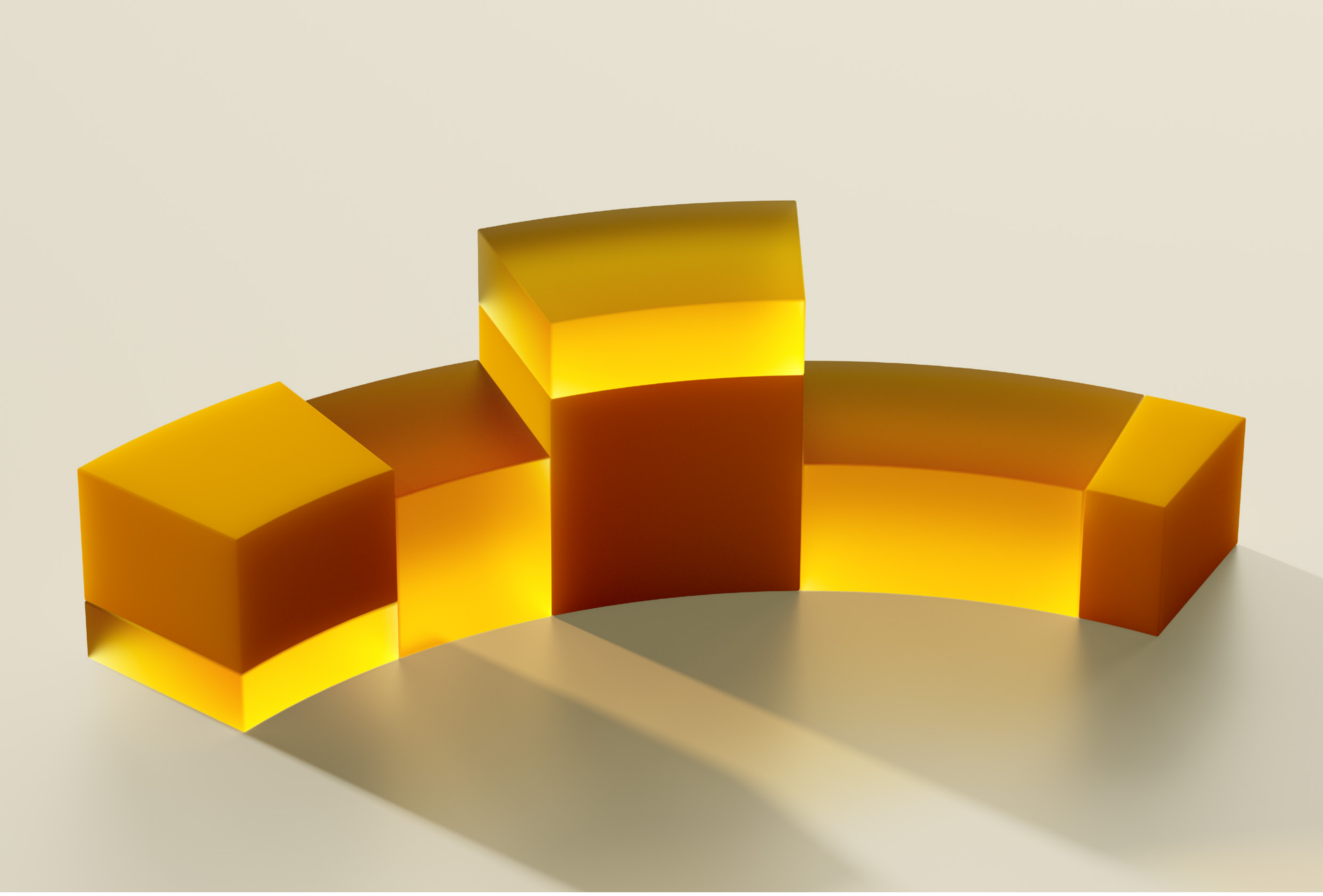

ESG integration at J.P. Morgan Asset Management

Asset Management Solutions

1 March 2022

For certain strategies that the adviser determines to be ESG integrated, the adviser integrates financially material environmental, social, and governance (ESG) factors as part of the Fund's investment process (ESG Integration). ESG Integration is the systematic inclusion of ESG issues in investment analysis and investment decisions. ESG Integration is dependent upon the availability of sufficient ESG information for the applicable investment universe. In addition, in order for an actively managed strategy to be considered ESG integrated, the adviser requires: (1) portfolio management teams to consider proprietary research on the financial materiality of ESG issues on investments; (2) documentation of the adviser's research views and methodology throughout the investment process; and (3) appropriate monitoring of ESG considerations in ongoing risk management and portfolio monitoring. ESG determinations may not be conclusive and securities of companies / issuers may be purchased and retained, without limit, regardless of potential ESG impact. The impact of ESG Integration on performance is not specifically measurable as investment decisions are discretionary regardless of ESG considerations.

J.P.Morgan
ASSET MANAGEMENT

Asset Management Solutions
Multi-Asset Solutions

Research / due diligence

The Multi-Asset Solutions team designs and manages multi-asset portfolios, integrating the breadth and depth of investment talent within J.P. Morgan Asset Management, drawing on its proprietary quantitative and qualitative research capabilities, strategy and security selection, asset allocation and risk-focused portfolio management expertise.

For our ESG research in Multi-Asset Solutions, we leverage the following three teams:

- ESG research performed by our Multi-Asset Solutions Manager Research team.
- ESG research performed by our centralized Sustainable Investing team.
- ESG research performed by the research analysts of the corresponding asset classes.

Within the manager/strategy evaluation process, we focus on understanding how ESG considerations influence the capabilities of the underlying manager/strategy and the investment process. The emphasis is on understanding how ESG factors are considered and how the manager/strategy defines, evaluates, and rationalizes inclusion of securities that may score poorly and/or contain perceived headline risk. MAS portfolio managers consider this information, among other variables, when reviewing managers/strategies within the overall portfolio construction process. At Investment Director quarterly meetings, ESG characteristics can be challenged and discussed.

Portfolio construction

Multi-Asset Solutions believes that financially material ESG factors may impact risk/return characteristics of the underlying managers/strategies in which we invest. Therefore, we look to understand if the underlying managers/strategies are adequately identifying and actively mitigating risks and seeking opportunities, where material to their investment process.

A considerable amount of the ESG analysis is done via the bottom-up process of the underlying managers/strategies, which are assessing materiality within their respective investment processes and determining ESG factors at the company or issuer level.

The manager/strategy selection process carried out by the Multi-Asset Solutions investment team combines manager research and portfolio construction:

- The Manager Research Team looks to understand how ESG is considered within an underlying managers/strategies investment process, how it defines and mitigates material ESG risks, and the investment rationales for the inclusion of securities that may score poorly and/or contain perceived headline risk.
- Multi-Asset Solutions portfolio managers then consider the ESG risks associated with the strategy run by an underlying manager along with other risks and benefits at the total portfolio level. Please note that portfolio managers use multiple criteria to decide which underlying funds to select, which also includes volatility, past performance, tracking error, expected return, and Sharpe ratio. Although these particular risks are considered, the underlying funds and securities of issuers presenting such risks may be purchased and retained by portfolios, as exclusion may result in an unbalanced portfolio and suboptimal risk-adjusted returns over longer-time horizons.

Engagement

Engagement functions are a collaboration between J.P. Morgan Asset Management portfolio managers, research analysts and the Investment Stewardship team. Each brings a different perspective to our interactions with companies across our five investment stewardship priorities and our research framework.

From a Multi-Asset Solutions perspective, we leverage our manager research team to engage with underlying investment teams to understand how ESG is considered. We incorporate ESG in our regular manager/strategy review process where we raise topical considerations, review ESG outliers from a third-party score perspective, and conduct periodic deep-dive ESG reviews to cover enhancements to integration and the sustainable investing process.

The output from these reviews is then included within our Research Notes application in Spectrum™ and forms part of the dialogue between our Manager Research and Portfolio Management teams.

Asset Management Solutions continued
Multi-Asset Solutions

Documentation and monitoring

All our manager/strategy research is housed in our proprietary technology platform, Spectrum™, to ensure full transparency to our investors, where appropriate.

Spectrum™ Research Notes: Any engagement and analysis on existing and new managers is uploaded and incorporated into our research notes database, which is accessible to our investment teams for their review. We also look to cover any relevant material within our monthly investment team meetings.

On a quarterly basis, the Investment Director teams conduct formal review meetings with each investment team. Portfolios are reviewed in the context of objectives, performance, risk positioning and ESG integration. ESG integration is monitored through review of fund-level scores vs. benchmark scores, evolution of scores and qualitative discussions with portfolio managers. The Investment Directors report directly to the Head of Asset Management Solutions, Jed Laskowitz, and escalate any issues to the Asset Management Solutions Investment Operating Committee.

Asset Management Solutions continued
Quantitative Solutions

Research / due diligence

- To integrate ESG considerations in factor-based strategies (long-only and long-/short) and thematic, we rely on a third-party vendor to evaluate companies based on a quantitative ESG metric.
- Third-party vendor coverage for our full long/short universe is approximately 95%, with most in Europe and least in Asia, emerging markets and small cap, and is increasing over time. The result of the ESG evaluation provided by the third-party vendor is reflected in scores which are normalized by sector, but not by region. The scores range from 1-10 (10 being the best score) with most benchmarks' ESG score averaging around 5.

ESG integration is dependent on the availability of sufficient ESG information on relevant companies or issuers and the investment universe. We recognize the limitations around ESG data quality and availability.

Portfolio construction

- The Quantitative Solutions team implements ESG screening on their thematic strategies by excluding companies with the poorest ESG scores, first by reviewing them based on environmental, social, and governance score. If a company is an outlier on two or more of these metrics, it is removed. If it is an outlier on only one metric and highly relevant to the theme, we evaluate and can invest; if not we remove.
- Thematic investing strategies rely on the team's proprietary system and investment process for the identification of securities for inclusion that the adviser reflect certain themes. Because thematic investing involves qualitative and subjective analysis, there can be no assurance that the methodology used by, or determinations made by, the adviser will reflect specific themes or align with the beliefs or values of a particular investor.[1]
- As we invest using a quantitative investment process with no qualitative discretion, ESG factors are implemented on an automated basis. This results in an improvement of the portfolio score relative to the relevant benchmark or universe.
- Note that for Index Tracking strategies, we use full replication to invest in all holdings at the same weight as the index. This is to minimize tracking error. As a result, these strategies are not ESG Integrated (unless ESG aspects are explicitly included in the index methodology).

[1] Thematic Investing Risk. The Adviser's thematic investing strategies may perform differently compared to accounts that do not have such strategies. Thematic investing strategies rely on the Adviser proprietary system and investment process for the identification of securities for inclusion that reflect certain themes. An account's performance may suffer if such securities are not correctly identified or if the theme develops in an unexpected manner. Performance may also suffer if the securities included in the strategy do not benefit from the development of such themes. There is no guarantee that the adviser's investment process will reflect the theme exposures intended.

The criteria related to thematic investing strategies, including the exclusion of securities of companies in certain business activities or industries, may result in forgoing opportunities to buy certain securities when it might otherwise be advantageous to do so, or selling securities for thematic reasons when it might be otherwise disadvantageous for it to do so. As a result, thematic investing strategies may underperform strategies that invest in a broader array of investments. In addition, there is a risk that the companies identified by the Adviser's investment process as reflecting a particular theme do not operate as expected to facilitate a particular goal. The Adviser and its proprietary system assess companies by using a wide set of data inputs, which, for certain strategies, is combined with fundamental analysis. While the Adviser looks to data inputs that it believes to be reliable, the Adviser cannot guarantee the accuracy of its proprietary system or third party data. Under the Adviser's investment process, data inputs may include information self-reported by companies and third party providers that may be based on criteria that differs significantly from the criteria used by the Adviser to evaluate relevance to a strategy's investment theme. In addition, the criteria used by third-party providers can differ significantly, and data can vary across providers and within the same industry for the same provider. Moreover, there are significant differences in interpretations of what it means for a company to be relevant to a particular theme. While the Adviser believes its definitions are reasonable, the portfolio decisions it makes may differ with other investors' or advisers' views. Because thematic investing involves qualitative and subjective analysis, there can be no assurance that the methodology utilized by, or determinations made by, the adviser will align with the beliefs or values of a particular investor.

The ESG integration approach described above relates to the Quantitative Solutions investment strategy. Unless otherwise indicated in product-specific disclosures, the products following the aforementioned investment strategy do not promote environmental or social characteristics.

Asset Management Solutions continued
Quantitative Solutions

Engagement

- The Quantitative Solutions team manages portfolios that invest across large starting universes. As such, we rely on a third-party vendor, avoid investing in the worst-ranked names, and do not proactively engage with companies as a team. However, the Investment Stewardship team does exercise its voting rights in line with the J.P. Morgan Asset Management Global Proxy Voting Guidelines. The Stewardship Team may engage with companies held in Quantitative Solutions' portfolios as part of its stewardship program.
- When there are significant proxy voting issues on companies without fundamental analyst coverage, the Stewardship team will engage with the Quantitative Solutions portfolio managers. The two groups will evaluate proxy advisor recommendations, discuss the issues, and come to a decision.

Documentation and monitoring

- For factor-based portfolios, the portfolio manager running the quantitative process is responsible for determining that exclusions are coded and reflected. Monitoring is conducted by Investment Directors.
- As we invest using a purely quantitative investment approach, our ESG integration process is documented in the code and in our procedures.
- The Investment Directors formally monitor ESG and it is discussed in our Quarterly Review meetings, which include the CIO. The Investment Directors would alert the portfolio manager team were there to be significant drop in ESG scores. As our process is automated, this has not happened to date.

For more information on our approach to ESG Integration please contact your J.P. Morgan Asset Management representative.

LV–JPM53533 | 02/22 | 09bl221702165605

J.P.Morgan
ASSET MANAGEMENT