Quoniam
QUANTITATIVE INVESTMENT ENGINEERING

|insights|

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CREDIT FACTOR STRATEGIES OFFER AN UNCORRELATED INVESTMENT STYLE

There is increasing academic and practitioner evidence that well-known equity factors can be used to capture excess returns in global corporate bond portfolios. In this paper we discuss the implications for an asset owner using multiple managers with different alpha sources and styles. We analyse the exposure to the Value, Quality and Momentum factors for three leading fundamentally-managed investment grade credit funds in comparison to the Multi-Factor portfolio of Quoniam.

Factor-based or style investing has an increasingly large footprint in equity portfolios with applications in active, passive, and smart beta strategies. However, factor-based investing is still in its infancy for fixed income. Given widespread evidence in many asset classes, and the similarity in fundamental analysis, it should be no surprise that this is equally applicable to corporate bond portfolios as well as equities. The factors considered are Value, the idea that cheap bonds outperform expensive bonds, secondly Quality, the idea that safer assets with good fundamentals outperform higher risk assets with poor fundamentals, and Momentum, the idea that assets with strong recent performance continue to perform in the near future. The validation of these factors contributing to excess performance has been documented in a variety of academic papers.

We analysed the factor exposures of three leading discretionary-managed funds[1)] using five years of portfolio holdings, calculating quarterly portfolio exposures to the following factors:

- Value – the market spread versus a fair value model spread based on the volatility of the underlying stock.
- Quality – a combination of two fundamental quality measures, namely the profitability of the issuer and the "safety" of the issuer (i.e. Free Cash Flow to Interest expenses).
- Momentum – price momentum of the underlying stock.

In addition, we show the exposure to a Multi-Factor signal (Value, Quality, Momentum) where we have combined elements of our proprietary factors. In figure 1 we show the average of the quarterly portfolio exposures from 2013 to 2018 for three leading global credit mutual funds. In figure 2 we show exposures for the Quoniam Multi-Factor fund.

We observe that average exposures for the fundamental funds have minimal exposure to Value, Momentum and Multi-Factor

[1)] Based on assets under management (AuM) IPE ranking for flagship Global Credit funds. Source: Morningstar and Bloomberg.

Three top fundamentally-managed global credit funds

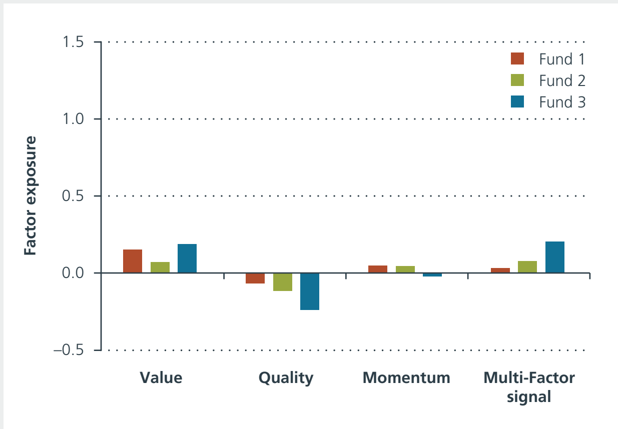


Fig. 1: Average factor exposures (quarterly, 2013–2018) for largest discretionary, fundamentally-managed global credit funds. Source: Morningstar, Quoniam Research

Quoniam Multi-Factor global credit portfolio

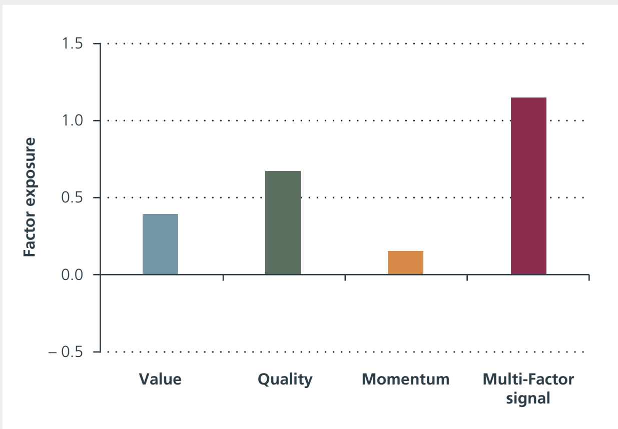
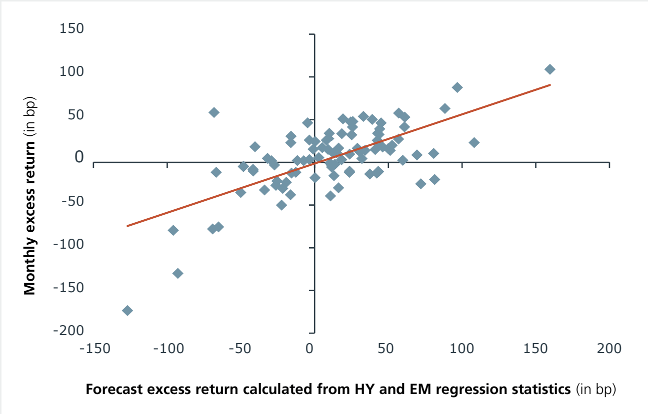


Fig. 2: Average factor exposures (quarterly, 2013–2018) for a quantitative global credit portfolio from Quoniam. Source: Quoniam Research

Fundamental fund – Realised overall vs forecast calculated from HY and EM regression



Monthly excess returns Multi-Factor vs fundamental

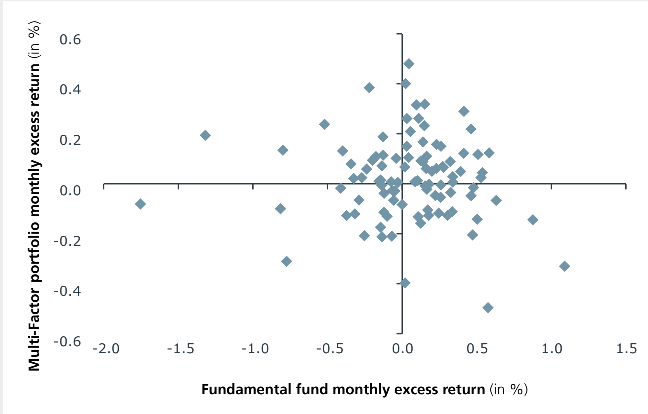


Fig. 3: Correlation of fundamental fund excess return with high yield and EM bonds excess returns (lhs); correlation of Multi-Factor portfolio excess returns with fundamental fund excess returns (rhs).
Source: Bloomberg, Morningstar, Quoniam Research

and most notably negative exposure to Quality. At the same time, the Quoniam strategy has significant exposure to the Value and Quality factors, and the Multi-Factor signal. The performance of the single factor exposures is driven by the characteristics as described above. The multi-factor exposure uses an integrated bottom-up credit signal based on tilting towards a combination of the three factors.

Dissecting fundamental fund returns

If not factors, what drives the excess performance of the fundamental global credit portfolios? Additional insight can be gained from analysing the correlation between fund returns and credit sectors, including high-yield and emerging market bonds. Adding both high-yield and emerging market bonds to an investment-grade portfolio aims to achieve extra return by investing in bonds with higher spreads. This can be characterised as an "active carry strategy" where cheap bonds are purchased that offer a higher spread. This differs from the Value idea mentioned earlier as the cheap bonds have been held with no consideration for an underlying fundamental or market-based value assessment.

In figure 3 (lhs) we show that the the outperformance of the largest fundamental fund is highly correlated with high yield and emerging market bond returns. This indicates that the fund has simply invested in these sectors to enhance returns relative to investment grade credit and those returns could equally be achieved by investing in high yield or emerging market bond indices.

Quoniam's Multi-Factor fund provides an uncorrelated investment style

In figure 3 (rhs) we show the implications for factor exposures versus high-yield and emerging market bonds as a driver for excess returns. Here the excess returns of the Multi-Factor portfolio are plotted against those of the fundamental portfolio, showing non-correlated excess returns. This analysis shows that the Multi-Factor credit portfolio of Quoniam provides exposure to factor premia that provide an excellent non-correlated investment style to traditional fundamental bond funds.

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LITERATURE

Brooks, Palhares, Richardson (2018):
'Style investing in fixed income', Journal of Portfolio Management, Forthcoming