Combining quant and fundamental to diversify your EM equity portfolio

WHITE PAPER
For professional investors
September 2017

Fabiana Fedeli
Portfolio Manager EM Equities
Wilma de Groot
Portfolio Manager Active Quant EM
Introduction

Over the past years, emerging markets have been quite volatile. Since last year, however, they have been showing a strong recovery and inflows show that investors have found their way back to emerging markets. In deciding which strategy to select, they may consider combining two or more of them. This allows them to benefit from diversification, which can reduce risk and offer more stable alpha.
Combining quant and fundamental to diversify your EM equity portfolio
Inflows into emerging markets have improved significantly. After a long period of outflows, the tide turned in 2016 and, with a short-lived dip following Trump’s election, inflows have gathered pace. Over the first half of this year, over USD 40 billion found its way into emerging markets.

Depending on their portfolio objective, investors have a wide range of emerging markets strategies, styles and approaches to choose from. This can vary from low-risk strategies aiming to benefit from the low volatility anomaly, emerging markets smaller companies strategies that capitalize on strong domestic growth, to enhanced indexing as an alternative to passive emerging equity allocations.

Combining two or more of these strategies can diversify the portfolio. But what does this mean concretely for the portfolio’s risk and return characteristics? To give an indication of the benefits of diversification, we will take two global emerging markets strategies with the same objective, i.e. to achieve alpha at a set risk budget. The main difference is that one is fundamentally managed and the other quantitatively. The two strategies are Robeco Emerging Stars Equities and Robeco QI Emerging Markets Active Equities. We will give a concise description of the strategies, address their similarities and differences, and, finally, show the results of an allocation to both strategies in terms of risk and return.

The fundamental strategy: Robeco Emerging Stars Equities
Robeco Emerging Stars is a fundamental, actively managed emerging markets equities strategy. Its investment approach is index agnostic and focuses on the most attractive investments. This results in a high-conviction, concentrated portfolio of 35 to 50 stocks. The strategy has EUR 1.9 billion under management as at 30 June 2017.

The investment process: country allocation and stock selection
The strategy has two main performance drivers: country allocation and stock selection. Countries are analyzed by looking at their macro environment & political risk, earnings expectations, valuation, technical analysis and sentiment & market supply/demand. The strategy typically invests around 80% of its portfolio in the five most attractive countries. Stock selection focuses on the long term to uncover structural drivers and capture mispriced sound business models. It draws from both fundamental analysis and the outcome of leading-edge quantitative models, which serve as an idea generator and a second opinion. Positions are typically 2% to 4% of the portfolio.

‘A combination of two strategies can enhance returns and reduce risks’
Since inception in December 2006, the Emerging Stars strategy has generated an excess return of 3.96% per year gross of fees, at a tracking error of 5.95%. This results in an information ratio of 0.67.

The quantitative strategy: Robeco QI Emerging Markets Active Equities
Robeco QI Emerging Markets Active Equities is a quantitative, actively managed emerging markets equities strategy. Its factor-based investment approach is systematic and research-driven to benefit from persistent behavioral biases. Its benchmark is the MSCI Emerging Markets index. The portfolio has a high conviction and a high active share, consisting of 221 stocks as at 30 June 2017. Assets in the strategy amount to EUR 1.5 billion per 30 June 2017.

The investment process: stock selection
The strategy focuses on stock selection. This is done on the basis of a proprietary quant stock selection model, which produces a ranking of stocks. Top-ranked stocks are overweighted, bottom-ranked underweighted. The portfolio managers check the rankings for issues not captured by models, such as corporate actions or index reviews. A proprietary rules-based portfolio construction algorithm limits turnover. The strategy has exposure to factors that are rewarded with superior risk-adjusted performance: value and momentum. It uses enhanced factors to avoid non-rewarded risks, such as distress risk (value trap) or residual momentum instead of generic price momentum (reducing sensitivity to market reversals).
Risk and return

Table 2. Track record since inception

<table>
<thead>
<tr>
<th>31-07-2017</th>
<th>1-year</th>
<th>3-year</th>
<th>5-year</th>
<th>Since Feb-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quant Emerging Active</td>
<td>24.81%</td>
<td>7.71%</td>
<td>6.81%</td>
<td>7.61%</td>
</tr>
<tr>
<td>Benchmark</td>
<td>18.41%</td>
<td>6.80%</td>
<td>5.68%</td>
<td>4.69%</td>
</tr>
<tr>
<td>Relative performance</td>
<td>6.40%</td>
<td>0.92%</td>
<td>1.13%</td>
<td>2.92%</td>
</tr>
<tr>
<td>Tracking error</td>
<td>2.15%</td>
<td>3.19%</td>
<td>2.95%</td>
<td>3.33%</td>
</tr>
<tr>
<td>Information ratio</td>
<td>2.98</td>
<td>0.29</td>
<td>0.38</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Source: Robeco. Robeco QI Emerging Markets Active Equities (EUR) I-share, figures gross of fees, based on net asset value, in EUR. Until 21-06-2010 named Robeco 130/30 Emerging Markets Equities. All figures are annualized. As of 01-07-2008, the benchmark changed from S&P/IFC EM Regional Investable Composite (net dividends reinvested) to MSCI Emerging Markets index (net div. reinv.) The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

Since inception in February 2008, the strategy has generated an excess return of 2.92% per year gross of fees, at a tracking error of 3.33%. The information ratio is 0.88.

The differences between the two strategies

Both strategies have been capable of delivering alpha within set risk parameters with a diversified portfolio. However, to achieve diversification, it’s the differences between the strategies we are interested in. We will discuss three main differences:

1. The role of country allocation
2. The role of quantitative models and qualitative analysis
3. The way in which sustainability is integrated

1. The role of country allocation

Emerging Stars: Country allocation is one of the two main performance drivers, together with stock selection. Country allocation is deemed very important because of the substantial differences in risks and opportunities in emerging markets. Quantitative Research by Robeco shows that over the period from December 1992 through 2016, a significant portion of returns variance in emerging markets equities is driven by country differences (see Figure 1).
Figure 1 | Stock return decomposition in emerging markets

Source: Robeco Quantitative Research, data points. December 1992-2016. The graph looks at the contribution of sectors, countries and the overall market to the volatility of returns. The graph shows that the returns variance in emerging markets can be mostly attributed to investing in the asset class (i.e. the market) and to differences between countries, while sector makes a far smaller contribution.

During the top-down country allocation part of the investment process, the team identifies the positive and negative macro drivers across different emerging markets. In order to effectively utilize the outcome of the country analysis, in the stock selection part of the investment process the team aims to select companies with an underappreciated earnings outlook that are either positively correlated with the positive macro drivers and negatively or not correlated with the negative macro drivers of a country. In South Africa, for example, the team has a negative view on the domestic economy and sees risks for the value of the rand. Within the portfolio’s positioning in South Africa, the team therefore prefers companies with foreign-based revenues.

Quant Emerging Active: Country allocation is not a performance driver in this strategy. This approach is driven by a quantitative stock selection model and research shows a positive relation between the number of stocks in a country (breadth) and the information ratio of the stock selection strategy based on this model (Figure 2). In other words: the model needs breadth to fully fulfil its potential.
The model obtains a higher information ratio in a market where the model has lots of stocks to choose from (such as South Korea) than in markets (like Peru) which contain only a few listings. In other words: the more stocks to choose from (breadth), the better, as reflected in the higher information ratio. The same applies to the selection of emerging market countries itself. As the number of emerging markets is relatively low (24 countries) the information ratio of a quantitative top-down country selection model would be relatively low as well. The bar on the far-right (selection within countries) indicates that the information ratio increases significantly when the stock selection model is applied bottom-up: on the total universe of emerging markets stocks.

2. The role of quantitative models and qualitative analysis

**Emerging Stars**: The models serve as an idea generator, and as a second opinion. The rankings are therefore not leading in the investment process. Fundamental analysis is the main driver. This can provide insights into issues such as upcoming changes in company management or industry regulations, for example tax policies, that are not covered by the model. After the analysis of countries and companies, the portfolio managers construct the model portfolio. They select stocks on which they have a positive fundamental opinion, fit a theme from the top-down research analysis and preferably are ranked highly in the quantitative rankings.

**Quant Emerging Active**: The quantitative multi-factor model drives stock selection and portfolio construction. There is a human overview, which means that at the start of the investment process, the quality of the data fed into the model is checked and at the end of the process the model’s outcome is checked for issues not covered by the model. The model produces a ranking of stocks. After the human overview, the team uses a proprietary portfolio construction algorithm to translate the model ranking into an optimal portfolio. The basic idea is that top-ranked stocks are overweighted with a maximum target of 0.5% per stock and bottom-ranked stocks are underweighted. In total this leads to around 200 stocks in the portfolio.
3. The way in which sustainability is integrated

**Emerging Stars**: ESG is integrated into both country and company analysis. A country with a negative ESG profile is given a country risk premium, which means that it is penalized in its valuation assessment versus a country with better ESG performance. If a stock has a poor ESG profile, the team will thoroughly analyze this score. Based on the outcome of this analysis, the team can increase the weighted average cost of capital (WACC) with 100 or 200bps, to reflect the true value of the investment opportunity. The analysts will also modify their financial statement forecast if other input factors, such as sales growth or margins, can be impacted, reflecting risks or opportunities that ensue from the company’s score on the ESG factor.

Additionally, the team, in close cooperation with Active Ownership specialists, actively engages with selected companies to enhance both their ESG profile and financial results, aiming to enhance the strategy’s alpha. Information gathered during this process can be used to support and complement fundamental analysis.

**Quant Emerging Active**: The portfolio construction algorithm ensures that the portfolio’s total weighted RobecoSAM sustainability score is at least as high as that of the benchmark. This implies that stocks with a higher sustainability are more likely to be selected in the portfolio. The quantitative portfolio management team also manages an Emerging Sustainable Active strategy, which incorporates impact investing on four dimensions (20% lower footprint for carbon, waste production, energy consumption and water usage) and excludes controversial companies (in industries such as tobacco, alcohol, adult entertainment and controversial weapons). The RobecoSAM sustainability score of this strategy is at least 20% higher than the benchmark and still offers a stable alpha.

**Combining the two strategies: diversification**

As we have seen, the two strategies, even though they have the same universe (global emerging markets) and objective (deliver alpha at a pre-defined risk), have a different, philosophy and process. How could combining them benefit investors and what would it cost them? The cost, first of all, would be an expansion of the manager search, and an increase in the number of managers to be monitored and reviewed.

The benefit would be a more stable alpha. For the two strategies discussed in this article, we have calculated that their excess returns show a correlation of only 0.32 over the period since the start of Robeco QI Emerging Markets Active Equities, in February 2008. As different approaches tend to work well in different periods, combining the two leads to more robust outperformance. Risks are spread across two teams and approaches, which means that country and manager risks can be further reduced. Figure 3 shows the excess returns of the two strategies and their combination over the period from February 2008 through July 2017.
Figure 3 | Combined results since February 2008

Gross cumulative (excess) returns:

- MSCI EM: 54.56%
- EM Stars: 91.28% (+36.72%)
- Active Quant EM: 100.70% (+46.14%)

Source: Robeco Performance Measurement. Left graph: Robeco QI Emerging Markets Active Equities (EUR, I-Share) and Robeco Emerging Stars Equities (EUR, I-share), gross of fees, based on Net Asset Value, all figures in EUR. Until 21 June 2010, the Active Quant EM strategy was named Robeco 130/30 Emerging Markets Equities. Inception date: February 2008. Right graph: Cumulative excess return Robeco QI Emerging Markets Active Equities (EUR, I-Share) and Robeco Emerging Stars Equities (EUR, I-share) as well as a 50% allocation to both strategies. The value of your investments may fluctuate. Results obtained in the past are no guarantee for the future.

Please note that these graphs are not intended to show that one strategy is better than the other. Over a different period, the Emerging Stars strategy shows better numbers than its quant counterpart. Over five years, for example, the outperformance and information ratio of Emerging Stars are higher than that of Quant Emerging Active (see Figure 4). Over this period, the correlation between the excess returns of the two strategies is 0.25.
Conclusion: more stable alpha

We have shown that two global emerging equity strategies, which have both proven capable of delivering alpha, can be even more robust when combined. Diversification across low-correlated strategies can reduce risk and offer more stable alpha. Even if an investor has a preference for a fundamental or a quantitative strategy, it would be worthwhile considering a combination of the two approaches, as this can enhance returns and reduce risks.
Important Information
Robeco Institutional Asset Management B.V., hereafter Robeco, has a license as manager of UCITS and AIFs from the Netherlands Authority for the Financial Markets in Amsterdam. This statement is intended for professional investors. Therefore, the information set forth herein is not addressed and must not be made available, in whole or in part, to other parties, such as retail clients. Robeco disclaims all liability arising from uses other than those specified herein. Without further explanation this presentation cannot be considered complete. It is intended to provide the professional investor with general information on Robeco’s specific capabilities, but does not constitute a recommendation or an advice to buy or sell certain securities or investment products. All rights relating to the information in this presentation are and will remain the property of Robeco. No part of this presentation may be reproduced, saved in an automated data file or published in any form or by any means, either electronically, mechanically, by photocopy, recording or in any other way, without Robeco’s prior written permission. The information contained in this publication is not intended for users from other countries, such as US citizens and residents, where the offering of foreign financial services is not permitted, or where Robeco’s services are not available. The prospectus and the Key Investor Information Document for the Robeco Funds can all be obtained free of charge at www.robeco.com. Investment involves risks. Before investing, please note the initial capital is not guaranteed. The value of the investments may fluctuate. Past performance is no guarantee of future results. Historical returns are provided for illustrative purposes only. The price of units may go down as well as up and the past performance is not indicative of future performance. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency.

Additional Information for investors with residence or seat in France
Robeco is having the freedom to provide services in France. Robeco France has been approved under registry number 10683 by the French prudential control and resolution authority (formerly ACP; now the ACPR) as an investment firm since 28 September 2012. Robeco France is only authorized to offer investment advice service to professional investors.

Additional Information for investors with residence or seat in Germany
This information is solely intended for professional investors or eligible counterparties in the meaning of the German Securities Trading Act.

Additional Information for investors with residence or seat in Italy
This document is considered for use solely by qualified investors and private professional clients (as defined in Article 26 (1) (d) of Consob Regulation No. 16190). If made available to Distributors and individuals authorized by Distributors to conduct promotion and marketing activity, it may only be used for the purpose for which it was conceived. Therefore, the information set forth herein is not addressed and must not be made available, in whole or in part, to other parties, such as retail clients. Robeco disclaims all liability arising from uses other than those specified herein.

Additional Information for investors with residence or seat in Spain
The Spanish branch Robeco Institutional Asset Management BV, Sucursal en España, having its registered office at Paseo de la Castellana 42, 28046 Madrid, is registered with the Spanish Authority for the Financial Markets (CNMV) in Spain under registry number 24.

Additional Information for investors with residence or seat in Switzerland
This document is exclusively distributed in Switzerland to qualified investors as such terms are defined under the Swiss Collective Investment Schemes Act (CISA). RobecoSAM AG has been authorized by the FINMA as Swiss representative of the Fund(s), and UBS Switzerland AG, Bahnhofstrasse 45, 8001 Zurich, postal address: Badenstrasse 574, P.O. Box, Ch-8098 Zurich, as the key investor information agent. The performance data do not take account of the commissions and costs incurred on the issue and redemption of units.

Additional Information for investors with residence or seat in the United Kingdom
This document is considered for use solely by qualified investors and professional clients (as defined in Article 23 of the Financial Services and Markets Act 2000 (Financial Services and Markets Act 2000), as amended) in the United Kingdom. Robeco France is authorized and regulated by the Financial Conduct Authority (FCA) as an investment firm. Robeco France is equally authorized to offer investment advice service to professional investors.

Combining quant and fundamental to diversify your EM equity portfolio | 13
Additional Information for investors with residence or seat in Shanghai
This material may not be copied or used with the public. This material is prepared by Robeco Investment Management Advisory (Shanghai) Limited Company (Robeco Shanghai for short) and is only provided to the specific objects under the premise of confidentiality. This material must not be wholly or partially reproduced, distributed, circulated, disseminated, published or disclosed, in any form and for any purpose, to any third party without prior approval from Robeco Shanghai. The information and/or analysis contained in this material have been compiled or arrived at from sources believed to be reliable but Robeco Shanghai does not make any representation or warranty as to their accuracy, correctness, usefulness or completeness and does not accept liability for any loss arising from the use hereof or the information and/or analysis contained herein. Neither Robeco Shanghai nor its affiliates, nor any of their directors, officers or employees shall assume any liability or responsibility for any direct or indirect loss or damage or any other consequence of any person acting or not acting in reliance on the information contained herein. The information in this material may contain projections or other forward-looking statements regarding future events, targets, management discipline or other expectations which involve assumptions, risks, uncertainties and is only as current as of the date indicated. Based on this, there is no assurance that such events will occur, and may be significantly different than that shown here, and we cannot guarantee that these statistics and the assumptions derived from the statistics will reflect the market conditions that may be encountered or future performances of Robeco Shanghai. The information in this material is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. The information contained herein may not reflect the latest information on account of the changes and Robeco Shanghai is not responsible for the updating of the material or the correction of inaccurate or missing information contained in the material. Robeco Shanghai has not yet been registered as the private fund manager with the Asset Management Association of China. This material was prepared solely for informational purposes and does not constitute a recommendation, professional advice, an offer, solicitation or an invitation by or on behalf of Robeco Shanghai to any person to buy or sell any product. This material should not be viewed as a recommendation to buy or sell any investment products or to adopt any investment strategies. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Robeco Shanghai is a wholly foreign-owned enterprise established in accordance with the PRC laws, which enjoys independent civil rights and civil obligations. The statements of the shareholders or affiliates in the material shall not be deemed to a promise or guarantee of the shareholders or affiliates of Robeco Shanghai, or be deemed to any obligations or liabilities imposed to the shareholders or affiliates of Robeco Shanghai.

Additional Information for investors with residence or seat in Australia
This document is distributed in Australia by Robeco Hong Kong Limited (ABN 156 512 659) (“Robeco”) which is exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 09/1103. Robeco is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws. This document is distributed only to "wholesale clients" as that term is defined under the Corporations Act 2001 (Cth). This document is not for distribution or dissemination, directly or indirectly, to any other class of persons. It is being supplied to you solely for your information and may not be reproduced, forwarded to any other person or published, in whole or in part, for any purpose. In New Zealand, this document is only available to wholesale investors within the meaning of clause 3(2) of Schedule 1 of the Financial Markets Conduct Act 2013 (FMCA). This document is not for public distribution in Australia and New Zealand.

Additional Information for investors with residence or seat in Brazil
The fund may not be offered or sold to the public in Brazil. Accordingly, the fund has not been nor will be registered with the Brazilian Securities Commission - CVM nor have they been submitted to the foregoing agency for approval. Documents relating to the fund, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of the fund is not a public offering of securities in Brazil, nor used in connection with any offer for subscription or sale of securities to the public in Brazil.

Additional Information for investors with residence or seat in Colombia
This document does not constitute a public offer in the Republic of Colombia. The offer of the fund is addressed to less than one hundred specifically identified investors. The fund may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign funds in Colombia. The distribution of this document and the offering of Shares may be restricted in certain jurisdictions. The information contained in this document is for general guidance only, and it is the responsibility of any person or persons in possession of this document and wishing to make application for funds to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for the fund should inform themselves of any applicable legal requirements, exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile.

Additional Information for investors with residence or seat in Panama
The distribution of the fund and the offering of Shares may be restricted in certain jurisdictions. The above information is for general guidance only, and it is the responsibility of any person or persons in possession of the prospectus of the fund and wishing to make application for Shares to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for Shares should inform themselves as to legal requirements also applying and any applicable exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile.

Additional Information for investors with residence or seat in Peru
The fund has not been registered before the Superintendencia del Mercado de Valores (SMV) and are being placed by means of a private offer. SMV has not reviewed the information provided to the investor. This document is only for the exclusive use of institutional investors in Peru and is not for public distribution.

Additional Information for investors with residence or seat in Uruguay
The sale of the Fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The Fund must not be offered or sold to the public in Uruguay, except in circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The Fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The Fund corresponds to investment funds that are not investment Funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.