

Ready? Steady? Go!

- · Global Multi-Factor Credits offers style diversification with fundamental peers
- · Low correlation, low tracking error, and low volatility add value
- · Core credit allocation with steady performance, high sustainability, and low fees

In our annual series of peer group studies, we have repeatedly shown that Robeco's Global Multi-Factor Credits strategy is a style diversifier compared to traditionally managed global credit strategies. In this year's article, we reconfirm that our multi-factor credits strategy is the only one with a negative outperformance correlation with its peers, and zoom in on the strategy's steady performance delivery.

In a multi-manager credit context, the Robeco Global Multi-Factor Credits strategy (GMFC) has one of the lowest tracking errors in the peer group and offers the largest average tracking error reduction when combined with a fundamental credit manager. As a building block in a multi-asset context, the strategy has the lowest volatility and beta in its peer group, as well as the lowest correlation with equities. Therefore, when used in a 60/40 stocks/credits portfolio, it generates the asset mix with the lowest volatility.

The strategy's steady performance delivery and its diversifying ability with both credit managers and equities, in combination with its strong sustainability profile and lower fees, give it a unique position among active and passive global credit strategies. This makes it an appealing offering for asset owners' core credit allocations, diversifying with active managers and offering a smarter alternative to passive strategies.

Background

Global Multi-Factor Credits invests globally in predominantly investment grade credits and offers balanced exposure to the low-risk, quality, value, momentum, and size factors. It aims to outperform the global credit market by applying a systematic, risk-controlled investment process that constructs a well-diversified portfolio of bonds.

Our team of fundamental credit analysts complements the quantitative issuer selection by screening for tail risks beyond the scope of the model. The investment process systematically incorporates companies' ESG and SDG scores and their environmental footprints of carbon emissions, water use, and waste disposal.

Dare to be different

In this year's study, we analyze a peer group of 20 global credit managers over the live period of our Global Multi-Factor Credits strategy since August 2015. The peer group includes well-known asset managers such as BlueBay, HSBC, Invesco, JP Morgan, PIMCO, Russell, and Schroders. We download the returns of their global credit funds

ARTICLE SEPTEMBER 2024

Marketing material for professional investors, not for onward distribution



Patrick Houweling, PhD Head Quant Fixed Income, Lead Portfolio Manager Multi-Factor Credits



Ralph Berkien Head Fixed Income Client Portfolio Management, Client Portfolio Manager Quant Fixed Income





0.4

0.5

0.3

from Morningstar Direct and as Morningstar reports net returns, we add back fees to approximate the gross returns, creating a level playing field.

Then, we calculate the correlation between the outperformances of our multi-factor credits strategy and each of the 19 fundamentally-managed peers. Panel A of Figure 1 shows the results. The correlations range from -0.24 to +0.29 and the average is -0.07; 14 out of 19 correlations are negative. Next, we repeat this exercise for all the peers; see Panel B. With its average outperformance correlation of -0.07, GMFC scores the best of all strategies, as it is the only one with a negative correlation. For the other strategies, the average outperformance correlation ranges between 0.22 and 0.46, with an average of 0.36. This reconfirms the diversifying nature of our multi-factor strategy against other traditional global credit strategies.

Not only over the full sample period from August 2015 to July 2024, but also over more recent periods, such as over the last 3 years, GMFC has the lowest average outperformance correlation in the peer group.

A: Outperformance correlation of GMFC with each of the other B: Average outperformance correlation of a strategy with each of the strategies other strategies M T **GMFC** Ċ Ŕ N C 0 B E P J SL J. Q G H В T G M K N F P Κ D FS Q H 0 R

Figure 1 – Style diversification in the peer group of global credit strategies.

Past performance is no guarantee of future results. The value of your investments may fluctuate.

0.3

0.2

Source: Morningstar Direct, Robeco. Period: August 2015-July 2024. GMFC = Robeco Global Multi-Factor Credits Strategy (euro hedged). B to T are 19 anonymized global credit strategies (all euro-hedged). The outperformance is calculated vs. the Bloomberg Global Aggregate Corporates Index (euro-hedged). The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged.

High stability of outperformance

-0.2

Above, we looked at outperformances. In this section, we zoom in on the stability of outperformances by calculating the tracking error of each strategy; see Panel A of Figure 2.1 We see in the chart that GMFC has one of the lowest tracking errors in the peer group, with only one strategy having a lower tracking error. This shows that the performance delivery of our strategy has been very steady.

¹ Some managers use swing pricing to let incoming and/or outgoing clients pay for the transaction costs that their inflow resp. outflow causes. These swings in the NAV can substantially increase the tracking error but are not a result of the inherent investment process of the strategy. Since we do not have access to the "unswung NAV" (i.e. the NAV without applying the swing price mechanism), we mitigate the effect of swing pricing by calculating the tracking error on 12-month rolling window returns. Note that this causes an underestimation of the true tracking error because of the high autocorrelation in the rolling returns. Therefore, we also applied the Newey-West Heteroskedasticity and Autocorrelation Consistent (HAC) estimator for each strategy and found that this increased the tracking error by approximately the same factor for each strategy. Therefore, the order of the strategies, when sorted on their tracking error, was not materially affected. For ease of interpretation, we chose to present the tracking errors without the HAC correction.



In fact, since its inception in 2015, our Global Multi-Factor Credits strategy has outperformed the benchmark in nine out of ten years.² The reason why the tracking error has been so low is that our strategy uses a systematic, risk-controlled portfolio construction methodology that targets the same FX, duration, and credit risk as the benchmark and controls relative exposures in key risk dimensions, such as sectors, currency denominations, seniorities, and size groups. It also constructs a well-diversified portfolio across issuers. This results in low variation of relative returns, or in other words: steady outperformances.

To make the tracking error numbers more tangible, we calculate the outperformance in the best 12-month subperiod and in the worst 12-month subperiod. Panel B of Figure 2 plots the difference between these best and worst subperiods for each strategy. The larger the difference, the more volatile the outperformance over different time periods. We find that the strategies with the lowest tracking errors, including GMFC, show a return dispersion of around 2% between the best and the worst subperiods, whereas for other strategies in this peer group this is up to three times as high. One strategy has an exceptionally high difference of almost 12% between its best and worst 12-month subperiod.

A lower return dispersion indicates that investors experienced less surprises of either very strong underperformance or very strong outperformance. Such strategies will hardly ever be in the top of the peer group based on their outperformance, but also rarely in the bottom. Instead, they have delivered predictable and steady performance without large swings. Therefore, asset owners may consider them as an alternative to passive strategies that also have a low tracking error but no outperformance potential or sustainability integration.³

² Robeco Global Multi-Factor Credits Strategy over the live track record from August 2015 to July 2024, counting both the 8 full calendar years, the partial starting year 2015 and the current ongoing year 2024. The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations, the performance shown may increase or decrease if converted into your local currency. Performance gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged. The value of your investments may fluctuate. Past performance is no guarantee of future results.

³ See also our recent article "The case for Enhanced Index in credits", September 2024, in which we demonstrate that passive credit strategies face challenges like high turnover and transaction costs and that an enhanced index strategy improves returns and sustainability at a similar level of tracking error.

ROBECO

Figure 2 – Tracking error and return dispersion of global credit strategies.



Past performance is no guarantee of future results. The value of your investments may fluctuate.

Source: Morningstar Direct, Robeco. Period: August 2015-July 2024. GMFC = Robeco Global Multi-Factor Credits Strategy (euro hedged). B to T are 19 anonymized global credit strategies (all euro-hedged). The outperformance and tracking error are calculated vs. the Bloomberg Global Aggregate Corporates Index (euro-hedged). The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged.

The benefit in a multi-manager context

What is the advantage of investing in a strategy with a low tracking error and a low correlation with other managers? This becomes clear in a multi-manager portfolio that invests in multiple global credit managers.

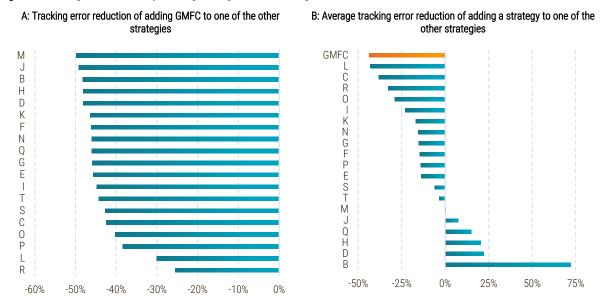
Consider an asset owner that initially only invests in one of the fundamental strategies in the peer group and then replaces 50% of this investment with GMFC. We calculate the tracking error of this 50/50 portfolio and compare it with the tracking error of the initial single-strategy portfolio. Panel A of Figure 3 shows the percentage tracking error reduction for each single-manager starting point, B to T. We find that in all cases the tracking error is substantially reduced. The reduction varies between -26% and -50% and is -44% on average. The tracking error reduction is the result of adding a strategy with a low standalone tracking error and a low correlation to the existing manager.

Next, we conduct the same calculations for all other managers; see Panel B. For five strategies (J, Q, H, D and B), we find that the tracking error increases if they are added to another strategy. These are the five strategies with the highest standalone tracking errors, see Panel A of Figure 2, which thus overwhelms the diversification benefit of investing in two managers.

In all other cases, the tracking error of the multi-manager portfolio is lower than of the single-manager portfolio. We find the largest reductions for the steady strategies with the lowest standalone tracking errors (GMFC, L, C, R, and 0). Because GMFC has the lowest outperformance correlation with other managers in this study, it offers the strongest style diversification benefit and thus generates the largest tracking error reduction.

ROBECO

Figure 3 – Tracking error reduction by investing in two global credit strategies.



Past performance is no guarantee of future results. The value of your investments may fluctuate.

Source: Morningstar Direct, Robeco. Period: August 2015-July 2024. GMFC = Robeco Global Multi-Factor Credits Strategy (euro hedged). B to T are 19 anonymized global credit strategies (all euro-hedged). A combined investment in two strategies has 50% weight in each. The tracking error is calculated vs. the Bloomberg Global Aggregate Corporates Index (euro-hedged). The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged.

Defensive positioning

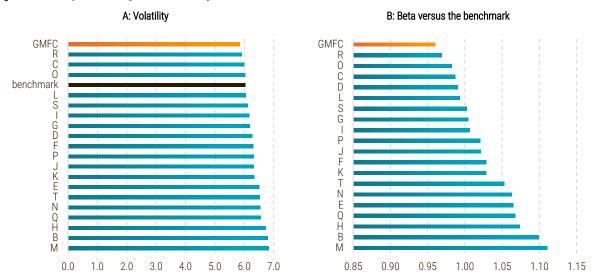
It is widely known that many credit managers tend to buy riskier assets to achieve higher yields, often labeled as "reach for yield" behavior. However, buying riskier bonds leads to excessive risk-taking. Panel A of Figure 4 shows the return volatility of the 20 strategies and of the Bloomberg Global Aggregate Corporates Index; Panel B shows the beta of each strategy versus this benchmark. Sixteen strategies have a volatility higher than the benchmark and 14 strategies have a beta above 1. This indeed demonstrates that many managers have a high-risk bias in their investment process.

The Robeco Global Multi-Factor Credits strategy stands out because it has both the lowest volatility and the lowest beta in the peer group. Thanks to the use of the low-risk and quality factors in our multi-factor model, the credit selection exhibits a quality tilt, leading to a volatility slightly below the benchmark and a beta that is slightly below 1. This makes the strategy more defensive than its peers.

⁴ Becker and Ivashina, 2015, "Reaching for Yield in the Bond Market", The Journal of Finance. Choi and Kronlund, 2017, "Reaching for Yield in Corporate Bond Mutual Funds", The Review of Financial Studies.

⁵ In last year's article, "Dare to be different", we illustrated the defensive nature of the Robeco Global Multi-Factor Credits strategy by showing that it had the highest outperformance in the peer group in the five worst credit months that occurred since inception in 2015, while the average manager underperformed in these months: +27 bps vs. -50bps per month, on average.

Figure 4 - Volatility and beta of global credit strategies.



Past performance is no guarantee of future results. The value of your investments may fluctuate.

Source: Morningstar Direct, Robeco. Period: August 2015-July 2024. GMFC = Robeco Global Multi-Factor Credits Strategy (euro hedged). B to T are 19 anonymized global credit strategies (all euro-hedged). The benchmark is the Bloomberg Global Aggregate Corporates Index (euro-hedged). The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged.

The benefit of defensive positioning in a multi-asset context

As the credit selection by the Robeco Global Multi-Factor Credits strategy tilts the portfolio to companies with a higher credit quality, it is somewhat less exposed to company default risk than its peers. This is a beneficial feature in a multi-asset context, in which asset owners typically invest a substantial part of their assets in equities, because in a risk-off scenario the credit returns are then less correlated with the negative equity returns, reducing the drawdown of the multi-asset portfolio.

Panel A in Figure 5 plots the correlation of each global credit strategy with the global equity market, represented by the MSCI World Index. We find that the correlations range between 0.63 and 0.74 and that GMFC has the lowest correlation of the 20 strategies. This makes it a great building block in a multi-asset portfolio.

To illustrate this, we create multi-asset portfolios that invest 60% in the MSCI World Index and 40% in one of the 20 global credit strategies. Panel B shows the volatilities of these 60/40 portfolios. We find that the portfolio with GMFC indeed has the lowest volatility. This result is robust for other portfolio weights for equities and credits, ranging from 90/10 to 10/90. In all cases, the portfolio that uses GMFC for its credit allocation has the lowest volatility of all 20 strategies. This is the result of having the lowest standalone volatility and the lowest correlation with equities.

To provide an example of dampened volatility, consider the worst equity month in our sample: March 2020, the outbreak of the COVID-19 pandemic. In this month, the MSCI World Index returned -13.33%. The average global credit strategy generated a return of -7.69%. On the other hand, GMFC, with its defensive positioning, lost "only" -6.26%, so 1.44% better than the average strategy.

ROBECO

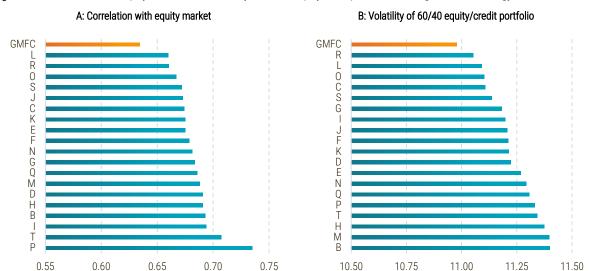


Figure 5 - Correlation with the equity market and the volatility of a 60/40 equity/credit portfolio for each global credit strategy.

Past performance is no guarantee of future results. The value of your investments may fluctuate.

Source: Morningstar Direct, MSCI, Robeco. Period: August 2015-July 2024. GMFC = Robeco Global Multi-Factor Credits Strategy (euro hedged). B to T are 19 anonymized global credit strategies (all euro-hedged). Equity market is the MSCI World Index (euro-hedged). The currency in which the past performance is displayed may differ from the currency of your country of residence. Due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged.

A systematic incorporation of sustainability

The Robeco Global Multi-Factor Credits strategy promotes various environmental and social characteristics. Firstly, it applies exclusion criteria related to products and business practices that Robeco believes are detrimental to society. Examples include manufacturers of tobacco or controversial weapons and companies involved in thermal coal, oil sands, or arctic drilling. If a company in the portfolio is in breach of global norms, such as the UN Global Compact or OECD Guidelines, it will become part of Robeco's Enhanced Engagement program in which the company is asked to address the reported shortfalls. Also, we will not take overweight positions in companies that are under Enhanced Engagement. Failure to meet the requested improvements leads to an addition of the company to the Robeco Exclusion List.

Moving beyond exclusions and engagement, the strategy commits to providing investors with lower environmental footprints than its benchmark in terms of its carbon emissions, water use, and waste disposal. In addition, the strategy commits to being exposed to less ESG risk than the benchmark. Finally, it commits to investing more than the benchmark in companies that contribute positively to the UN Sustainable Development Goals (SDGs).

Looking at the peer group ranking based on ESG risk, which is just one of the sustainability dimensions that the Robeco Global Multi-Factor Credits strategy integrates in its investment process, we find that it scores better than the benchmark (by construction) and better than the average strategy. Zooming in on the strategies with similar risk characteristics (the ones labeled C, O, R, and L), we find that GMFC has the lowest ESG risk among these peers, which, in fact, all score worse than average.

Investors who aim to make a more sustainable impact with their corporate bond holdings can consider Robeco's Global SDG & Climate Multi-Factor Credits Strategy. This strategy, launched in June 2022, invests in bonds from companies that, on average, decarbonize in line with the Paris Agreement and in companies that contribute positively to the SDGs. ESG risk, carbon emissions, and other environmental footprints are kept below its Parisaligned benchmark. This strategy would score second in the peer group ranking just based on ESG risk.

⁶ See our 2020 white paper "Sustainability innovations in factor credits".

⁷ See our 2022 white paper "SDG & Climate Multi-Factor Credits: Systematically targeting the SDGs and the Paris Agreement in credits".



Conclusion

The Robeco Global Multi-Factor Credits strategy stands out as an attractive choice for asset owners seeking a steady and predictable allocation to global credits. The strategy's defensive style, characterized by the lowest volatility and beta among its peers, ensures stability in turbulent markets and the best diversification with equities.

Furthermore, the strategy's systematic, risk-controlled investment process generates a market-like risk profile, a relatively low tracking error, and a steady outperformance. Our research shows that, combined with its negative correlation with fundamental credit managers, the Robeco Global Multi-Factor Credits strategy offers the largest tracking error reduction when combined with a fundamental manager.

The strategy's commitment to sustainability further enhances its appeal. By excluding harmful business practices and investing more in companies that, on average, have lower ESG risk, lower environmental footprints, and positive contributions to the SDGs, the Robeco Global Multi-Factor Credits strategy aligns financial performance with sustainable investment principles. The strategy's competitive fee structure underscores its attractiveness as an ideal core holding for asset owners' credit allocations.

⁸ Actual fees can differ based on the exact share class of choice and the total size of the investment.

Important information

This information refers only to general information about Robeco Holding B.V. and/or its related, affiliated and subsidiary companies, ("Robeco"), Robeco's approach, strategies and capabilities. This document is solely intended for professional investors, defined as investors qualifying as professional clients, who have requested to be treated as professional clients or who are authorized to receive such information under any applicable laws. Unless otherwise stated, the data and information reported is sourced from Robeco, is, to the best knowledge of Robeco, accurate at the time of publication and comes without any warranties of any kind. Any opinion expressed is solely Robeco's opinion, it is not a factual statement, and is subject to change, and in no way constitutes investment advice. This document is intended only to provide an overview of Robeco's approach and strategies. It is not a substitute for a prospectus or any other legal document concerning any specific financial instrument. The data, information, and opinions contained herein do not constitute and, under no circumstances, may be construed as an offer or an invitation or a recommendation to make investments or divestments or a solicitation to buy, sell, or subscribe for financial instruments or as financial, legal, tax, or investment research advice or as an invitation or to make any other use of it. All rights relating to the information in this document are and will remain the property of Robeco. This material may not be copied or used with the public. No part of this document may be reproduced, or published in any form or by any means without Robeco's prior written permission.

© Q4/2024 Robeco