FEG INSIGHT

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2019 FIXED INCOME MARKET OUTLOOK

Three Big Things

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FEG's fixed income team meets nearly every day with public and private debt managers and we understand the predominant matters facing fixed income investors. When considering the breadth and depth of public and private debt markets, there are any number of potential areas of interest.

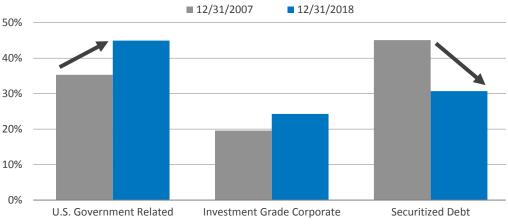
This outlook focuses on changes in the "core" fixed income markets due to increased Treasury issuance, the growth of BBB-rated corporate issuance in public credit markets, and the evolution of private credit and its relationship with public credit.

CHANGES IN THE INDEX COMPOSITION

Despite the rampant growth of public and private debt markets and strategies over the past 30 years, primary fixed income exposure for investors remains core fixed income. Given the persisting low rate environment, core fixed income has provided capital preservation in recent years but little else, with trailing 1-, 3-, and 5-year returns of 0%, 2.1%, and 2.5%, respectively.¹ Despite low returns, core fixed income continues to serve as an "anchor to windward" not only to mitigate equity risk and hedge against deflation, but also to provide a store of capital to be deployed when compelling opportunities are evident.

Notwithstanding the sustained deterioration of the U.S. fiscal situation in recent years, Treasuries remain the strongest safe haven option within the core fixed income universe.² In December 2018, the Bloomberg Barclays U.S. Aggregate Bond Index (BBAGG) served as a reminder of the importance of core fixed income to diversified portfolios, as global equities declined by 7% while the BBAGG gained 1.8%.³

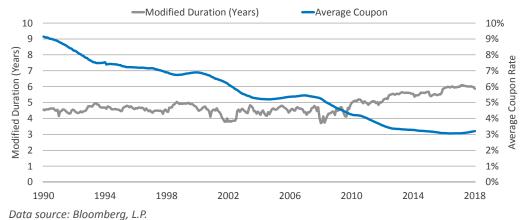
The BBAGG is comprised primarily of U.S. government-related bonds, investmentgrade corporate bonds, and securitized debt. Following the Great Financial Crisis (GFC) in 2008, the sector composition of the BBAGG changed meaningfully, due primarily to the increase in issuance of Treasuries relative to the other sectors. Since the GFC, Treasuries and government-related securities have grown by almost 30% to become nearly half of the core bond index.



MORE GOVERNMENT DEBT AND LESS SECURITIZED DEBT IN THE CORE BOND INDEX

Data source: Bloomberg, L.P.

The core fixed income universe also responded to monetary stimulus and quantitative easing, which pressured rates lower. New issuance of all high-quality debt provided materially lower rates and higher duration. As a result, the BBAGG and core fixed income strategies in aggregate are now much more sensitive to interest rate changes than over the past two decades. These conditions illustrate that core bond allocations provide capital preservation and little-to-no real return over the long-term—and further, investors should understand that a jump in rates will negatively impact core bond allocations.



COUPON RATES DROPPING AND DURATION CREEPING UPWARDS

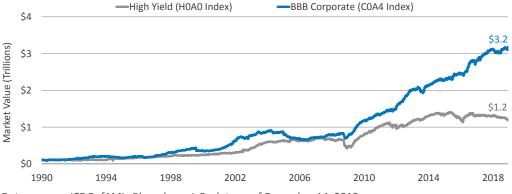
Historically, FEG does not make calls on interest rates, as this type of speculation is best left to water cooler conversation; however, data suggests that markets continue to favor U.S. Treasuries and interest-rate sensitive assets in flight-to-quality environments. A more pronounced bout of turmoil for risky assets could lead to an outsized return for core fixed income investors. Alternatively, should the market environment begin to lack volatility, core fixed income investors may observe a "coupon-clipping" experience.

Bearish cases suggesting a higher interest rate environment following the GFC have come and gone for more than a decade now, and 2018 saw rates rise for most of the year until equity markets experienced a correction of negative 10%. While a higher interest rate environment could happen, the late stages of the economic and credit cycle argue for a lower or neutral rate environment in 2019 which could favor core fixed income.

FALLEN ANGEL RISK

Readers of prior credit market outlooks know that FEG has advocated for a more conservative fixed income profile for several years, as risky areas of the bond markets have provided little return opportunity for the risk. Investors with conservative allocations are well-positioned to take advantage of further spread widening in "risky" publicly traded credit, particularly high yield bonds. FEG believes that an environment favoring core fixed income could simultaneously provide an entry point for increased high yield bond allocations.

One area that could provide some opportunity in high yield, or even in investmentgrade credit, is BBB-rated corporates. The substantial growth of BBB-rated corporate issuance relative to the size of the high yield bond market has potential implications in the event of downgrades, as bond issuer ratings could migrate from investment grade to speculative grade, a term elegantly known as a "fallen angel." Since 2010, BBB-rated corporate bonds have grown to more than 2.5x the size of the high yield bond market.

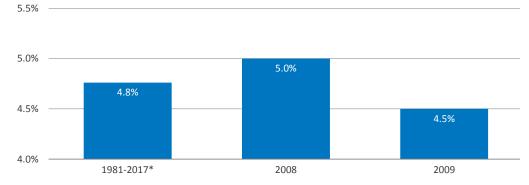


BBB BONDS GROW TO MORE THAN DOUBLE THE HIGH YIELD MARKET

Data sources: ICE BofAML, Bloomberg, L.P.; data as of December 14, 2018

The growth of BBB-rated corporate bond issuance appears alarming, as seasoned investors know that mandate-driven fixed income managers can become forced sellers in a fallen angel environment. Fallen angels can enter a wasteland where potential investors avoid buying the bonds of these issuers until they are either included in a high yield bond index or an alternative credit manager becomes interested at stressed prices. While fallen angel risk is real, some context regarding the potential size of the opportunity set is warranted.

A recent study by S&P Global Ratings noted that BBB-rated bonds for non-financial corporate issuers have performed well during challenging periods. From 1981-2017, on average, approximately 4.8% of BBB-rated issuers migrated to speculative grade over a one-year period. Even the during the GFC there was no marked increase in fallen angels relative to the historical average. In fact, the BBB-rated downgrade rate was approximately 5% in 2008 and 4.8% in 2009.



THE FREQUENCY OF FALLEN ANGELS HELD STEADY IN THE GFC

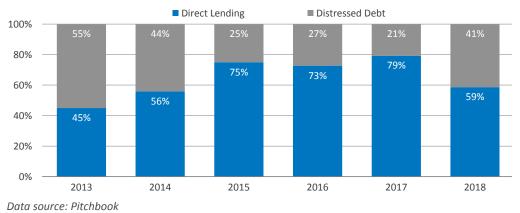
Data sources: S&P Global Ratings and S&P Global Fixed Income Research *Represents one-year average from 1981-2017.

Although the downgrade rate may have held constant, the number of new issuers and the amount of issuance is substantial. To that end, the number of issuers for BBB-rated corporates has increased by approximately 40% since 2007, which is significant because issuers are downgraded rather than the amount issued, making credit work paramount. As a base case, S&P studied the BBB-rated corporate market of 2018 and assumed the severity of the next downturn would be in line with the GFC. The result of their analysis suggests a fallen angel opportunity set of approximately \$200 to \$250 billion.⁴

FEG relies primarily upon core fixed income managers, which are key investors in BBBrated corporate bonds, to pick winners and avoid losers. Should a flight-to-quality environment take place in conjunction with an uptick in fallen angels, FEG expects that managers capable of thorough corporate credit underwriting should be able to take advantage of stress in the investment grade space and that allocations to high yield may become attractive. Additionally, FEG has long-standing relationships with alternative credit managers that are well prepared to invest in such an environment, some of whom have built substantial war chests to deploy in periods of capital scarcity.

THE RELATIONSHIP BETWEEN PRIVATE AND PUBLIC CREDIT

Private credit—i.e., direct lending and distressed debt—has been around for decades but was only recently accepted as an institutional asset class following the dislocation opportunity stemming from the GFC. As the Pitchbook fundraising chart suggests, direct lending—which includes lending to the senior and mezzanine parts of the corporate capital structure—began taking the lion's share of private credit investor interest after 2014, as the dislocation opportunity emanating from the GFC lost momentum.





The primary driver leading investors into direct lending in recent years has been yield, with investors moving into the space to diversify away from the low yields plaguing traditional fixed income markets. Private credit mezzanine debt has maintained more than a three-percentage point yield premium over public high yield bonds since 2010. While this premium continues to persist, it is FEG's view that the differential could diminish in the event of a credit downturn, as high yield spreads would likely widen in that environment. Although they have declined by approximately two percentage points over the past six years, lending terms to private companies are generally more stable than in public credit markets, thus investors could be faced with a liquidity choice at some point in the short to intermediate future.

Illiquidity Premium Private Credit¹ -High Yield² 15% 10% 5% 5.9 5.0% 1 8% 4.4% 4 39 3.1% 2.1% 1 1% 0% 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

PRIVATE CREDIT MAINTAINING A YIELD ADVANTAGE

Data source: Credit Suisse, SPP Capital

¹ Private Credit – 2007-2010: Ares Company Filings, KKR Credit Analysis; 2011-2018: SPP Capital ² High Yield= 12-Month Average Yield of Credit Suisse U.S. High Yield Index

In 2008 and 2009, demand for both distressed debt and public credit increased when the private yield premium declined to between 1.1% and 2.1%. Using that information as a baseline, and in an environment where the economic and credit cycle are in their later stages, a decline in the yield premium is possible. While investor appetite for public versus private credit is difficult to predict, investors would likely begin to forego illiquid private credit options until the yield premium shifts back into favor.

CONCLUSION

The rule of three led us to focus on the three big things facing fixed income investors in 2019. Increased Treasury issuance has created more interest rate sensitivity for core fixed income investors than in the past two decades, which could be beneficial to investors in a flight-to-quality environment. An increase in fallen angels, particularly in conjunction with a flight-to-quality environment, could lead to an outsized return for core fixed income investors and a potential entry point for high yield bonds or alternative credit managers. Finally, the yield premium between private and public credit could decline in the next economic downturn, making public credit markets more attractive on a relative basis.

Regardless of the timing of the end of the current economic and credit cycle, FEG believes our conservative stance in recent years should provide investors not only with the stabilizing anchor but also the ability to be opportunistic when the time comes to take advantage of higher credit risk premiums.

¹Benchmarked against the BBAGG, as of December 31, 2018.

 2 U.S. debt to gross domestic product (GDP) reached 105.4% at the end of 2017. The all-time high was 118.9% in 1946 and the record low was 31.7% in 1981. https://tradingeconomics.com/united-states/government-debt-to-gdp

³ Global equities is defined as the MSCI All Country World Index.

⁴S&P Global Ratings Credit FAQ: When the Cycle Turns: 'BBB' Downgrade Risks May Be Overstated. December 3, 2018.

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