Making the grade

BlackRock.

Assessing risks in the BBB-rated corporate bond market

Introduction

Investment grade corporate bonds may offer potentially higher returns in an environment where government bond yields stay ultra-low and, in many cases, turn negative.

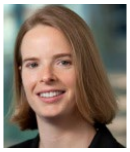
Given their high-grade status (AAA-BBB-), the bonds can carry significantly less credit risk than certain high-yielding assets such as high-yield bonds (BB and lower). Many investors rely on their investment grade fixed income allocation to diversify against riskier, growth-oriented assets such as global equities and alternative strategies.

Over the past decade, the investment-grade corporate bond market has grown significantly due to issuers taking advantage of rock-bottom interest rates and increased demand from yield-starved investors. However, while debt outstanding has surged, the fundamental creditworthiness of the bonds has declined, potentially making the asset class riskier than in previous periods.

Consequently, we have observed that investors have become increasingly focused on the growing size of the lowest-quality investment grade bonds, or those with a BBB or equivalent rating. Companies that fall into this bucket may have "fallen angel risk," or the risk of being downgraded from investment grade to high yield. Below BBB ratings signifying a heighted potential for default—making it more expensive to borrow and service debt.

As the global economy shows signs of late-cycle behavior, we believe it is important to assess the risks that exist in the BBB-rated corporate bond market and explore potential solutions for minimizing exposure to rating downgrades.

Tom Parker, CFA
Chief Investment Officer
Systematic Fixed Income



Susan Harrison, CFA
Head of EMEA Strategy
Systematic Fixed Income

Tom's Take

In the past several months, there has been increased focus on the potential risks posed by the growing size and weakening fundamentals of the BBB-rated corporate bond market.

While we don't see a sudden wave of downgrades on the horizon, our analysis of the impact of "fallen angel risk" and the "risk on" positioning of many credit managers underscores the need for strategies designed for resilience even in asset classes that are traditionally seen as stable and safe.

As systematic fixed income investors, we believe credit-screened strategies, which filter out securities with the highest risk of ratings deterioration, can offer the potential for yield opportunities that investors need from investment grade credit but with downside management in the face of volatile markets.

Thomas Parker

The weaker fundamentals of the BBB-rated portion of the corporate bond market may make investment grade bonds riskier than in years past.

Credit downgrades to below investment grade status can meaningfully detract from investment returns.

Credit-screened strategies may help to reduce the risk of credit downgrades by avoiding the riskiest investment grade bonds.

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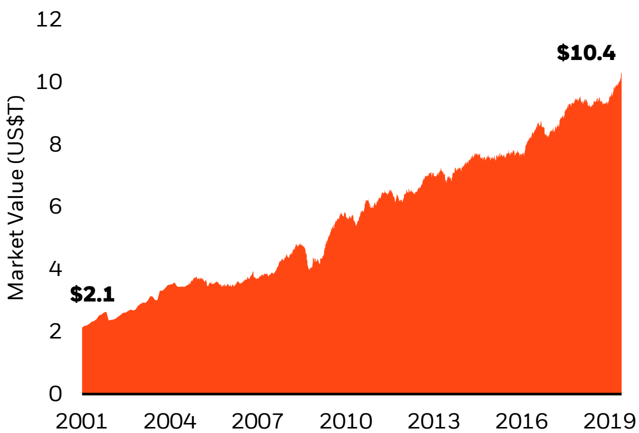
The growth of BBB-rated corporate debt

The investment-grade corporate debt market has grown rapidly in recent years. Global capitalization reached over $10 trillion in 2019 from just over $2 trillion at the start of 2001 (see Figure 1). In the U.S., corporate debt as a percentage of GDP now stands at 47%, its highest level since 2009.[1]

Figure 1: Global corporate debt outstanding has grown nearly 5x

Global market value of investment grade corporate bonds

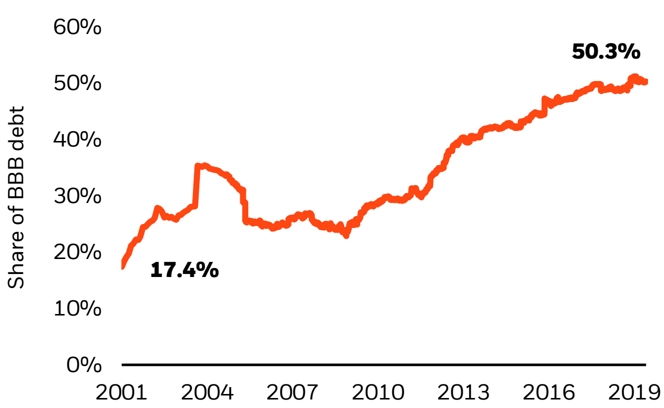


Source: Bloomberg Barclays, as 6/28/2019.

At the same time, the lowest rated part of the investment-grade market has grown particularly quickly. Globally, BBB debt makes up over 50% of the market versus only 17% in 2001 (see Figure 2).

Figure 2: BBB-rated bonds represent over 50% of investment grade debt

BBB share of global investment grade corporate market



Source: Bloomberg Barclays, as 6/28/2019.

Drivers of growth in corporate debt markets

The decade-long period of ultra-low interest rates has been the main backdrop for this period of growth. Historically low global interest rates are encouraging companies to use more debt to fund business operations, refinance existing obligations, conduct M&A activity, and/or expand dividend or share buyback programs.

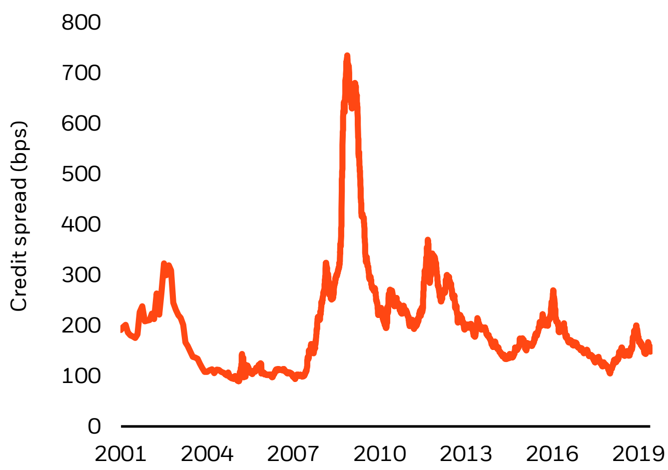
Furthermore, as banks have scaled back their lending in response to tighter regulations, companies are now more likely to look to public debt markets for finance. This burgeoning global supply of corporate debt has been met by strong demand by yield-starved investors.

In particular, the U.S. market, which has higher yields relative to other developed markets, has seen incremental demand coming from foreign investors, further fueling growth of the market.[2]

Most recently, the U.S. Federal Reserve and other global central banks pivoting towards dovishness in order to nurture tepid growth and increase inflation may have temporarily alleviated fears of any sustained rate increases. This accommodative monetary policy stance has helped drive corporate bond spreads back towards their lowest levels in over a decade (see Figure 3). As a result, investors continue to search for yield in the lower echelons of the BBB-rated bucket.

Figure 3: Investor demand for higher yields has kept credit spreads low

Global BBB corporate bond average spread



Source: Bloomberg Barclays, data based on the Bloomberg Barclays Global Corporate BBB-Rated Bond Index as 6/28/2019.

[1] Source: Board of Governors of the Federal Reserve System, as of 3/31/2019.
[2] Source: Morgan Stanley, Corporate Credit Research, North America, "The Nature of the BBBeast", published 10/5/2018.

Credit fundamentals and downgrade risks

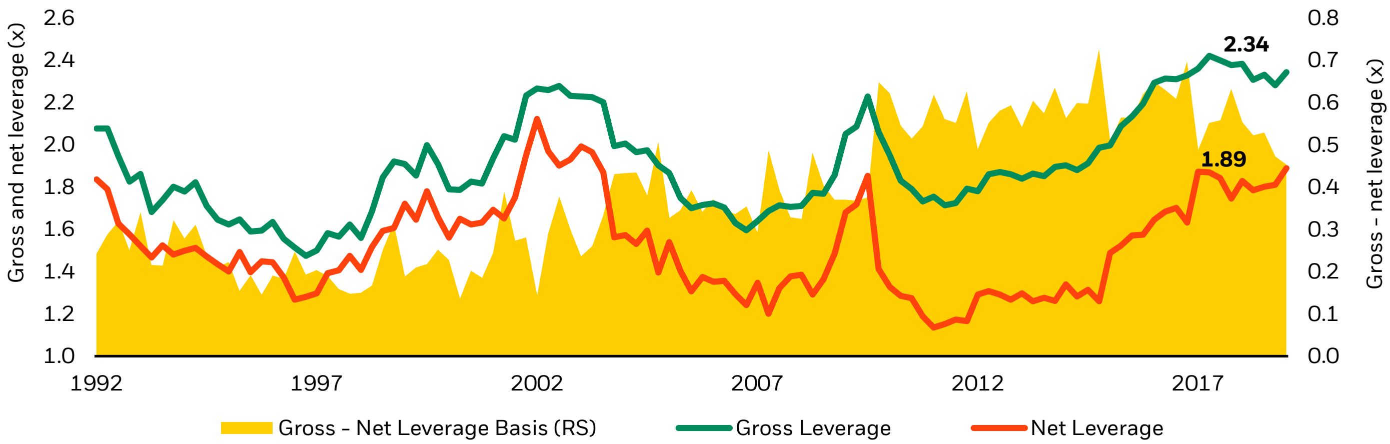
While the popularity of investment-grade debt has been surging, the fundamental creditworthiness of the bonds has weakened by historical standards. Figure 4 shows that investment-grade corporate leverage levels have been on the rise since 2011 and are now approaching the highest readings since 1992. The credit rating agencies have largely tolerated higher corporate leverage, particularly given persistent low interest rates and central banks turning decisively dovish since the start of the year.

In the 2007-09, 2000-03 and 1989-91 downturns, between 23% and 45% of investment-grade bonds were downgraded to junk. If downgrade rates were to remain at such levels, the next downturn could see approximately $600 billion of BBB bonds consigned to junk status.[3]

Inevitably, some of the most highly levered BBB-rated credits will likely be downgraded to high yield. However, many companies have tools at their disposal to help protect their credit rating. Given many of these companies rely on access to investment grade capital markets to fund business operations, a significant portion of the BBB-universe is highly motivated to remain investment grade.

Figure 4: Investment-grade leverage levels are higher than historical norms

Leverage of global investment grade corporate bonds



Source: Morgan Stanley, Bloomberg, as at 3/31/2019. Gross leverage is calculated as total debt / 12-month EBITDA. Net leverage is calculated as (total debt less cash and cash equivalents) / 12-month EBITDA. A shrinking basis between Gross – Net Leverage is usually a sign that investment-grade balance sheets are holding less cash. Higher measures of leverage typically indicate greater issuer risk.

However, that doesn't mask the heightened risk of investment-grade credit, particularly lower-rated names operating in sectors closely tied to the business cycle.

We believe the sharp increase in the proportion of BBB-rated constituents has made the investment-grade bond sector riskier than in recent years. BBB-rated bonds are typically the most vulnerable of all investment-grade debt in a recession. Any downgrade of such bonds would relegate them from the investment-grade universe to the high yield universe (making them "fallen angels"), which would negatively re-rate their value. Portfolios constrained to invest only in investment-grade debt would likely be forced to sell the holdings, potentially further eroding the bonds' value.

Analysis by Morgan Stanley has found that significant volumes of BBB-rated bonds were downgraded in previous credit downturns.

If faced with being downgraded, companies can cut or eliminate stock dividends, share repurchase programs and M&A activities. Additionally, many companies have been taking advantage of the low rates by issuing longer-dated bonds—potentially locking in low borrowing costs and reducing refinancing risk in the current market cycle.[4]

Nevertheless, we believe investors should remain diligent as an economic slowdown or recession could limit companies' ability to protect their ratings—potentially increasing the risk of more downgrades.

> **"…The sharp increase in the proportion of BBB-rated constituents has made the investment-grade bond sector riskier than in recent years."**

[3] Source: Morgan Stanley, Corporate Credit Research, North America, "The Nature of the BBBeast", published 10/5/2018.
[4] Source: Bloomberg, based on changes in the duration of the Bloomberg Barclays Global Aggregate Corporate Total Return Index from 6/30/2014 to 6/28/2019.

Quantifying BBB downgrade risk

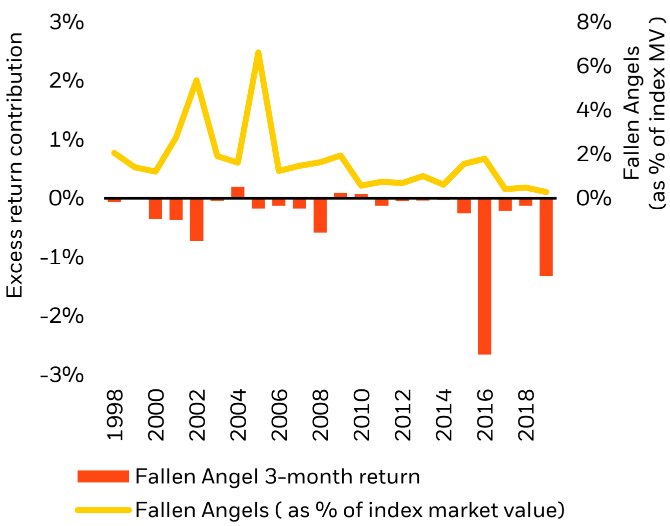
One way to quantify the risk of downgrades is to examine the price impact of "fallen angel risk", or the risk posed by investment grade bonds that are downgraded to high yield.

Looking back over the past 20 years, we found that fallen angel bonds declined sharply in the three months prior to being downgraded, creating a drag on the returns of the overall market of U.S. investment grade corporate bonds.

In some years, fallen angel bonds detracted only 0.05%, while in 2016 they detracted over 2.5% (see Figure 5).

Figure 5: Fallen Angel risk can meaningfully detract from returns

Return contribution and market share of bonds downgraded to high yield



The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Source: Bloomberg, BlackRock, as of 6/30/2019. The left axis represents excess return contribution measured from every name that fell out of the Bloomberg Barclays US Credit Index 3 months prior to its rating downgrade. The right axis represents % market value of the downgraded names that fell out of the Bloomberg Barclays US Credit Index.

Furthermore, as Figure 5 illustrates, the potential impact of downgrades varies and the magnitude can be influenced by the stage of the credit cycle. In early- and mid-cycle environments, performance drag due to fallen angels tends to be benign, as risk assets generally perform well, and defaults/downgrades are low.

However, in late-cycle environments, such as the early and late 2000s, high-yield default rates tend to increase, the percentage of fallen angels can rise, and the impact on performance can become more pronounced. Cumulatively, the performance drag due to fallen angel bonds can be significant for investment grade credit portfolios.

Are active managers ready for downgrades?

Given the potential downside risk posed by the BBB market, does active management hold the solution?

Looking back at the past seven years of returns, U.S. investment grade credit managers have overall demonstrated positive outperformance versus their respective benchmarks.

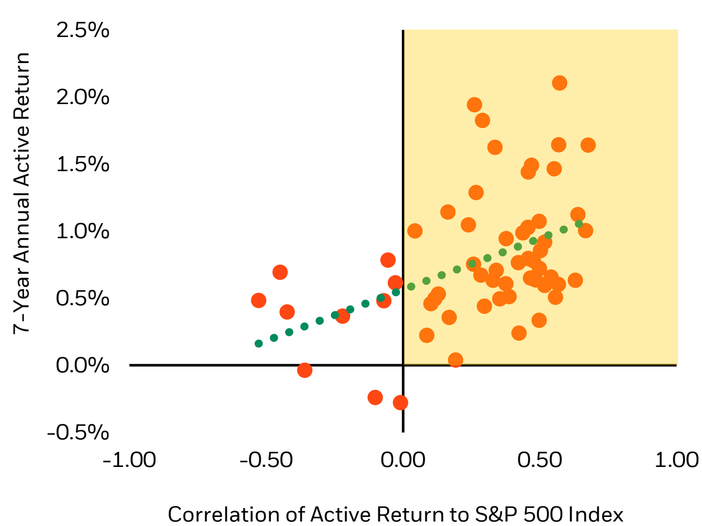
However, as Figure 6 shows, this active return has been generated with relatively high positive correlation to riskier assets like U.S. equities.

This "risk on" positioning may have been beneficial in upward trending markets, but it may limit downside management in more challenging conditions. A closer look at the data reveals that active managers have struggled in "risk-off" markets, which is most likely the time when downgrade risk is at its highest.

In periods of down equity markets, credit managers lost an average of 0.58%.[5] From this perspective, investors may have more equity-like risk in their fixed income portfolio than they may have intended.

Figure 6: Credit managers may not be positioned defensively for downgrades

Active return and correlation to equities of active managers



The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Source: BlackRock, eVestment. As of 6/30/2019. Managers represent all active Investment Grade Credit Managers in composites reported to eVestment with stated, non-custom benchmarks. All returns are gross of management fees. Including management fees can alter performance and cause them to be lower than gross returns. The Investment Grade Credit category above is defined by eVestment. The "manager" composite used is an equal weighted average of the monthly returns of composites within the category. The composite includes managers in the category that have a) benchmarks that mirror the category, b) a base currency in USD, and c) have at least one year of returns. The inception date of each manager varies. Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index.

[5] Source: BlackRock, eVestment. As of 6/30/2019. Based on average monthly manager returns and S&P 500 Index returns since 6/30/2012. Managers include active managers reported in the eVestment Investment Grade Credit category.

Potential solution

Screening out the riskiest credits

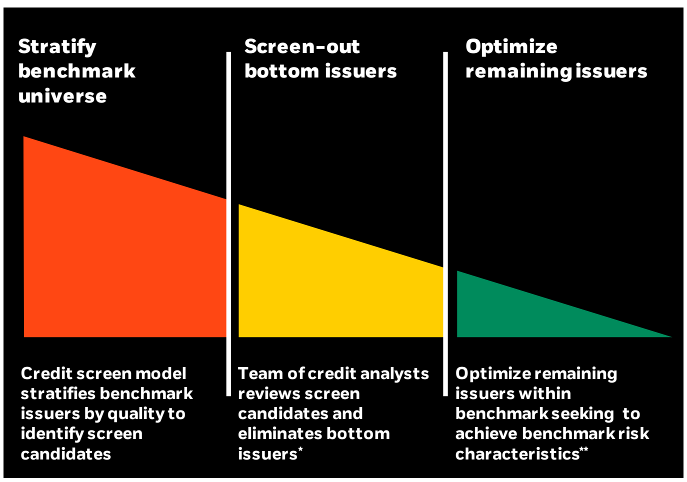
We believe investors looking to manage downside risks posed by issuer downgrades can benefit from a credit-screened approach to corporate credit investing. These types of strategies seek to invest in a broad portfolio of bonds that closely resemble a capitalization-weighted index, while removing issuers at greatest risk of downgrades, which could lead to sharp price declines.

Screening out the weakest-looking credits changes the characteristics of the remaining investable universe. However, many investors still want the attractive risk-reward profile of the broad investment-grade universe.

Therefore, when constructing the portfolio post-screening process, the portfolio manager may seek to replicate the characteristics of the broad universe in terms of factors such as yield, maturity, spread and credit quality. Figure 7 is a simplified example of a typical credit-screened investment process.

Figure 7: Credit screening seeks downside management by avoiding deteriorating credits

Credit screening investment process



Source: BlackRock Systematic Fixed Income, as of 6/30/2019. Investment process is subject to change. *Proportion of screened out issuers can vary over time, rising in times of perceived high risk. ** Optimization process based on stratified sampling approach aims to maintain portfolio yield comparable to benchmark, while being more defensively positioned towards credits deemed to be high risk

> **“…Investors looking to manage downside risks posed by issuer downgrades can benefit from a credit-screened approach to corporate credit investing.”**

A systematic approach to credit screening

Due to the vastly increased size and number of securities in the investment-grade bond market, we favour a systematic, model-driven approach to screening the universe of issuers.

Key benefits

A systematic credit screening process can offer:

- **Broad coverage and diversification:** A systematic approach is able to cover a very broad universe by screening thousands of issuers every day, potentially resulting in meaningful diversification.*
- **Less bias and emotion:** Financial models are less susceptible to biases in the investment process. They employ strict and objective criteria to select securities and entry and exit points. This approach lessens the risk of emotions playing a role in closing winning positions too early or holding onto losing positions too long.
- **Low costs:** BlackRock’s scale enables potentially lower transaction costs for clients. We combine research, proprietary tools and a dedicated trading desk to help us understand the nature and magnitude of transaction costs, allowing us to help minimize performance drag.
- **Transparency and consistency:** The transparency of a systematic, rules-based process can help investors more clearly distinguish alpha from market-based returns.

Other considerations

Other key considerations when evaluating a credit-screened strategy are:

- **Out-of-model risk:** Quantitatively-driven processes, such as credit-screening, typically cannot account for risks that are not directly measurable via available market data. M&A expectations, geopolitical events, or other headline risk require human oversight. BlackRock’s credit analysts review all model outputs before they enter or exit a portfolio to manage this risk.
- **Low dispersion environments:** Credit-screened strategies tend perform better in markets with higher dispersion in security returns. In low dispersion environments, the benefits of screening out credits that are downgraded may not result in outperformance versus a capitalization-weighted index.

Credit screening in practice

Our proprietary credit model seeks to go deeper a level deeper than traditional credit-rating agencies.

We systematically screen thousands of issuers every day and monitor a myriad of indicators of corporate wellbeing and distress. We analyze issuers based on their relative probability of default, public financial statement trends, and market sentiment that incorporates information from the equity and options markets of the issuer (see Figure 8).

In addition to quantitative models, our seasoned portfolio managers, credit analysts, and traders come together to identify and empirically validate our findings when screening out the riskiest credits in the portfolio.

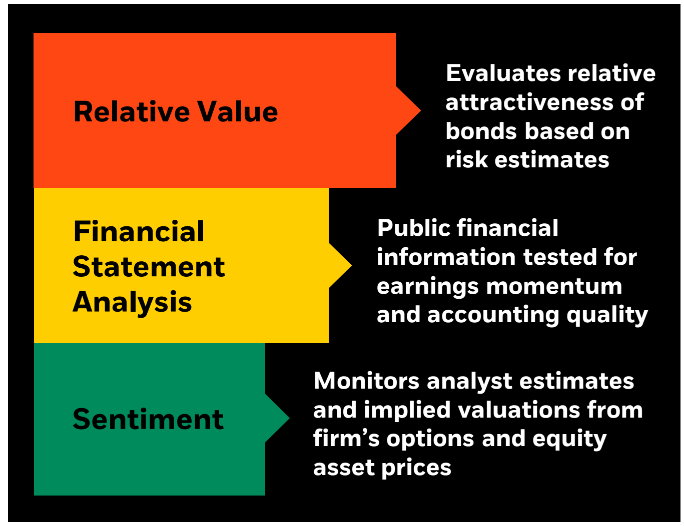
Conclusion

The BBB-rated portion of the investment grade corporate bond market has grown significantly in recent years, driven by companies taking advantage of low interest rates to finance debt and increased investor appetite for higher-yielding securities.

Weaker fundamentals have stoked concerns about potential “fallen angel risk” in the most vulnerable BBB-rated segment of the market. Since fixed income can be a key diversifier against equity risk, we believe investors should evaluate if their current investment grade allocation

Figure 8: Proprietary credit model seeks to go deeper than rating agency metrics

Insights applied in systematic credit screening model



Investment process is subject to change.

will provide the ballast they desire in the case of a market sell off or a series of credit downgrades.

Credit-screened strategies, which systematically screen-out bonds with the highest risk of a downgrade, may help limit the downside risk posed by ratings deterioration.

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