

## ARTICLE

For professional investors

August 2017

**ROBECO**  
The Investment Engineers

# Global Multi-Factor Credits as a style diversifier

- **Negative correlation with global credit funds offers style diversification**
- **Strong Sharpe ratio through higher returns and lower risk**
- **Low costs and high sustainability score**

**In this article we show that Robeco QI Global Multi-Factor Credits is a style diversifier in a peer group of traditionally managed global credit funds. Moreover, it is among the funds with the highest Sharpe ratios. Our analyses also show that the fund has one of the lowest costs and one of the highest sustainability scores.**

Robeco QI Global Multi-Factor Credits is an innovative strategy offering balanced exposure to the low-risk, quality, value, momentum and size factors in the global investment grade corporate bond market. The strategy constructs a well-diversified portfolio of bonds with strong scores in our quantitative multi-factor model. Sustainability assessments are systematically incorporated in the investment process.

### **Style diversification**

For clients that already invest in actively managed credit portfolios, this factor-based strategy offers style diversification by using a systematic way to generate alpha. The table below summarizes the main style differences between a multi-factor approach and a fundamental approach to credit investing.



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‘On average, multi-factor credits correlates negatively with other global credit funds’

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Table 1 | Diversifying approaches

Multi-factor approach	Fundamental approach
Balanced exposures to all factors	May give exposure to one factor, but go against another factor
Persistent exposures to factors	May be prone to style drift
Free of behavioral biases	Decisions may be affected by portfolio managers' emotions
Model-based view on all companies	Fundamental view on selected companies only
Beta-neutral portfolio construction	May have substantial beta deviations

Source: Robeco

### Quantifying style diversification

Ultimately the arguments mentioned above should result in a low correlation between the performance of our multi-factor portfolio and a fundamentally managed portfolio. To support this claim, we obtained the returns of 25 global credit funds from Morningstar Direct over the 2-year live period of Robeco QI Global Multi-Factor Credits (July 2015 - June 2017). This peer group includes funds offered by well-known providers such as BlueBay, HSBC, Invesco, JP Morgan, PIMCO, Russell, and Schroders. As Morningstar reports net returns, we added back fees to approximate the gross returns.

For each fund and each month, we calculated the gross outperformance of the EUR-hedged share class versus the Bloomberg Barclays Global Aggregate Corporates index (also EUR-hedged). Next, we calculated the pairwise correlation between a fund's outperformance and each of the 25 other funds. Finally, we calculated the average of these 25 correlations for every fund. The results are shown in Figure 1, where we have anonymized the external funds.

Figure 1 | Average of outperformance correlations of a fund with each other fund in the peer group

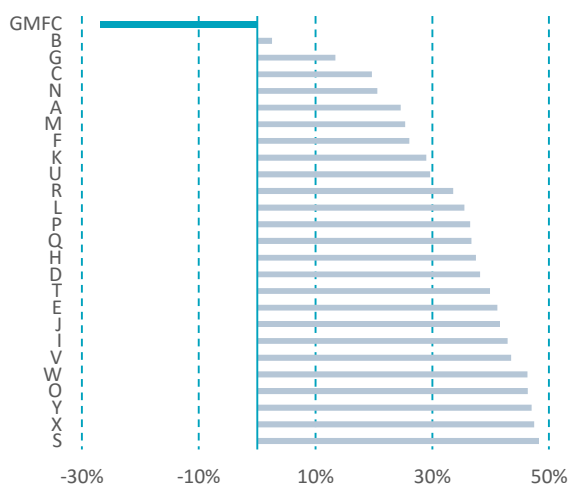
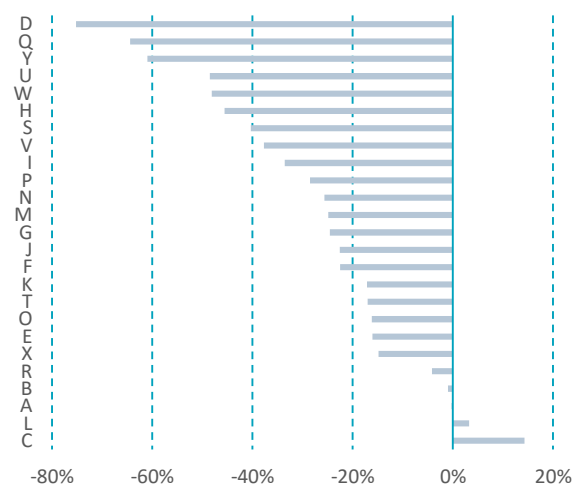


Figure 2 | Outperformance correlation of Robeco QI Global Multi-Factor Credits with each other fund in the peer group



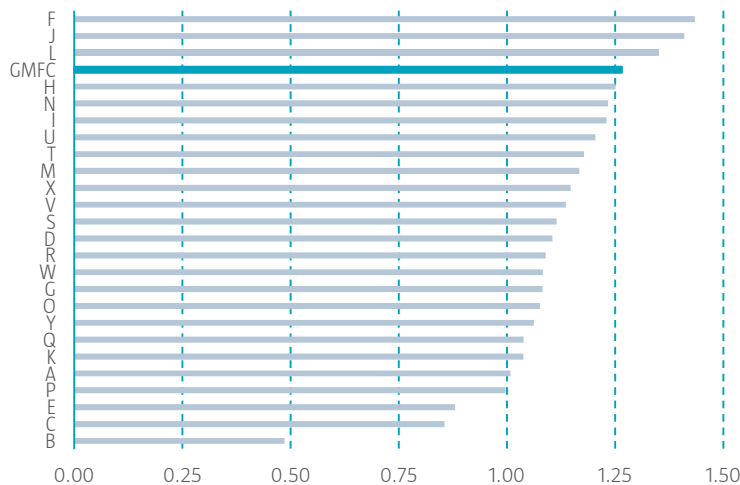
Source: Morningstar Direct, Barclays, Robeco. Period: July 2015-June 2017. GMFC = Robeco QI Global Multi-Factor Credits. A to Y are 25 anonymized global credit funds. Outperformance is calculated vs. Bloomberg Barclays Global Aggregate Corporates.

Clearly, Robeco QI Global Multi-Factor Credits has the lowest average correlation with the other funds: only -27%, whereas the average across all funds is +32%. So, indeed, our multi-factor portfolio is a diversifier versus fundamentally managed funds. Figure 2 provides more detail by listing the outperformance correlations of Robeco QI Global Multi-Factor Credits with each of the other funds. The correlations range from -75% to +14%.<sup>1</sup>

### Above-average return and low volatility

The fact that Robeco QI Global Multi-Factor Credits has a negative correlation is a good feature. What is even better is that this low correlation is accompanied by an above-average return and a low volatility. Figure 3 shows the Sharpe ratio of each fund over the sample period from July 2015 to June 2017. Clearly, Robeco QI Global Multi-Factor Credits' Sharpe ratio is among the highest. The high Sharpe ratio is driven by a volatility that is among the lowest in the peer group, and a return that is above-average. The lower volatility is a clear result of the fund's exposure to the low-risk and quality factors, while the higher return is driven by the value, momentum and size factors. The three funds with higher Sharpe ratios all accomplished it with the 'opposite' risk-return profile: their returns are among the highest in the peer group, while their volatility was above average. However, these three funds are all more expensive than Robeco QI Global Multi-Factor Credits (see below).

Figure 3 | Gross-of-fees Sharpe ratios of 26 global credit funds



Source: Morningstar Direct, Barclays, Robeco. Period: July 2015-June 2017. GMFC = Robeco QI Global Multi-Factor Credits. A to Y are 25 anonymized global credit funds. Returns are gross of fees. Outperformance is calculated vs. Bloomberg Barclays Global Aggregate Corporates.

<sup>1</sup> We also calculated the average outperformance correlation over a 5-year period by augmenting the 2-year live period of Robeco QI Global Multi-Factor Credits with 3 prior years of back-tested performance. 10 of the original 25 funds have a 5-year track-record. Over the period July 2012-June 2017, GMFC had a -39% average outperformance correlation, compared with +28% for the average fund.

We also calculated the information ratios of all funds. Robeco QI Global Multi-Factor Credits' information ratio of about 0.6 is above average. This above-average information ratio is due to a somewhat below-average tracking error and an above-average outperformance.

**Low costs and high sustainability**

Finally, we provide some additional information on the funds. Figure 4 lists for each fund its institutional share class' *ongoing charge*, which is the harmonized cost calculation method for UCITS funds. We observe that the ongoing charge of Robeco QI Global Multi-Factor Credits is the second-lowest. This shows the fund is attractively priced, between passive and traditional active strategies.

Figure 5 shows the sustainability score of each fund, as calculated by Morningstar using Sustainalytics data. Again, Robeco QI Global Multi-Factor Credits ranks favorably, with one of the highest scores, resulting from sustainability integration in the investment process. In fact, one of the funds with a higher score is a thematic sustainability fund.

Figure 4 | Costs

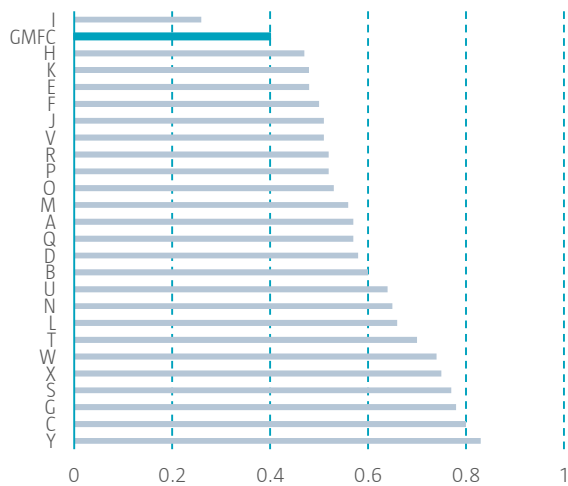
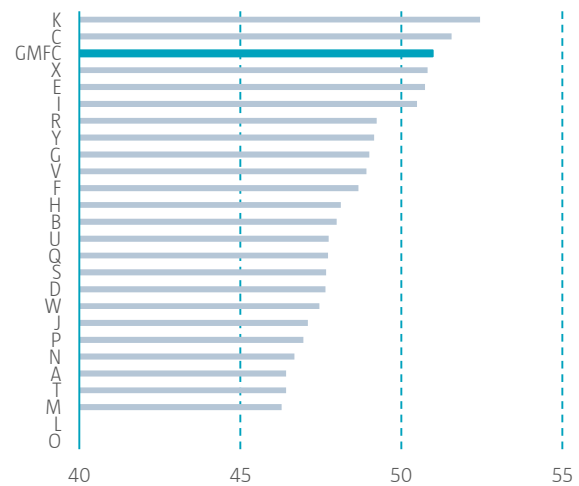


Figure 5 | Sustainability score



Source: Morningstar Direct. Left chart=KIID Ongoing Charge, as reported by the fund. Right chart= Morningstar sustainability score, as calculated by Morningstar; for two funds the sustainability score was not available.

**Conclusion**

Robeco QI Global Multi-Factor Credits is a factor-based strategy that offers style diversification by using a systematic way to generate alpha. In a peer group of 26 funds, it has the lowest average outperformance correlation with other funds. Moreover, this negative correlation is accompanied by an above-average return and a well below-average volatility. As a result, the fund has one of the highest Sharpe ratios in the peer group. On top of this, it has an above-average information ratio, one of the lowest costs and a top-ranked sustainability profile.

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