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LIVE TO FIGHT ANOTHER DAY

Capital Preservation Is Key in Fixed Income Today

IN BRIEF

- Investors are searching for yield in an environment characterized by a high degree of uncertainty and complexity and elevated asset prices across the board.
- Strong interest in corporate debt has driven up the price of corporate bonds and led to spreads tightening in both investment grade (IG) and high-yield (HY) debt.
- Spreads are even tighter on a risk-adjusted basis (e.g., when quality and duration are taken into account); these bonds appear "priced for perfection."
- The focus of fixed income should be on *prudent capital preservation*, given the host of secular factors weighing on the global economy and the aging business cycle.
- Since there is little "margin of safety" in the credit markets, investors would be wise to engage in active security selection and prudent risk management to ensure they are adequately compensated for risk.

These are no ordinary times. Uncertainties have arrived "not single spies, but in battalions." They include global central banks retreating from providing quantitative easing (QE), secular economic stagnation, high debt levels, adverse demographic trends, political dysfunction, heightened geopolitical tensions and the dislocation accompanying the march of technology.

In tandem, asset prices have risen across the board and market volatility remains muted. Expected returns are the lowest they've been for decades. Investors are remarkably sanguine, notwithstanding the complexity and uncertainty in the current environment — and are pursuing relatively high-risk strategies in the quest for investment returns. The "search for yield" is a common refrain, while the tail-risk lessons of the global financial crisis appear to have receded from view. In the pursuit of yield, investors have also rushed to buy equities that serve as bond proxies — utilities, telecommunication stocks and real estate investment trusts (REITs), for instance — leading to high prices and low dividend yields for these securities.

The desire to capture income, combined with an uptick in global growth, has resulted in very strong investor interest in corporate debt — both IG and HY bonds — from pension funds and other institutional investors in particular. This has led spreads on US-dollar corporate bonds — the additional yield investors demand on top of US Treasury debt — to fall to levels not far off or beneath their post–financial crisis lows, and bond prices to rise (bond prices and yields move in an inverse direction). Companies can now raise money in some US bond markets at a lower cost, relative to government bonds, than they have for the past decade. The favorable environment has also created the opportunity for companies to issue longer-dated notes and bonds.

The result is that credit markets appear "priced for perfection" in a context that's far from ideal. Given the host of secular factors weighing on the global economy and the possibility that we may be entering the latter stages of a business cycle, fixed income investing should focus on prudent capital preservation. An investor in this market needs to preserve principal to live to fight another day.

In this paper, we show that the credit markets appear even further stretched when assessed on a quality and interest-rate sensitivity basis, and that investors should broaden their opportunity set and actively select securities with an eye toward prudent risk management to ensure adequate compensation for risk. Investing, after all, consists largely of ensuring that the risk premium captured adequately compensates for the risks taken.

Central bank monetary accommodation

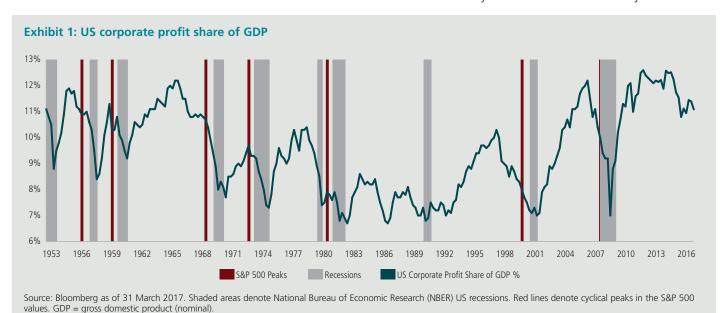
Central banks became important direct actors in the global economy when they made significant monetary accommodation (QE) available in the wake of the global financial crisis in 2008–2009, providing critical support to the current business cycle. As central banks such as the European Central Bank (ECB) progressively withdraw from playing this role and the US Federal Reserve begins to reduce its balance sheet, the economy and the markets could have an adverse response that may expedite the end of the business cycle.

The consequences of this great monetary experiment remain a complete unknown, however.

Aging business cycle

That the US economy appears in the latter stages of the business cycle, with Europe and much of the developed world not far behind, is based on a number of observations, including data related to corporate profits, cash flows, credit and merger and acquisition (M&A) activity. The US consumer remains the chief locomotive of global demand, and hence the US business cycle has a direct impact on both developed and emerging economies around the world.

As Exhibit 1 shows, falling corporate profits as a share of gross domestic product (GDP) has in the past signaled the end of the economic cycle and been a leading indicator of recessions in the United States. A decline on this measure appears evident based on the last few years' observations. The chart also illustrates the cyclical nature of the economy in the



post-war period. The current cycle has endured for the longest period of time, bar the one that lasted 10 years, from 1989 to 1999.

Exhibit 2 shows a measure of cash flow, EBITDA (earnings before income tax, depreciation and amortization expense) as a proportion of enterprise value (aggregation of stock and bonds). The chart reveals two trends we're witnessing from the equity markets: a leveling off of cash flow growth as margins decline and a rise in asset values. The two effects have resulted in a decline in cash flow available to companies.

Another barometer of the economy, corporate credit, has increased significantly in the United States. Though debt as a proportion of EBITDA² has not exceeded prior peaks, largely because of low interest rates, debt as a proportion of assets has risen above the 2007 peak. These debt levels may make companies vulnerable to adverse market shocks such as central bank rate increases.

An increase in M&A activity also signals that the economy is moving into the latter stage of the business cycle. When companies are not experiencing organic growth, they may engage in M&A activity to create the impression of growth. This indeed is happening in the United States and in Europe, with stock price premiums of 35% to 40% not unusual in M&A transactions at present. These premia fall in line with the excess paid during past market peaks.

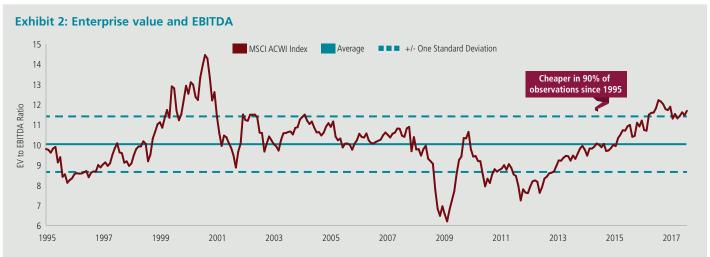
Capital preservation is paramount

Fixed income traditionally plays a pivotal role as ballast in a diversified portfolio. In an environment where investors are chasing yield and spreads appear particularly tight, it is important to keep this key function in mind and manage fixed income with the appropriate prudence.

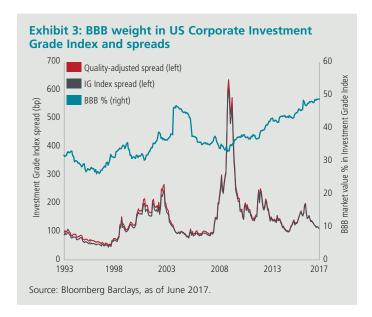
Investment-grade debt

US IG bonds offer little compensation at present, given relatively tight spread levels. Moreover, changes in the composition and the duration of the investment-grade index reveal a downward drift in index quality and an increase in interest rate sensitivity.

The quality of the IG index has declined relative to a decade ago as the proportion of BBB-rated bonds has steadily risen (see Exhibit 3). BBBs now comprise 49% of the US Investment Grade Corporate Bond Index, up from 36% as of mid-2007. In addition to the proportion of BBBs in the index, Exhibit 3 also plots the IG spread and a quality-adjusted spread. The latter adjusts the historical IG corporate spread using the BBB weight, as of June 30, 2017, to indicate what the index spread would have been if the current BBB weight had prevailed throughout the period. The historical IG spread appears understated relative to this quality-adjusted historical IG spread. This further underscores the magnitude of the tightness of today's spread levels.



Source: Bloomberg as of 31 July 2017 (monthly). EBITDA = earnings before income tax, deprecation & amortization expense. It is not possible to invest directly in an index. Standard deviation is an indicator of the portfolio's total return volatility, which is based on a minimum of 36 monthly returns. The larger the portfolio's standard deviation, the greater the portfolio's volatility.

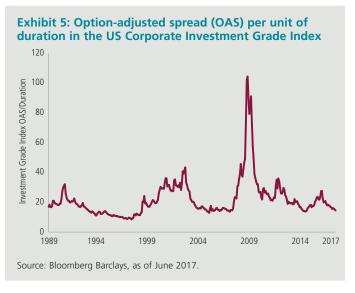


Furthermore, duration has increased in the IG index since the 1990s. Declining interest rates, a lengthening maturity of debt (the current IG weighted-average maturity of 10.9 years compares with 10.3 years a decade ago) and the lower coupons that have accompanied lower rates have increased the interest rate sensitivity of the investment-grade bond market (see Exhibit 4). Exhibit 5 shows that IG bond holders are being paid less now for every unit of duration compared with a few years ago, with current compensation not far off the low points of 2007 and 1997 on this measure.

In sum, IG quality has declined, duration risk has increased and compensation per unit of duration has fallen. So both credit risk and rate risk have increased while valuations have risen. This has created an investment environment with little "margin of safety," calling for a prudent approach that prioritizes capital preservation.

Given the host of secular factors weighing on the global economy and the possibility that we may be entering the latter stages of a business cycle, fixed income investing should focus on prudent capital preservation. An investor in this market needs to preserve principal to live to fight another day.

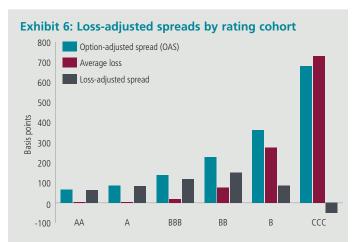




High-yield debt

High-yield credit also looks fraught with risk. The HY asset class is characterized by a cyclicality that reflects the economic cycle; consequently, default risk is an important determinant of total investment returns. Investors are generally not compensated for a strategic allocation to the lower-quality segments of the HY market because any perceived carry advantage tends to be offset by higher price losses, leading to comparable or lower average total returns — and even lower compound returns because of the variance drain³ associated with the significantly higher return volatility of the lowest-quality segment of the HY market. HY has also tended to react more like equities than low-volatility bonds in a selloff and be vulnerable to downside risk.

This is illustrated in Exhibit 6, which depicts the loss-adjusted spreads by rating cohort. In CCCs, the lowest-rated issues in the HY market, the loss-adjusted spread is currently negative when historical losses are taken into account. While the return profile of CCCs argues against a strategic allocation over time, this segment of the market displays greater dispersion of returns than that observed within the other portions of the HY market (BB- or B-rated issues), suggesting that opportunities exist to add value with prudent security selection. Also, CCCs often outperform after significant selloffs in credit risk, when spreads have widened out to attractive levels, with sharp recoveries ensuing.

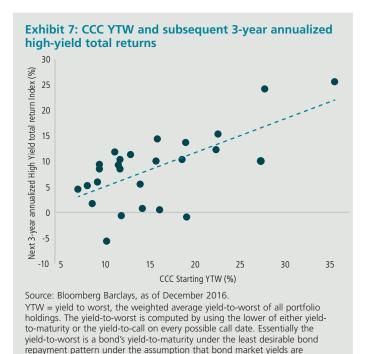


OAS Source: Bloomberg Barclays, as of June 2017. Average Loss Source: Moody's Investors Services and MFS, as of June 2017.

Note: The average loss data aggregates the historical average losses experienced by rating cohort using Moody's credit loss data since 1983 along with the historical ratings migration over a 3-year time horizon to arrive at an empirical average loss experienced over a three-year time horizon in a given credit bucket. These losses are then subtracted from the stated spread levels to capture the loss-adjusted spreads expected over a three-year investment horizon.

The spread in the US high-yield market has tightened significantly since early 2016, when yields were as high as 10.10% on February 11, 2016, compared with a yield of 5.62% on June 30, 2017.

Given current yields, including negative CCC spreads on a loss-adjusted basis, our analysis shows that the HY index may only generate an annual total return of 3.5% to 4% in the coming years (see Exhibit 7 and Methodology on page 6). This return may underwhelm investors' expectations for the seemingly high-risk, high-return pocket of credit markets.



unchanged. The Barclays Caa U.S. High Yield Index is shown on the horizontal

axis and the Barclays U.S. Corporate High Yield Index is shown on the vertical

A prudent investment approach

axis. See Methodology on pg 6.

Given the richness of credit markets and the low expected returns caused in part by such low yields available in the market, as well as the increased risk and complexity in the environment, investors would be well placed to focus on broadening the opportunity set, actively selecting securities, allowing for flexible allocations where appropriate and constructing portfolios with prudent risk management controls to ensure adequate compensation for risk.

Corporate credit offers opportunities, but spread compression has left many valuations stretched. In this context, capital preservation matters. The opportunity cost of holding quality appears low compared to the downside risk of an adverse credit event. Our refrain: Preserve principal to live to fight another day.

Special thanks to Sean Cameron and Linda Nockler for their contributions.



METHODOLOGY FOR EXHIBIT 7

The scatterplot shows the starting yield-to-worst for the CCC component of the US High Yield Corporate Bond Index on the horizontal axis versus the subsequent three-year annualized HY index total return using annual data points from year-end 1987 through year-end 2013. The dashed line through the points shows the line of best fit over this period. For instance, a starting yield on the CCC component of the US HY index of 8¾% would have corresponded to a 3½% to 4% subsequent three-year annualized total return for the US HY Index based on the line of best fit. And as of June 30, 2017, for reference, the yield on the CCC high-yield index equaled 8.77%.

Endnotes

- ¹ A reference to a line from Shakespeare's Hamlet: "When sorrows come, they come not single spies. But in battalions!"
- ² EBITDA refers to earnings before interest, taxes, depreciation and amortization. EBITDA can be used to analyze and compare profitability between companies and industries because it eliminates the effects of financing and accounting decisions.
- ³ Variance drain, also known as volatility drag, refers to the negative relative impact volatility has on portfolio returns, given the effects of compounding.

Index Definitions

Standard & Poor's 500 Stock Index measures the broad U.S. stock market.

Bloomberg Barclays U.S. High-Yield Corporate Bond Index measures the high-yield bond market.

Bloomberg Barclays U.S. Corporate Investment Grade Index measures the performance of investment grade corporate bonds.

MSCI All Country World Index measures developed and emerging market stock markets.

Bloomberg Barclays Caa U.S. High Yield Index is the Caa component of the U.S. Corporate High Yield index. The **Bloomberg Barclays U.S. High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

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