LOMBARD ODIER
INVESTMENT MANAGERS

Investment viewpoint

Crossover as a credit complement: a risk-return profile

For professional investor use only • Fixed Income

March 2019

Ritesh Bamania
Head of UK and Ireland
Institutional Clients and Solutions

Anando Maitra
Head of Systematic Research

Leslie Sita
Client Portfolio Manager

Executive summary

Crossover bonds are corporate bonds that span ratings from the lowest-calibre of investment grade to the highest-calibre of high yield. Rated between BBB and BB, this market segment is prevalent globally across regions and currencies. Collectively, such credits are also referred to as 5B.

Tapping into what is sometimes considered a credit rating "sweet spot," a crossover strategy can improve returns relative to traditional investment grade (IG) strategies by roughly 100bps, while preserving favourable drawdown and default probability.

We suggest complementing an IG strategy with crossover. By investing in crossover bonds, we are effectively bulleting into the central part of the rating spectrum. This provides an alternative to a traditional paradigm of enhancing returns via a barbell into high yield credits, or alternately with illiquid assets. The crossover universe therefore provides diversification relative to these traditional approaches.

We think current market conditions mean careful implementation is key to maintaining optimal credit quality. Our approach to investing in crossover emphasizes quality and valuation, with additional focus on low turnover. This means that our pooled fund strategy requires less frequent trading than traditional benchmark approaches, while our buy and maintain bespoke funds would have significantly less trading. We use sustainability as a framework through which to appraise credit quality, and build safer and more resilient portfolios.

With an overall bond universe that is two-thirds the size of IG, crossover supply is sufficiently deep and diverse to enable tailoring of a portfolio for specific yield and maturity requirements. Similar to IG credit, practical considerations are key.

The case for crossover: attractive returns with moderate risks

The crossover space in corporate credit could be an attractive solution for investors looking to lock in improved returns in relation to investment grade, while avoiding the more pronounced credit risk of lower-rated high yield. Tapping into what is sometimes referred to as a credit rating "sweet spot," a crossover strategy could boost returns relative to traditional IG strategies by roughly 100bps, yet present a moderate credit risk profile that has lower default probability and drawdowns than high yield.

Firstly, a crossover approach can provide more favourable yields[1] than investment grade. Previous yield improvement from a global crossover strategy is shown in Table 1, relative to returns expected from global IG bonds. As at 31 December 2018, crossover bonds could have increased the spread return to 260bps (over government bonds) compared to 155bps (over government bonds) on an IG strategy. This would have been achieved with a 20% lower level of duration risk than the IG credit strategy. The overall yield in GBP hedged terms at this date would have been 3.7% for a global crossover strategy, compared to 2.6% for a global IG (market cap) return.

TABLE 1 PORTFOLIO CHARACTERISTICS OF GLOBAL CROSSOVER VERSUS GLOBAL INVESTMENT GRADE

	GLOBAL 5B POOLED FUND	GLOBAL IG (MARKET CAP BENCHMARK)
Yield (EUR, hedged)	2.2%	1.1%
Yield (USD, hedged)	5.4%	4.3%
Yield (GBP, hedged)	3.7%	2.6%
Spread[2]	261 bps	155 bps
Duration	5.04	6.23
Number of issues	4,801	8,413

Source: Bloomberg Barclays Point as of 31 December 2018.
Past performance is not a guarantee of future results.

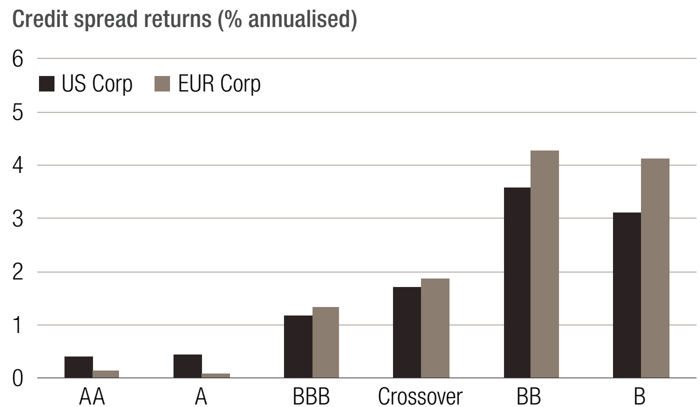
Secondly, crossover assets can provide a greater spread capture than B bonds, primarily due to the outperformance of BB rated issuers. As investors move down the credit rating spectrum, the general trend is for an increase in credit spread returns to reward the escalation of credit risk. However, counter-intuitively, BB rated issuers offer higher returns than the lower-rated B segment, as shown in Figure 1. The greater spread capture can be explained by the inclusion of fallen angels in the BB universe on the one hand, and the propensity for improved fundamentals on the other.

Fallen angels are credits that have recently been downgraded from investment grade. At the time of downgrade, investment grade only funds are forced to sell these bonds, thereby increasing supply. But there is insufficient demand because high yield funds are usually smaller and less familiar with the issuer, and the spread on offer is not attractive enough for them. The mismatch in supply and demand leads to a valuation shock that can fuel the BB-ratings bucket yielding relatively more than lower ratings buckets in B space.

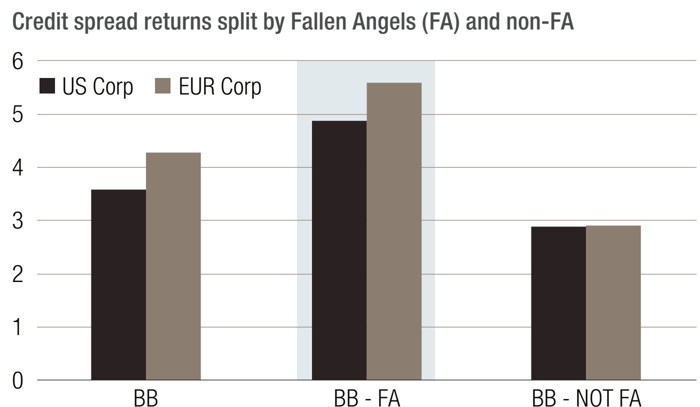
Figure 1 shows BB bonds providing higher spread returns than IG or lower-rated, B bonds over the past 14 years. And within the BB ratings bucket, credit spread returns are improved because fallen angels are included. As such, the fallen angels effect has created a "sweet spot" in credit by disproportionately rewarding investors with yield for only a relatively small move down the credit spectrum.

FIG. 1 CREDIT RATING SWEET SPOT

Credit spread returns (% annualised)



Credit spread returns split by Fallen Angels (FA) and non-FA

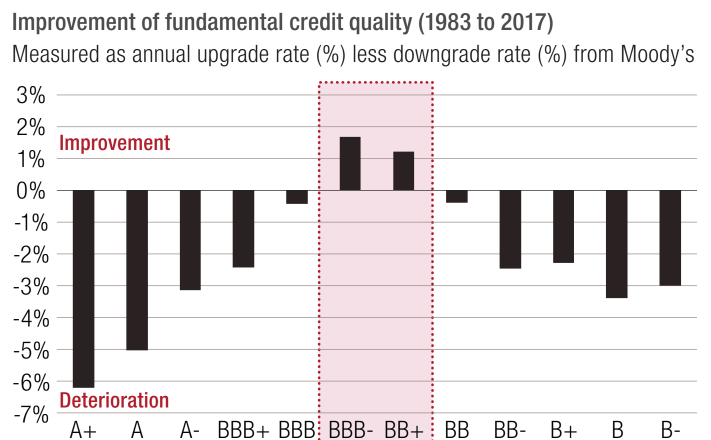


Source: Barclays POINT and LOIM. Note: Average spread returns from June 2004 to December 2018. Similar conclusions when spreads are adjusted for trend. Past performance is not guarantee of future results.

In addition, crossover issuers have tended to behave in a credit-positive manner, demonstrating a greater scope for enhanced ratings over time. Our data in Figure 2 show BBB- and BB+ rated issuers leaned more towards improving their fundamental credit quality relative to other rating categories.

FIG. 2 CROSSOVER ISSUERS TEND TO BEHAVE IN A CREDIT-FRIENDLY MANNER

Improvement of fundamental credit quality (1983 to 2017)
Measured as annual upgrade rate (%) less downgrade rate (%) from Moody's



Source: LOIM calculations. Past performance is not a guarantee of future results.
Moody's Annual Default Study: Corporate Default and Recovery Rates, 1920-2017.
There is a overall net downgrade rate as companies in general deteriorate in quality over time.

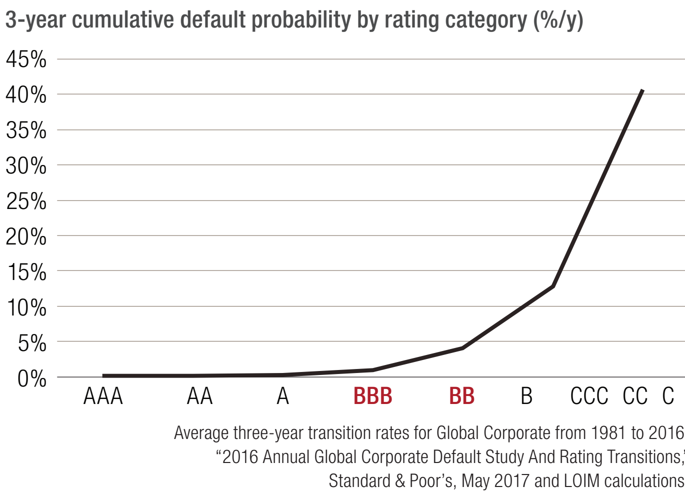
[1] Yields are subject to change and can vary over time.
[2] Spread is versus duration-matched US treasuries.

Thus far, we have argued that the crossover sector provides yield enhancement and improves the spread captured by investors relative to an IG approach. Now we turn to the risk characteristics, arguing that a crossover approach also shows lower default probability and positive drawdown characteristics relative to a high yield strategy, in order to maintain a moderate credit risk profile.

Figure 3 below shows that crossover credits have an inferior cumulative default probability than credits rated below the BB bucket. The default probability of crossover is closer to rates seen in IG than to rates in B or below – indeed, default probability begins to rise significantly below the BB credits.

FIG. 3 DEFAULT PROBABILITY RELATIVE TO RATING

3-year cumulative default probability by rating category (%/y)

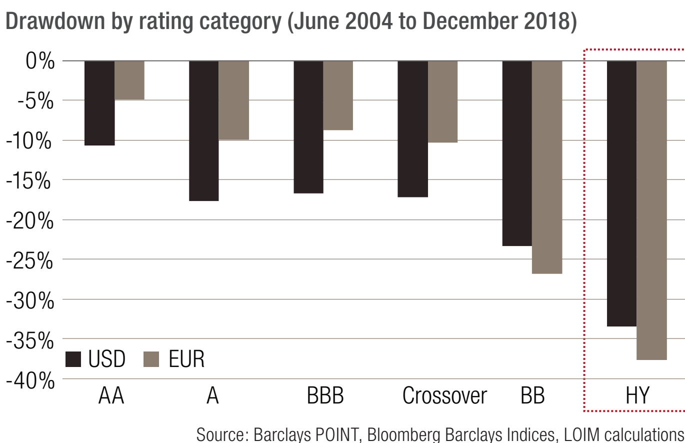


Average three-year transition rates for Global Corporate from 1981 to 2016. "2016 Annual Global Corporate Default Study And Rating Transitions," Standard & Poor's, May 2017 and LOIM calculations.

Whereas the high yield universe has experienced significant drawdowns in the past, crossover drawdowns are similar to those of investment grade bonds, and lower than those of high yield. Figure 4 illustrates this point over the past 14 years.

FIG. 4 CROSSOVER DRAWDOWN RELATIVE TO OTHER RATING CATEGORIES

Drawdown by rating category (June 2004 to December 2018)



Source: Barclays POINT, Bloomberg Barclays Indices, LOIM calculations.

This combination of low default probability and muted drawdown characteristics serves to maintain a more moderate credit risk profile when compared to high yield, and provide a risk profile more aligned with IG.

Bullets over barbells: crossover as a diversifier

Integrating a crossover strategy into a traditional credit, or buy and maintain portfolio can diversify against approaches that use higher quality IG and high yield, and/or invest in more illiquid assets. Traditional credit strategies have tended to invest in IG credit, with the largest portion in A-rated names, and some investment in the higher-quality BBB area. Two popular ways to increase spread have been to barbell IG with high yield, or to move into secure, income-type illiquid asset classes, such as property or infrastructure.

The crossover strategy provides another option to improve yield for moderate credit risk by effectively bulleting into 5B space, and could be used together with the other approaches. Incorporating crossover would increase exposure to issuers with improving fundamentals. And it would enhance yield and capture more spread for a relatively lower credit risk than the sub-BB high yield.

As for illiquidity, the inclusion of a crossover approach could reduce the spectre of illiquidity risk raised by investing in asset classes that require long-term investment and cannot be easily sold. We believe investors seeking better liquidity should consider the opportunities in this middle zone of 5B where we will now argue that a quality-driven approach is key.

Our approach: embedding sustainability into our portfolio construction

We think current market conditions mean careful implementation is key to maintaining optimal credit quality. Concerns have arisen about the increased leverage inherent in some lower-rated, investment grade borrowers, especially as monetary policymakers could eventually remove accommodation. Such an environment necessitates careful implementation to maintain optimal credit quality. Credit strategies that have longer duration or are much lower in the credit rating spectrum are likely to be more acutely sensitive to such conditions – high yield in particular could be severely impacted.

Given the backdrop, we believe it is essential to build safer and more resilient portfolios by mitigating risks without compromising on the returns. We do this by achieving three key objectives:

1. To embed a greater degree of safety, by focusing on quality, which allows us to improve diversification and protect portfolios better during periods of volatility. This focus also enables us to materially reduce turnover in our evergreen pooled funds, thereby reducing unnecessary trading costs. Turnover in our buy and maintain portfolios would be even lower, given the design of such funds.
2. To further mitigate risk by assessing extra-financial factors, by favouring companies with better business practices and those we believe are transitioning to more sustainable business practices and models.

3. To consider the resilience of the portfolio to the physical and transition risks associated with climate change, which we believe is one of the most pressing sustainability challenges investors face. We do this by favouring companies with a lower carbon intensity to reduce the carbon exposure of the portfolio, and through carbon avoidance by adding exposure to climate-aligned bonds.

In our view, issuers with better business practices, lower carbon intensity and a willingness to issue climate-aligned bonds suggests they are also more likely to transition to a low-carbon economy in an orderly fashion.

Bespoke design for cashflow-driven investors

For buy and maintain investors with cashflow requirements, a deep pool of crossover supply facilitates tailoring of a portfolio for specific yield and maturity requirements.

The large universe of outstanding crossover bond supply allows us to compose a portfolio from a broad selection of credits, giving us added flexibility for implementation, as well as to incorporate investor constraints. Starting with a supply of crossover credits that is approximately USD 6 trillion in size, we can tailor the portfolio such that investors can tilt away from facing specific credit risk. Instead, investors would face more balanced risks from a larger base of names.

We look to mitigate turnover by reducing idiosyncratic risk and moderating transaction costs. Idiosyncratic risk is risk specific to an issuer, which might spur the need to change a position, should our quality-based allocation become compromised. We minimise issuer concentration and diversify exposure across sectors and countries – this curbs the need to sell a large position in any one credit, further reducing transaction costs and ensuring lower turnover.

Maturity and duration constraints can also be taken into account. We can build a portfolio with an average maturity of 5 to 10 years. Finally, ESG and carbon usage metric targets can also be included in the portfolio building stage, depending on investor preferences.

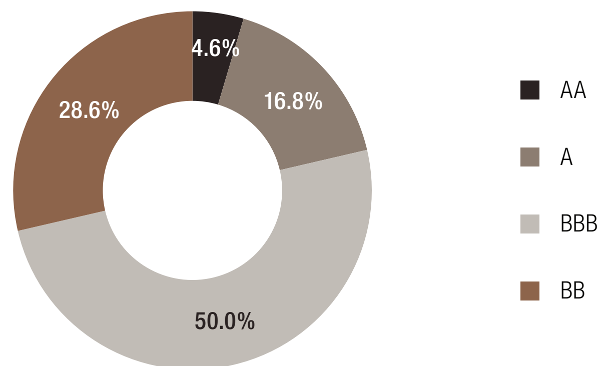
We note that investors would need to assess currency hedging as part of a cashflow matching framework, given the global nature of the crossover market.

Figure 5 below shows an example of a Global BBB-BB portfolio snapshot on 25 January 2019, with average duration of 5.8 years, a spread of maturity over 5 to 10 years, targeting a credit spread of roughly 250bps, an overall rating of IG and a reasonably high ESG score.

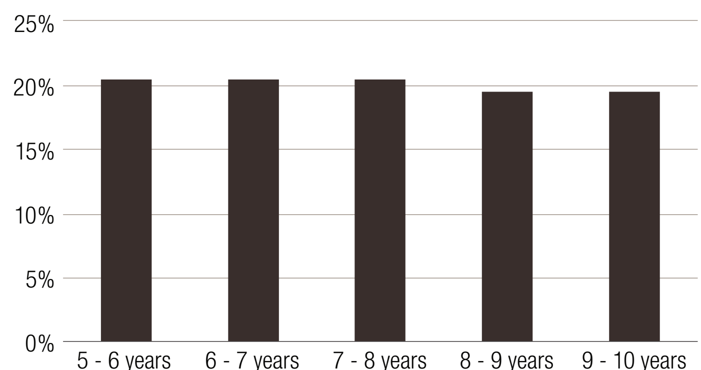
FIG. 5 PORTFOLIO CHARACTERISTICS

CHARACTERISTICS	PORTFOLIO
Positions	115
Issuers	106
Coupon (%)	3.81
Yield to maturity (%) USD Unhedged	**3.72**
Hedged Yield to maturity (%) GBP hedged	**3.67**
Option adjusted spread (bps)	254
Duration (yr)	5.76
Average rating	**BBB/BBB-**
ESG/CAR (Values on scale 0 to 100)	**70.28**
Carbon Intensity	**176.98**

Rating breakdown



Maturity breakdown



Source: LOIM/Allocations and holdings are subject to change as at 31 January 2019. For illustrative purposes only. Past performance is not a guarantee of future returns. Holdings/allocations are subject to change.

Conclusion

The crossover segment of corporate credit can be a relevant supplement to credit, and buy and maintain strategies. The 5B segment has shown characteristics of yield[3] enhancement, while maintaining a moderate credit risk profile. Our crossover strategy focuses on quality and valuation, with low turnover.

A large universe of outstanding bond supply permits flexible implementation. We use sustainability as a framework to measure credit quality and build safer and more resilient portfolios. Given current market conditions, we believe a dedicated focus on quality is key.

[3] Yields are subject to change and can vary over time.

For professional investor use only. Important information: Please see important information at the end of this document.

IMPORTANT INFORMATION

For professional investor use only.

This document is issued by Lombard Odier Asset Management (Europe) Limited, authorised and regulated by the Financial Conduct Authority (the "FCA"), and entered on the FCA register with registration number 515393. Lombard Odier Investment Managers ("LOIM") is a trade name. This document is provided for informational purposes only and does not constitute an offer or a recommendation to purchase or sell any security or service. It is not intended for distribution, publication, or use in any jurisdiction where such distribution, publication, or use would be unlawful. This document does not contain personalized recommendations or advice and is not intended to substitute any professional advice on investment in financial products. Before entering into any transaction, an investor should consider carefully the suitability of a transaction to his/her particular circumstances and, where necessary, obtain independent professional advice in respect of risks, as well as any legal, regulatory, credit, tax, and accounting consequences. This document is the property of LOIM and is addressed to its recipients exclusively for their personal use. It may not be reproduced (in whole or in part), transmitted, modified, or used for any other purpose without the prior written permission of LOIM. The contents of this document are intended for persons who are sophisticated investment professionals and who are either authorised or regulated to operate in the financial markets or persons who have been vetted by LOIM as having the expertise, experience and knowledge of the investment matters set out in this document and in respect of whom LOIM has received an assurance that they are capable of making their own investment decisions and understanding the risks involved in making investments of the type included in this document or other persons that LOIM has expressly confirmed as being appropriate recipients of this document. If you are not a person falling within the above categories you are kindly asked to either return this document to LOIM or to destroy it and are expressly warned that you must not rely upon its contents or have regard to any of the matters set out in this document in relation to investment matters and must not transmit this document to any other person. This document contains the opinions of LOIM, as at the date of issue. The information and analysis contained herein are based on sources believed to be reliable. However, LOIM does not guarantee the timeliness, accuracy, or completeness of the information contained in this document, nor does it accept any liability for any loss or damage resulting from its use. All information and opinions as well as the prices indicated may change without notice. Neither this document nor any copy thereof may be sent, taken into, or distributed in the United States of America, any of its territories or possessions or areas subject to its jurisdiction, or to or for the benefit of a United States Person. For this purpose, the term "United States Person" shall mean any citizen, national or resident of the United States of America, partnership organized or existing in any state, territory or possession of the United States of America, a corporation organized under the laws of the United States or of any state, territory or possession thereof, or any estate or trust that is subject to United States Federal income tax regardless of the source of its income. Source of the figures: Unless otherwise stated, figures are prepared by LOIM. Views and opinions expressed are for informational purposes only and do not constitute a recommendation by LOIM to buy, sell or hold any security. Views and opinions are current as of the date of this presentation and may be subject to change. They should not be construed as investment advice. Important information on case studies: The case studies provided in this document are for illustrative purposes only and do not purport to be recommendation of an investment in, or a comprehensive statement of all of the factors or considerations which may be relevant to an investment in, the referenced securities. The case studies have been selected to illustrate the investment process undertaken by the Manager in respect of a certain type of investment, but may not be representative of the Fund's past or future portfolio of investments as a whole and it should be understood that the case studies of themselves will not be sufficient to give a clear and balanced view of the investment process undertaken by the Manager or of the composition of the investment portfolio of the Fund now or in the future. Although certain information has been obtained from public sources believed to be reliable, without independent verification, we cannot guarantee its accuracy or the completeness of all information available from public sources.

©2019 Lombard Odier IM. All rights reserved.