BBH Taxable Fixed Income

Quarterly Strategy Update / 2Q 2019

The Largest 'Technical' in Financial Markets History

As we write this Quarterly Update, 14 Euro-denominated high yield bond issues are trading at negative yields. This means that investors are actually paying speculative-grade issues for the privilege of holding their money. Consider the effect of this situation on investors in Europe and beyond. We think it is a tidy explanation for recent U.S. fixed income behavior.

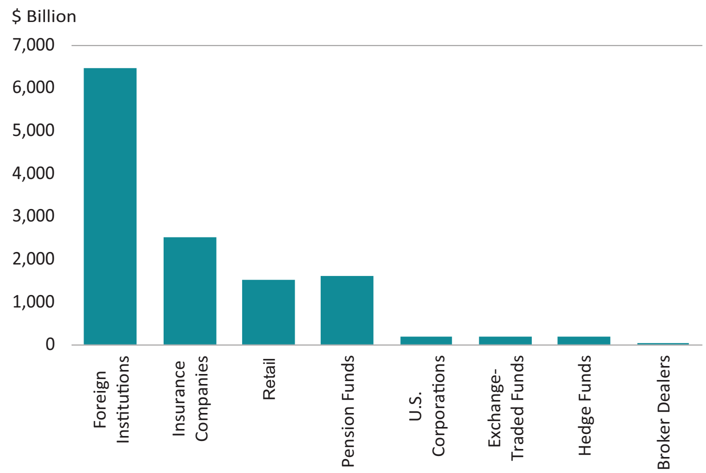
At first glance, credit markets and sovereign markets seem to reflect different views of the future – credit has rallied as if economic conditions are improving (e.g. credit risk is diminishing), yet long sovereign bond rates have rallied and the yield curve has inverted, as if a recession is imminent. Perhaps neither observation is accurate. Instead, yield movements may not be about shifting expectations for growth, but rather reflect expectations for global rate cuts, and the unrelenting global hunt for yield.

Overseas investors, starved for yield in their own markets, are determining the tone in U.S. credit and rates. Crowded out by their own central banks and facing negative yields across a large portion of their own fixed income markets, European and Asian investors have recently been piling into the higher rates in the U.S. Wherever they can find a positive hedged-currency yield, they go, driving those yields lower as well. Overseas flows and hedging dynamics are consistent with:

- the rally in long rates,
- the credit swoon in the fourth quarter of 2018,
- the timing and magnitude of the credit rally in the first half of this year,
- a notably over-stretched high yield market,
- the diverging path of asset-backed securities (ABS) spreads, and
- where USD credit spreads have met resistance.

Overseas investors now own *half* of all credit denominated in U.S. dollars (hereafter "USD Credit"), and the most active share next to U.S. Mutual Funds, which own around 20%. They also own a bit less than half of the entire U.S. taxable fixed income market. It is reasonable to conclude that flows from overseas investors are the most important factor determining credit pricing in our markets today.

Holders of USD Denominated Credit

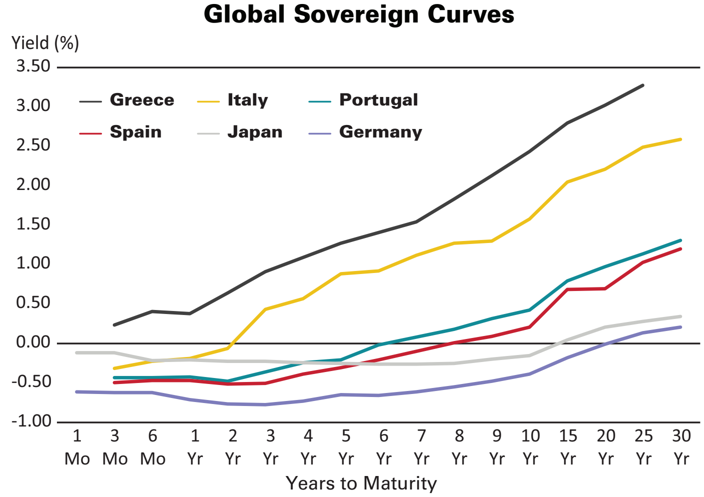


Sources: HSBC and BBH Analysis

A growing portion of debt trades at negative yields

Since 2015, both Japanese and Eurozone yields have been less than 1%, with negative short rates. In April, even 10-year German and Japanese sovereign bond yields (along with the Netherlands and Sweden) went below zero for the second time (the first being in 2016). Today, a total of nearly $14 trillion of sovereign debt trades at negative yields. The few remaining pockets of positive yields are not very impressive. Formerly high yielding European sovereigns, such as Spain and Portugal, now offer 10-year debt at just 0.2% and 0.4%, respectively, while the (abundant) Italian 10-year sovereign yields 1.6% and Greece yields just over 2%.

Global Sovereign Curves



Sources: Bloomberg and BBH Analysis

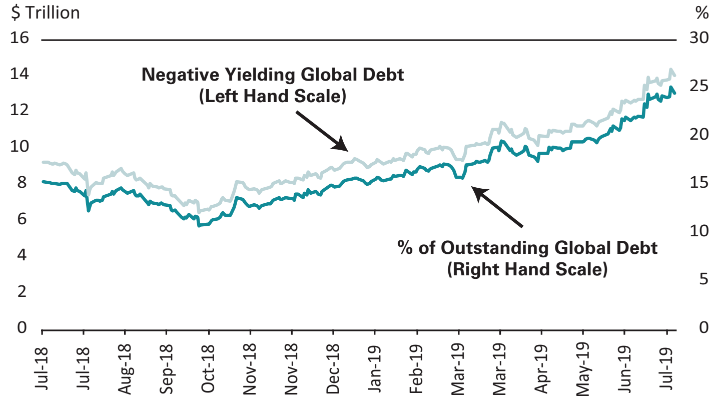
Corporate credits have followed suit, and now 20% of investment grade corporate debt in the Eurozone (over $600 billion globally) is trading at negative yields, as well as the collection of junk bonds mentioned above. The lack of decent yield opportunities in their own markets had nudged non-U.S. investors into the U.S. bond markets over the past four years. Negative yields in long sovereign and corporate debt have turned that nudge into a hard shove.

Hedging dynamics and the flat U.S. yield curve

If a non-USD investor buys a hedge of the same maturity as a bond, the hedge will cost the exact difference between home and target sovereign yields because of an equilibrium condition known as "covered interest parity"[1]. So in order to earn a positive spread in sovereigns, Euro or Yen-based investors must hedge *long* USD purchases (let's say 10 years) back into their home currency using a hedge duration of a year or less. This works well when the USD yield curve is steep and spreads are high, as the investor will earn the yield curve slope between the short Treasury rate and 10-year Treasury rates in addition to any credit spread. Decreasing spreads and flattening yield curves – which is exactly what we've had for the last six months – both subtract yield from hedged cross-currency investing.

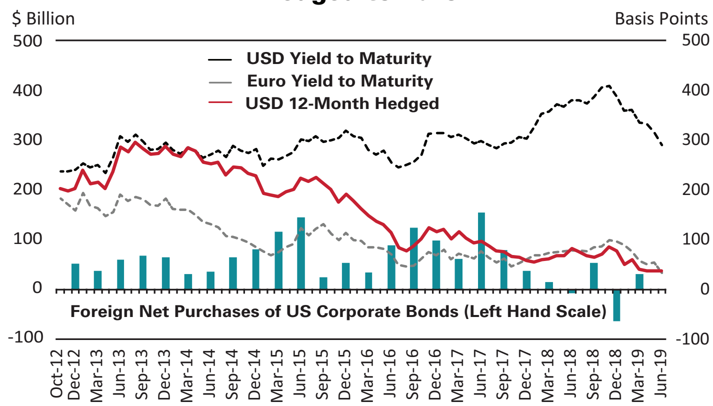
There's one further wrinkle. Changes in short rates can play a role in the profitability of an active hedge. If U.S. short rates go up during the hedge period, the overseas investor will take a mark-to-market loss on the hedge and face higher hedging costs going forward. If they are unhedged, they may see a currency gain. If U.S. short rates go down, the investor can reset and earn a gain on their previous hedge. As you can imagine, this makes hedging quite sensitive to Fed policy.

Negative Yielding Global Debt is Now 25% of the Bloomberg Barclays Global Aggregate



Data reported daily from July 6, 2018 to July 5, 2019
Sources: Bloomberg Barclays Global Aggregate Index and BBH Analysis

Diminishing Return of a $US Single-A Bond Hedged to Euro



Data reported monthly from October 31, 2012 to June 30, 2019 and quarterly from December 31, 2012 to June 30, 2019
Sources: Bloomberg and BBH Analysis

Finally, as hedging gets more and more expensive, overseas investors may choose not to hedge, although this can make them more likely to sell U.S. dollar investments when they perceive increasing currency risk. The U.S. dollar has been range-bound since early 2018, emboldening investors to try to capture the entire U.S. yield advantage in unhedged investments. The Euro has been weakening slowly but steadily vs. the dolar since early 2018, accruing gains to unhedged, Euro-based investors.

Looking at the course of global yields since the European Central Bank (ECB) adopted its "by any means necessary" policy, we have seen the trail of the global hunt for yield fan out across the globe, driving sovereign yields, then investment grade (IG) spreads, and then high yield, tighter.

In the fourth quarter of 2018, we saw the effects of anticipated changes in short rates. Expecting a rate hike, hedged investors began to withdraw from USD credit markets, causing spreads to widen, while Treasuries anticipated a change in Fed stance. When the Fed Chair indicated a willingness to halt rate increases, the Treasury rally continued, but hedged USD credit became more attractive, leading to the huge credit rally in the first half of 2019.

ABS spreads have been more stable, outperforming in the fourth quarter's down market, but underperforming in the rally this year. The average spreads of several ABS sectors even widened a bit (5-10 basis points[2]) in the second quarter. We've seen the reason for this in our own marketing activity: Japanese investors generally maintain an aversion to ABS, associating them with the 2008 Crisis-Era problems in residential mortgage-back securities (MBS). European regulators, with similar reasoning, are overtly hostile to securitized investments, passing new eligibility restrictions for Europe so strict that U.S. issuers have mostly chosen to ignore them. We think these foreign investors and regulators unwisely paint ABS with an overly broad brush. Nonetheless, lack of overseas participation is one reason ABS yields seem to march to a different drummer than the rest of the USD credit market.

[1] https://www.youtube.com/watch?v=YKHu3_cNU5E
[2] A unit that is equal to 1/100th of 1% and is used to denote the change in a financial instrument.

So what now?

It is implicit in our process that low spreads are correlated with higher risk in credit. When spreads are low, we buy less credit, and prefer shorter credit. We have ample historical evidence that spreads are mean-reverting over a few years. Therefore, buying long credit instruments at narrow spreads often leads to underperformance vs. Treasuries over the following 2-3 years. In fact, history suggests that the longer the period of very low spreads, the sharper the eventual spread-widening has been. We would also observe that long periods of narrow spreads encourage lax credit underwriting and strange investor behavior (such as buying junk bonds at a negative yield, perhaps). The ensuing spread widening is typically catalyzed by a series of unexpected losses arising from this excess. We are in strong agreement that today's investment environment is producing excessive leverage and credit availability, although it takes a different shape (and may pose less systemic risk) than prior cycles.

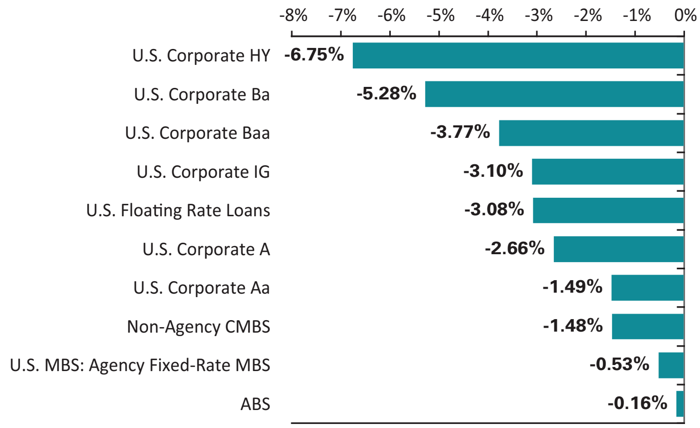
Will this time be different?

Some observers are suggesting that such unprecedented negative yields may lead to unprecedented market behavior, also known as "this time is different". Not that we won't see increased defaults, but the enormous quantities of money seeking positive hedged yields can stomach moderate losses in investment grade credit, and will perhaps only flee the high yield and direct lending markets. Therefore, the argument goes, investment grade credit is likely to *outperform* despite today's meager spreads. Investors will have to buy investment grade bonds.

It's a fair question: Where will all the foreign money go? Will it go into Treasuries and drive yields even lower, or can it remain in IG credit? We think the fourth quarter of 2018 was revealing (see chart on the right). Just as in prior cycles, all grades of credit underperformed, in proportion to their credit risk.

"This time is different" is a brave, possibly foolish, bet against the historical odds. We can easily imagine investors, as they have before, buying Treasuries instead and letting all classes of credit languish. We will stick with the shorter and less cyclical credit profile until we are compensated to do otherwise. This is not a subjective choice, but is hard wired into our investment process. We will only expose our client portfolios to credit opportunities when we are appropriately compensated to do so. In this environment, we are still finding enough "off the run" value opportunities to maintain decent performance. Without a appropriate compensation, however, we are not interested in adding credit risk.

Q4 2018 Credit Market Excess Returns

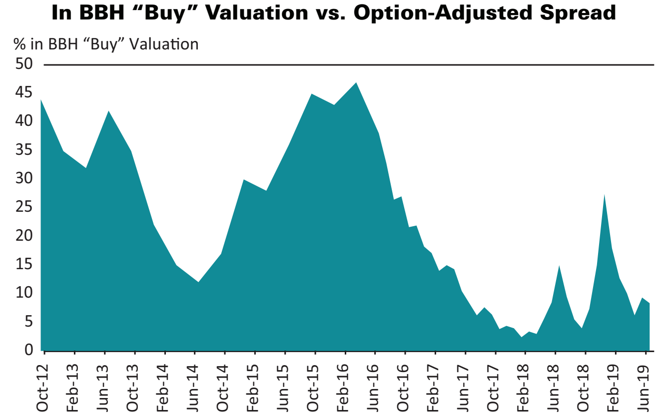


Past performance is no guarantee of future results
Data reported quarter-to-date as of December 31, 2018
HY = High Yield, MBS = Mortgage-Backed Securities, CMBS = Commercial Mortgage-Backed Securities, ABS = Asset-Backed Securities, IG = Investment Grade
Sources: Credit Suisse, Bloomberg, and BBH Analysis

Portfolios in the second quarter

The sell-off in December served up enough value opportunities to increase our credit exposure in client portfolios. As overseas investors returned in January, however, the corporate market rapidly retraced its steps and today only 8% of the IG universe trades at levels consistent with our buy criteria[3], down from 27% in December and 10% at the end of March. Overall, most accounts have less corporate credit sensitivity than their benchmarks, except those that can invest in bank loans. The opportunities picked up in the dislocation around year-end (such as **Sirius Group, Swiss Re, Bunge, Terraform, Owl Rock, BNP Paribas, Main Street Capital**) have been the strongest contributors to our year-to-date performance.

Percentage of ICE BofAML U.S. Corporate Index In BBH "Buy" Valuation vs. Option-Adjusted Spread



Data reported quarterly from October 31, 2019 to June 30, 2019
Sources: ICE BofAML and BBH Analysis

While ABS underperformed corporate credit, they handily outperformed the MBS sector, which underperformed Treasuries in the quarter. We

[3] Our valuation framework is a purely quantitative screen for bonds that may offer excess return potential, primarily from mean-reversion in spreads. When the potential excess return is above a specific hurdle rate, we label them "Buys" (others are "Holds" or "Sells"). These ratings are category names, not recommendations, as the valuation framework includes no credit research, a vital second step.

have a near-zero allocation to MBS in all portfolios, preferring to direct those dollars to short, higher-quality ABS and corporates wherever possible. This positioning benefited our portfolios across the board.

In general, our credit exposure remains finance-heavy, as we have found attractive spreads in short-dated bank paper and see many large banks as having relatively low credit risk today. Five of our longest-duration credit holdings are insurance companies. ABS are generally financial in nature, although they are diversified over collateral from many different industries, ranging from shipping containers to tax liens to drug royalties. We own very few traditionally cyclical credits (such as oil exploration and automobiles), which have performed very well in this market. The non-cyclical bent of our credit portfolio has hurt corporate security selection.

The rhetoric of the U.S. presidential candidates has begun to create some uncertainty in the healthcare industry, and given rise to a few buying opportunities. This will be the subject of a forthcoming Strategy Insight from our healthcare team. We purchased two new healthcare obligations for eligible portfolios in the second quarter, and there were some large mergers of credits already held.

Tracing its roots to a 2-physician neonatology practice in 1959 in Broward County, Florida, and formerly known as Pediatrix Medical Group, Sunrise, Florida-based **Mednax** is a leading physician staffing company. It is comprised of 4,500 physicians and several thousand more extenders who support those physicians. These professionals provide clinical services in neonatology, anesthesiology, radiology, and maternal-fetal care in roughly 570 client hospitals and related facilities across 39 states, the District of Columbia, and Puerto Rico. We purchased the BBB- 6.25% 2027 bonds at a spread of 440 basis points above Treasuries.

Formed in 2000, **U.S. Renal Care Inc.** provides dialysis services to patients who suffer from chronic kidney failure. The company is the third largest dialysis treatment provider in the country with $1.3 billion annual revenues and a 5% market share. As of March 31, 2019, USRC operated 334 outpatient dialysis clinics in 31 states and the territory of Guam. We purchased the single B senior secured loan at a discount margin of 537 basis points, yielding 7.8%.

After being relatively subdued over the past couple of years, biopharmaceutical mergers and acquisitions (M&A) roared back to life in 2019 with the second largest announced transaction of all time. On January 3, we were pleasantly surprised to learn that our portfolio credit **Celgene** BBB+ was being acquired by higher-rated **Bristol-Myers-Squibb** A+ in a $96 billion stock and cash transaction that creates a "top-10" biopharmaceutical firm with market-leading franchises comprising nine blockbusters and a deep and broad pipeline. While leverage pro forma for the Celgene acquisition is anticipated at over 3x, we are confident that BMY will rapidly de-lever to less than 2.5x by year-end 2020.

The above deal was recently topped by a transaction between two of our portfolio credits to create an even larger "top-5" biopharmaceutical firm with $50 billion in pro forma revenue and $25 billion in pro forma earnings before interest, taxes, depreciation, and amortization (EBITDA). In late June, **AbbVie** A- announced the acquisition of **Allergan** BBB for $63 billion in cash and stock to create the world's fourth largest biopharmaceutical with leading franchises in immunology, hematology, and medical aesthetics. Secondary franchises include virology, neuroscience, and women's health. An attractive pipeline with 50-75 compounds and 20 new drug approvals are expected by 2020. The transaction de-risks AbbVie's current product portfolio by significantly reducing its overwhelming reliance on blockbuster drug Humira ahead of an expected loss of U.S exclusivity in 2023. Pro forma annual free cash flow generation of $20 billion should allow for rapid debt repayment to lower leverage to 3.0x in the near term.

We continue to find value across most subsectors of the non-traditional ABS market, as well as selectively in primary and secondary purchases in commercial mortgage-backed securities (in particular property types, such as retail, with limited investor focus or exaggerated concerns). Our combined corporate and structed credit exposure is generally greater than benchmark levels.

Saganaw, a subsidiary of Guggenheim Life and Annuity Company, issued its first ABS securitized by the levelized commissions stream from a portfolio of fixed index annuities and paid by Security Benefit Life (A-rated by S&P). The primary risk to the commission stream would be an unusually high level of policyholder lapse on the annuity policies. Owing to surrender penalties in the policies, there is no impairment in even the most severe BBH stress scenario. These 1.8-year BBB-rated notes were issued in May and were attractively priced at a 320 basis points spread to Treasuries, and had a yield of 5.2%.

Melody Wireless Infrastructure Inc. issued its first ABS transaction, backed by cashflows from long-term rooftop lease and cell tower land rents paid by the five major wireless companies. The portfolio consists of 1,232 cellular sites in strategic locations across the U.S. The easements and leases have a utility-like stable return profile, benefit from the deployment of new 5G service, and the notes represent a low leverage of below 30% debt to market value. In April we participated in the 5-year senior tranche, rated single-A, at a spread over Treasuries of 150 basis points.

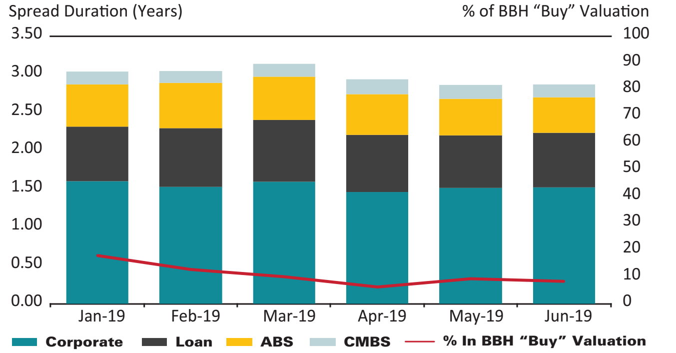
In May, BBH also participated in **HPLY 2019-HIT,** a single-asset single-borrower (SASB) CMBS transaction secured by a floating rate loan. Fully extended, the $870 million loan has a five-year term and is collateralized by 92 hotel properties spread across 30 states. The portfolio is diversified across 10 different flags. The largest brand, Hampton, accounts for 29 of the properties and 25% of the portfolio. The sponsor, Hospitality Investors Trust (HIT), is a public non-traded real estate investment trust (REIT) that invests in premium-branded lodging properties across the United States. The senior tranche has very low leverage, with the debt accounting for only 25% of the appraised property value. The AAA-rated tranche was priced at 110 basis points over 1-month London Interbank Offered Rate (LIBOR).

BX 2019-RP is also an SASB CMBS transaction, secured by a $230 million five-year floating rate loan. Originated in June, the loan is secured by a 12-property, 2.2 million square foot anchored retail portfolio, spread across seven states. The primary sponsor is Blackstone, among the largest global investors in real estate with $140 billion in assets under management (AUM). These notes also have low leverage, with even the BBB-rated notes representing just 41% of the appraised property value. We participated in the AAA-, A-, and BBB-rated tranches at spreads over 1-month LIBOR of 100, 210, and 270 basis points, respectively.

Given valuation levels, the current trend in credit exposure across accounts is flat to down, as illustrated in our BBH Core Income Strategy. We remain on the lookout for sector-specific opportunities, such as those we've seen in insurance, technology, and healthcare, and further issuance of high-quality ABS.

We are at the point in the cycle when the loudest voices are saying we should keep dancing until the music stops and spread narrowing is driven by overseas investors attempting to flee negative yields and fear of missing out. We would argue that you should pay attention to these diminishing returns to risk, and invest accordingly. We see little reason for a huge wave of defaults or a large, systemic crisis, but plenty of reason to think the largest 'technical' ever could reverse.

Spread Duration in BBH Core Income Strategy vs. % of Corporate Index at BBH "Buy" Valuation



CBMS = commercial mortgage-backed securities; ABS = asset-backed securities
Data reported monthly from January 31, 2019 to June 30, 2019
Sources: BBH Analysis

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Past performance does not guarantee future results, and current performance may be lower or higher than the past performance data quoted. The investment return and principal value will fluctuate, and shares, when sold, may be worth more or less than the original cost.

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