constrained Index (HUCO). The potential "usefulness" of the rating agencies becomes apparent in the greater "rating divergence" in our Broad High Yield Composite, relative to its benchmark High Yield Index. In any case, since we find that the rating agencies make poor risk assessments, we obviously have to rely on our own proprietary credit risk methodology.

Proprietary FSI High Yield Risk Groups:

The senior portfolio managers of the team have both adhered to a proprietary "risk categorization" methodology. This methodology has served us well through multiple, full credit cycles in their individual careers as well as over the last three years as a team. The following is a brief review:

Risk Group	Asset coverage	Cash flow volatility	"Strategic Value"
1.0-1.6	2.0x minimum	Low	Substantial
2.0-2.6	2.0x minimum	Medium	Meaningful
3.0-3.6	1.5x minimum	High	Moderate
4	Anticipate restructuring or default		

We assign every credit we own a dynamic Risk Group Rating from 1.0 to 4.0, based on our estimate of its estimated annual default risk, which is a function of: (1) Asset Coverage, (2) Volatility of free-cash-flow, and (3) Relative "Strategic Value"

The ultimate goal of our Risk Categorization Methodology is to accurately forecast the enterprise value that would be realized through an organized "real-world" Auction Process, in a less than ideal operating environment. Asset Value is typically calculated using multiple valuation methodologies; the primary methods estimate the present value of a company's forecasted free cash flow generating capability.

Definitions:

(1) Asset Coverage is defined as our proprietary calculation of an issuer's Asset Value (EV), divided by the total forecasted amount of debt, plus debt-equivalent obligations at the relevant issuing entity (obligor).

(2) Volatility of free-cash-flow of a company, relative to its industry and the economic cycle.

(3) Strategic Value is the relative strategic significance of a company in its industry sector: relative market shares, relative cost positions or other sustainable competitive advantages/barriers to entry. Without getting into details, there are numerous other qualitative fundamental assessments that can further safeguard against default risk, (e.g. management &, protective covenants).

ALL THAT may seem a bit dry, however it's the single most important Risk Control methodology that we spend our professional lives estimating. The "real-world" Auction Process concept in anything but theoretical when its critical importance becomes apparent should any company experience unexpected operating weakness, an economic downturn, or in true distressed investing: an Actual real-world Auction.

The Chart, above highlights the minimum real-world Asset Coverage we require, without exception, for any company's debt to be owned in our portfolios. Our stringent, minimum asset coverage requirements eliminates from consideration approximately 30% of the entire High Yield market, at any price.

"Never Buy Credit Risk at the Wrong Price"

There are Two Primary Mistakes to make in High Yield investing:

Mistake #1:

Credit Defaults are the ultimate High Yield mistakes. Our investment process controls default risk via our "Margin-of-Safety" requirements, encapsulated in Risk Group Rating metrics: e.g. we require the majority of our holdings to have a minimum estimated Asset Coverage of at least 200%; or reversing that concept, a Loan-to-Value no greater than 50%.

Mistake #2:

Buying Credit Risk at the Wrong Price. Our proprietary "risk categorization" methodology prevents this mistake if our credit work assessments are correct. Every credit we own, or consider owning is assigned a Risk Group from 1.0 to 4.0. This Risk Group methodology estimates the annual default risk of every credit, and we require an interest rate spread (premium) that overcompensates for the estimated default risk.

THE CONTRARIAN RISK ROTATION

Please consider our Investment Process in the language of commercial bank lenders, perhaps 40-50 years ago: We own non-investment grade debt in order to make loans: (1) to companies with *strong strategic value*, (2) at a *conservative*, *real world*, *Loan-to-Value*, (3) at *an interest rate that overcompensates* for our estimate of the borrowers default risk.

That sounds reminiscent of the famous quote attributed to Bob Hope: "A bank is a place that will lend you money if you can prove that you don't need it."

More importantly, this disciplined investment process forces us to be CONTRARIAN "lenders" relative to the short-term, and long-term credit cycle. We capitalize "CONTRARIAN" because we believe it represents a Critical, Differentiating Advantage of our Investment Process: relative to other high yield managers *AND* relative to most of the *"illiquid" investment strategies* that populate like deer during every bull market in credit.

When the High Yield market is around fair value ("credit is easy"):

The *opportunity set* of credits that "fit our investment process" in terms of (1) minimum, margin-of-safety requirement (minimum Asset Coverage), and (2) an interest rate spread overcompensating for estimated default risk, *becomes narrow, and relatively safer.*

Markets are complacent, demand for high yield is strong and the temptation to "bend on credit, and stretch for yield" is high! Our competitors often do just that, either recklessly, or unintentionally because, in our opinion, they lack an effective investment process to manage credit default risk.

In contrast, we believe our investment process will steer us into relative safety in an "easy credit" environment. Discipline of investment process is often an exercise in patience, but we never lose sight of what is truly exciting to us: The opportunity to be the bid in a market that is correcting, when complacency turns to fear and the incremental dollar "wants out" of risk credit.

The senior portfolio managers of the team *have never experienced a credit sell-off of any meaningful magnitude that didn't present net-positive opportunity due to an inevitable positioning in relative safety:* be it inter-cycle, sell-offs such as Feb'16, or "real deal" downturns such as 2002 or 2008.

We have no claim to brilliance as we allow our investment process to steer us through any macro environment. We can claim the common sense and discipline of complete dedication to our Investment Process, after success over multiple, full credit cycles.

Why High Yield? Why Now?

We rest our case –

Appendix:

OUR OUTLOOK FOR GLOBAL CENTRAL BANK

Last Quarter we chronicled the synchronous, dovish statements and actions of the Global Central Banks (GCBs). Now, after two Fed rate cuts, followed by daily, stop-gap repo loans to banks, *GCB forecasts start to look like this:*

"*QE4:* Fed makes it 43 rate cuts YTD (751 since Lehman); ECB QE (20bn/m from Nov'19) + Fed liquidity operations (est. \$400bn next 12-months) = new high in G5 central bank balance sheet by Apr'20 (prior peak was \$16.6bn in Mar'18); G5 central banks have bought \$13tn of financial assets since 2008 (Chart 3)." — Michael Hartnett, Chief Investment Strategist, BofAS, 19-Sep-2019

Chart 3: QE4 to take central bank balance sheets to new highs



Source: BofA Merill Lynch Global Investment Strategy, Bloomberg. BofAML Projections assum \$20bh/m purchases by ECB starting Nov & \$400bn/52 weeks liquidity injections by Fed as balance sheet buffer.

"QE infinity

And so it begins...again. Yesterday Draghi delivered a policy package consisting of rate cuts, deposit tiering for banks, cheaper TLTROs, and – most importantly –the return of quantitative easing. From November, the ECB will purchase 20bn of assets per month for as long as necessary, targeting sovereigns, ABS, covered and corporate bonds. And so 'QE Infinity' is born." – Barnaby Martin, Credit Strategist, MLI (UK), 13-Sep-2019

We're going to stay out on our now crowded limb and point out that there appears to be NO limit to GCBs monetary madness. We recommend investors prepare for mind numbing justifications:

"But what QE does do – and we think can often be overlooked – is to subtly "derisk" financial markets. QE "transforms" sovereign debt-to-GDP ratios by moving bonds from risk-averse investors towards more risk-tolerant central banks (buyand-hold). And if QE is sizable enough, the transformation in debt-to-GDP ratios can be meaningful." — *Barnaby Martin*

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