Q&A WITH QMA
Rethinking ESG Investing: Core-Satellite Framework

October 2019

AUTHOR

Gavin Smith, PhD
Managing Director and Portfolio Manager

ABOUT QMA

QMA began managing multi-asset portfolios for institutional investors in 1975. Today, we manage systematic quantitative equity and global multi-asset strategies as part of PGIM, the global investment management businesses of Prudential Financial, Inc. Our investment processes, based on academic, economic and behavioral foundations, serve a global client base with $123 billion in assets under management as of 6/30/2019.

FOR MORE INFORMATION

To learn more about QMA’s quantitative equity capabilities, please contact Gavin Smith, PhD at gavin.smith@qma.com, or at 973.367.4569.

Gavin Smith, PhD, Managing Director and Portfolio Manager on QMA’s Quantitative Equity team, discusses the difficulties with current ESG offerings, as well as the likely evolution of a viable framework for ESG investors.

How do you view the ESG landscape?

ESG (environmental, social, governance) investing has evolved considerably over the last two decades, from simple stock-exclusion strategies to more specialized thematic, engagement and impact-oriented solutions. Despite this strategic evolution, we believe that ESG investing is still in its relative infancy. There is no agreed-upon “best approach” to ESG. Investors have very different goals for their ESG portfolios. Going forward, we anticipate increased interest in a core-satellite framework, which would encourage investors to pair complementary ESG strategies to achieve their overall ESG investment goals.

In the core-satellite approach, a core manager could contribute controlled ESG exposure with risk control and stable performance (Note: QMA’s offerings fall into this category). A satellite, or specialist, manager could then focus on providing a positive impact with more variable performance. Such a combination in an investor’s portfolio would be more likely to deliver comprehensive investment performance and a stronger ESG outcome. While intuitive, the core-satellite approach has not thus far been a viable framework for ESG investors, due to institutional weakness in core ESG solutions.

Core ESG
- Seeks stable outperformance
- Controlled ESG exposure
- Risk controlled, diversified

Core-Specialist ESG

Specialist ESG (e.g. Impact, Thematic, Activist, etc.)
- Stronger focus on ESG
- Typically longer-term focus
- More variable performance

Source: QMA.

QMA a PGIM company

For Professional Investors only. All investments involve risk, including the possible loss of capital. Past performance is not a guarantee or a reliable indicator of future results.
What has limited the success of core ESG approaches?

Three main factors have limited the success of core ESG strategies:

- Core ESG managers traditionally use readily observable attributes to evaluate stock attractiveness from an ESG perspective. We believe that a company’s stock price already reflects the benefits of such attributes. Higher valuations, therefore, imply lower expected returns in the future for “good” ESG firms. This is an inherent cost for ESG investors. Another challenge to investors is what we call “ESG window dressing.” Companies that look attractive from an ESG perspective may in fact be “bad” companies. Such traps effectively tack on another cost to ESG portfolios. With the addition of these ESG-specific penalties, core ESG portfolios struggle to deliver on their alpha promise.

- There is a sparsity of data in the ESG space. With limited data, it is impossible to evaluate the stock universe properly. Lack of ESG insights presents a challenge to achieving strong ESG exposures — the portfolio will likely be ESG in name only.

- Third, poor integration of ESG insights can drag on a core ESG portfolio’s performance. Such unsophisticated approaches can result in unintended portfolio exposures, including the avoidance of whole sectors or industries. This represents yet another added cost, either through weaker excess returns or higher tracking error for ESG investors.

How do you overcome these challenges?

QMA has developed three quantitative solutions to solve the challenges that have plagued core ESG strategies from the beginning: evaluating ESG attributes, expanding ESG insights and integrating insights into portfolios. These solutions allow us to build core ESG portfolios capable of delivering relatively stable outperformance with an active ESG tilt.

1. **EVALUATE:** We use a refined approach to evaluating ESG attributes. QMA includes primarily industry-specific, financially relevant and material attributes in our evaluation process. This helps us identify attributes that have more likely been undervalued by the market. In addition, we use a combination of effort, effect and controversy-based ESG metrics, which helps us avoid window dressing. Our methodology ultimately produces an alpha-neutral evaluation: an ESG-specific portfolio characteristic without a cost.

2. **EXPAND:** We look to statistical techniques and natural language processing (NLP) to overcome limited data. Our statistical procedure utilizes a proprietary data completion technique to proxy carbon emission data, based on known return patterns and risk factors. In addition, NLP is an area of current research for the firm. By drawing on NLP techniques, we delve into information sources beyond those directly disclosed by the company. We take care to minimize false positives in the statistical techniques we use to infer a firm’s ESG status. Language from conference calls and other unstructured data can help quantify material ESG issues. Both of these methods can produce valuable insights and significantly expand ESG evaluations.

3. **INTEGRATE:** To avoid implementation-related performance drag, we use a substitution methodology. Our process integrates ESG insights while ensuring that existing alpha factor exposures remain unchanged. As illustrated below, we are agnostic if two stocks are comparable from an alpha perspective. If stock A has more attractive ESG attributes, we can easily substitute it into the portfolio and sell off stock B. When this process is replicated for the available universe, the end result is an ESG portfolio with the same alpha expectations, which also avoids the worst ESG offenders.

<table>
<thead>
<tr>
<th>ATTRIBUTES</th>
<th>STOCK A</th>
<th>STOCK B</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUE</td>
<td>Cheap</td>
<td>Cheap</td>
</tr>
<tr>
<td>GROWTH</td>
<td>Increasing growth</td>
<td>Increasing growth</td>
</tr>
<tr>
<td>QUALITY</td>
<td>Fundamentally strong</td>
<td>Fundamentally strong</td>
</tr>
<tr>
<td>ESG</td>
<td>GOOD ESG</td>
<td>BAD ESG</td>
</tr>
</tbody>
</table>

Source: QMA.
How can we accommodate varying expectations for a core ESG portfolio?

To produce a range of ESG portfolios, we adjust the ways in which we integrate ESG into portfolios and target different levels of active ESG exposure. Investors can select the alpha and/or ESG exposure solution that best meets their needs. Investors can select anything from a moderate level of ESG exposure with additional expected alpha to a higher level of ESG exposure that offers expected returns more in line with the benchmark.

Do the benefits of a well-designed core ESG portfolio translate into a higher fee for investors?

QMA’s goal is to produce a more effective core ESG portfolio where the alpha and tracking error are in line with a standard core portfolio. From an alpha perspective, this is both gross and net of fees. This means that a core ESG portfolio is not more expensive for an investor.

In fact, keeping with the spirit of ESG and good corporate governance, the alignment of interests between investors and investment managers is important. We embrace performance-based fees on our ESG strategies. This reflects the confidence we have that our core ESG solutions are capable of meeting performance and ESG expectations.

How can quantitative managers approach engagement and stewardship practices?

As a quantitative investment manager, QMA does not typically engage in dialogue with company management. We do, however, believe that strong company governance leads to improved management of social and environmental issues. As shareholders, we take full advantage of exercising our views and influence through the proxy voting process. We consider such proposals carefully with a focus on adding economic value. We also focus on the quality and diversity of corporate boards.

Another important way we approach engagement is to partake in collective work with ESG-related organizations and data providers. As a group, we advocate for greater disclosure of ESG data, which we view as essential both to the identification of potential sources of risk that might not be reflected in market valuations and to the further assimilation of ESG into mainstream investment practices.

We view the quantitative manager’s role as one of providing an objective yet flexible data-driven perspective on environmental, social and governance issues. We do so by carefully balancing our clients’ growing desire to invest responsibly with our primary goal to maximize their long-term, risk-adjusted returns.
Sources: QMA, FactSet, Compustat.

For Professional Investors only. All investments involve risk, including the possible loss of capital. Past performance is not a guarantee or a reliable indicator of future results. Diversification does not assure a profit or protect against loss in declining markets.

These materials represent the views, opinions and recommendations of the author(s) regarding economic conditions, asset classes, and strategies. Distribution of this information to any person other than the person to whom it was originally delivered is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of QMA LLC is prohibited. Certain information contained herein has been obtained from sources that QMA believes to be reliable as of the date presented; however, QMA cannot guarantee the accuracy of such information, assure its completeness, or warrant that such information will not be changed. These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this report. QMA and its affiliates may make investment decisions that are inconsistent with the views expressed herein, including for proprietary accounts of QMA or its affiliates.

These materials are for informational and educational purposes. In providing these materials, QMA is not acting as your fiduciary.

In Europe, certain regulated activities are carried out by representatives of PGIM Limited, which is authorized and regulated by the Financial Conduct Authority (Registration Number 193418), and duly passported in various jurisdictions in the European Economic Area. QMA LLC, which is an affiliate to PGIM Limited, is an SEC-registered investment adviser, and a limited liability company. PGIM Limited’s Registered Office, Grand Buildings, 1-3 Strand, Trafalgar Square, London WC2N 5HR.

In Japan, investment management services are made available by PGIM Japan, Co. Ltd., (“PGIM Japan”), a registered Financial Instruments Business Operator with the Financial Services Agency of Japan. In Hong Kong, information is presented by PGIM (Hong Kong) Limited, a regulated entity with the Securities and Futures Commission in Hong Kong to professional investors as defined in Part 1 of Schedule 1 of the Securities and Futures Ordinance.

In South Korea, information is issued by QMA, which is licensed to provide discretionary investment management services directly to South Korean qualified institutional investors.

The opinions expressed herein do not take into account individual client circumstances, objectives, or needs and are therefore are not intended to serve as investment recommendations. No determination has been made regarding the suitability of particular strategies to particular clients or prospects. The financial indices referenced herein is provided for informational purposes only. You cannot invest directly in an index. The statistical data regarding such indices has been obtained from sources believed to be reliable but has not been independently verified.

Certain information contained herein may constitute “forward-looking statements,” (including observations about markets and industry and regulatory trends as of the original date of this document). Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking statements. As a result, you should not rely on such forward-forward-looking statements in making any decisions. No representation or warranty is made as to future performance or such forward-looking statements.