Net Zero and Broad ESG in One Index

Contributor

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EXECUTIVE SUMMARY

- The S&P PACT™ Indices (S&P Paris-Aligned & Climate Transition Indices) have recently undergone methodology changes based on market feedback, as well as a name change to include "Net Zero 2050."
- The S&P PACT Indices now use the S&P DJI ESG Scores, exclude companies based on more business activities, and include a buffer rule and revised stock cap.
- The changes mean that choosing between a broad ESG index and a net zero/1.5°C-aligned index is no longer necessary.
- The S&P 500 PACT Indices show excess return historically, which can be largely explained by factor and sector exposures.

INTRODUCTION

Over the year since the launch of the S&P PACT Indices, the market has pushed for an index methodology evolution: the addition of an S&P DJI ESG Score improvement, further exclusions, a buffer rule, and revised stock capping (see Exhibit 1). The series comprises two types of indices: the S&P Climate Transition (CT) Indices and their more ambitious cousins, the S&P Paris-Aligned (PA) Indices. Both of these index series are aligned with the EU's minimum standards for low carbon benchmarks under the EU Benchmark Regulation, which follow a 1.5°C scenario toward net zero by 2050, thus the name change to include "Net Zero 2050." These methodology changes mean investors no longer need to choose between broad ESG indices and net zero/1.5°C-compatible indices—a first for the market.

In this paper, we outline how these methodology enhancements modify the index composition and the differences between the S&P CT and PA Indices, compare to the previous methodology, and provide a brief analysis of exposures and historical performance.

Exhibit 1: Methodology Changes from the May 2021 S&P PACT Index Consultation

Over the year since the launch of the S&P PACT Indices, the market has pushed for an index methodology evolution…

Additional Exclusions

- The exclusion of companies with exposure to small arms, military contracting, thermal coal, oil sands, shale energy, gambling, and alcohol (S&P PA Indices).
- The exclusion of companies deemed non-compliant by Sustainalytics UN Global Compact data

S&P DJI ESG Score

- The addition of an S&P DJI ESG Score constraint, targeting an improvement equivalent to or greater than if we were to exclude the worst 20% of companies by S&P DJI ESG Score (for the S&P PA Indices) or no worse than the underlying benchmark (for the S&P CT Indices).

Buffer Rule and Stock Cap

- The addition of a minimum stock threshold of 1 bp for existing constituents and max(1 bp, min(5 bps, 0.5 x weighting underlying index)).
- The addition of a stock cap: max(5%, underlying index weight).

Source: S&P Dow Jones Indices LLC. Chart is provided for illustrative purposes.

HOW DO THE S&P PARIS-ALIGNED AND CLIMATE TRANSITION INDICES COMPARE?

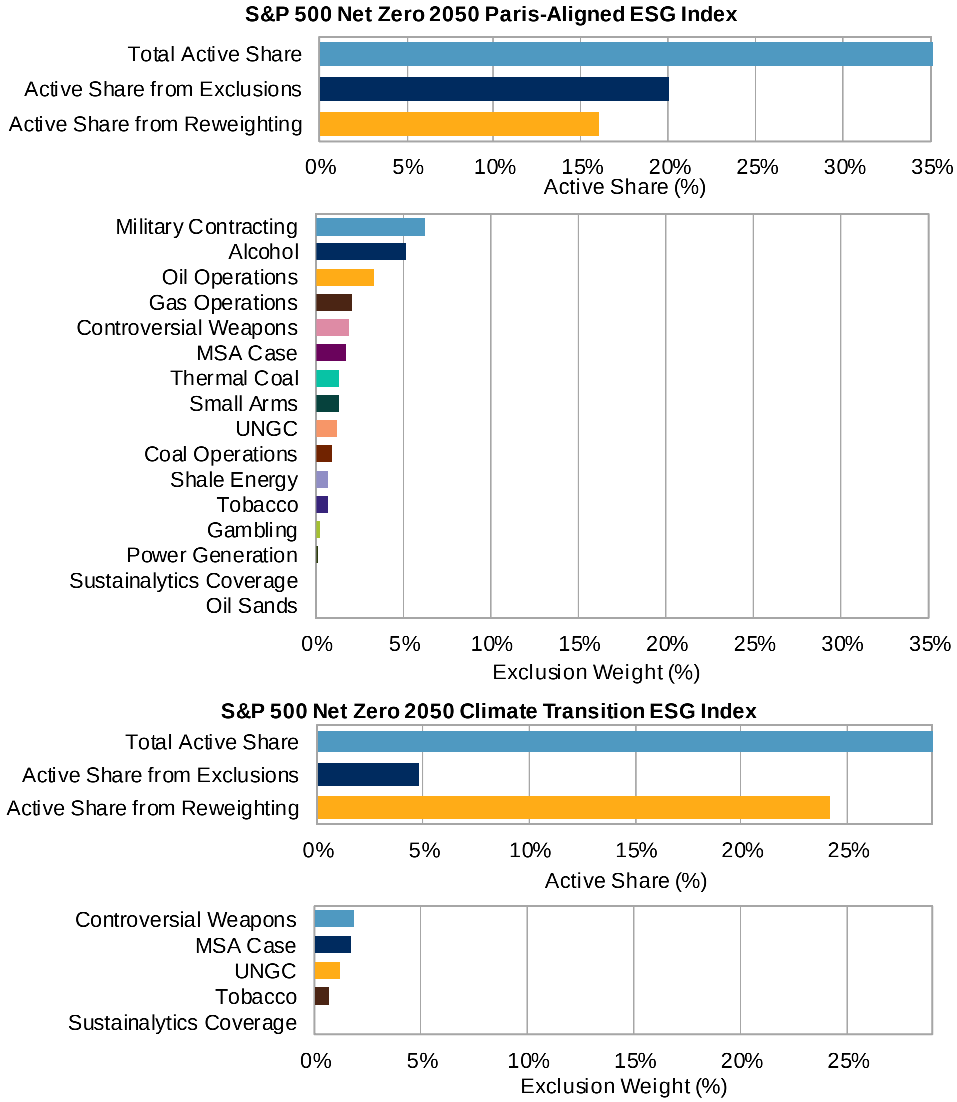
…including the addition of an S&P DJI ESG Scores improvement, further exclusions, a buffer rule, and revised stock capping.

Following the market consultation in May 2021, the S&P PA Indices have become more exclusive (as requested by market participants), while the S&P CT Indices have remained largely the same. The S&P PA Indices take on more active reweighting from the underlying index than their climate transition counterparts, with the S&P 500® Net Zero 2050 Paris-Aligned ESG Index taking about 8% more active share. This difference largely comes from exclusions, where the S&P 500 Net Zero 2050 Paris-Aligned ESG Index excludes 20% of the underlying index's weight (see Exhibit 2), while the climate transition equivalent excludes less than 5%. These observations are generally consistent across regions.

Following the market consultation, the S&P PA Indices have become more exclusive, while the S&P CT Indices have remained largely the same.

The S&P PA Indices take on more active reweighting from the underlying index than their climate transition counterparts.

Exhibit 2: S&P PA Indices More Affected than S&P CT Indices by More Exclusions



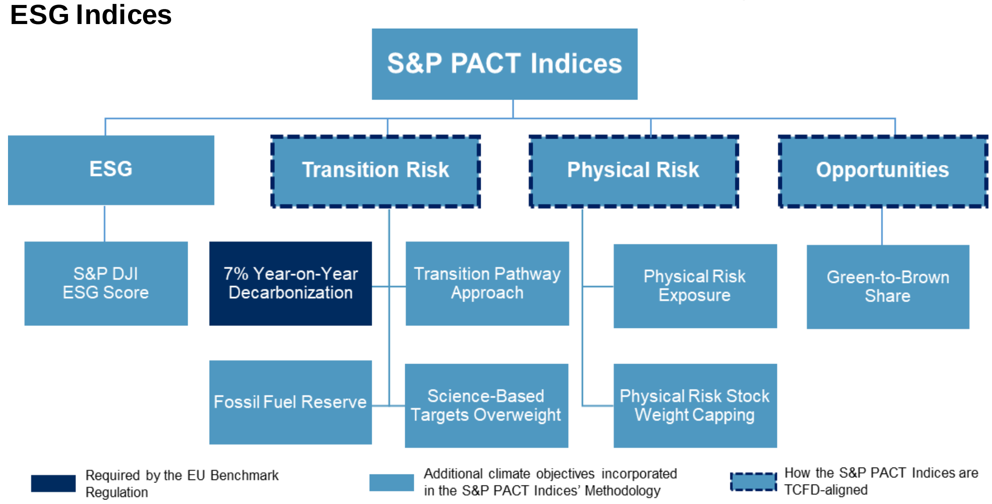
Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Charts are provided for illustrative purposes.

HOW DOES THE S&P DJI ESG SCORE AFFECT THE INDICES?

When reweighting the indices, the S&P DJI ESG Score fits nicely alongside the climate datasets (see Exhibit 3), which help the indices meet the EU's minimum standards for low carbon benchmarks under the EU Benchmark Regulation and recommendations from the Task Force on Climate-related Financial Disclosures (TCFD). This means there is no longer a need to choose between net zero/1.5°C-compatible indices and broad ESG indices.

The addition of the S&P DJI ESG Score fits nicely alongside the climate datasets.

Exhibit 3: No Need to Choose between Net Zero/1.5°C Alignment and Broad ESG Indices



Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Chart is provided for illustrative purposes.

Using our weight attribution methodology, we see aligning with a 1.5°C scenario on a forward-looking basis takes the most reweighting of all the ESG objectives.

HAS THE S&P DJI ESG SCORE INCLUSION AND FURTHER EXCLUSIONS CHANGED WHAT DRIVES THE REWEIGHTING?

Using our weight attribution methodology,[1] we see that aligning with a 1.5°C scenario (transition pathway dataset) on a forward-looking basis takes the most reweighting of all the ESG objectives (see Exhibit 4)—this is unsurprising, given so few companies are deemed to be 1.5°C compatible (less than 22% by weight of the S&P 500 was compatible). Simply put, to be 1.5°C compatible on a forward-looking basis requires some active reweighting, more so than the 7% year-on-year GHG intensity reduction[2] currently does.

The S&P PA and CT Indices differ in their sources of weight allocation in two main ways: S&P DJI ESG Score and high impact revenues

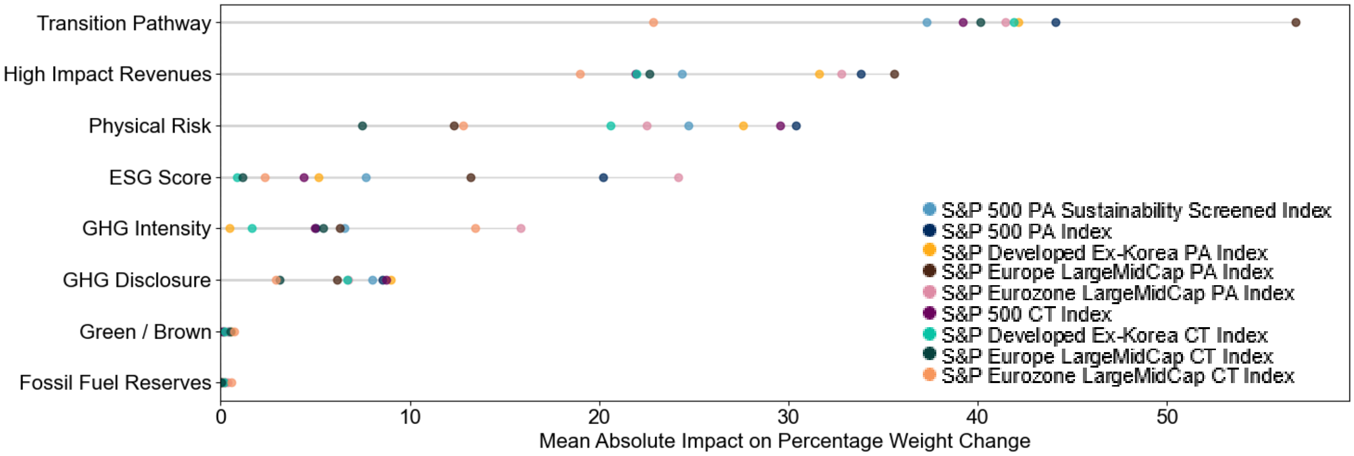
The S&P PA and CT Indices differ in their sources of weight allocation in two main ways: S&P DJI ESG Score and high impact revenues. The extra exclusions within the S&P PA Indices are mostly companies with high climate impact revenues—in order to maintain neutrality,[3] the S&P PA Indices take more reweighting to meet this high climate revenue constraint to avoid greenwashing. On the other hand, the S&P PA Indices target an improved ESG footprint compared with their underlying indices, while the S&P CT Indices aim to be no worse. In the S&P 500 Net Zero 2050 Paris-Aligned ESG Index, we see the reweighting effect from S&P DJI ESG Scores being over four times higher than those of the [S&P 500 Net Zero 2050 Climate Transition ESG Index](https://www.spglobal.com).

[1] Leale-Green, Ben and Barbara Velado. "Exploring S&P PACT Indices Weight Attribution. S&P Dow Jones Indices. December 2020. https://www.spglobal.com/spdji/en/education/article/exploring-sp-pact-indices-weight-attribution/

[2] The 7% year-on-year GHG intensity reduction is a key part of the EU Low Carbon Benchmark Regulation, to align with the IPCC 1.5°C scenario with no or limited overshoot. https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/190930-sustainable-finance-teg-final-report-climate-benchmarks-and-disclosures_en.pdf

[3] As required by the EU's minimum standards for low carbon benchmarks under the EU Benchmark Regulation.

Exhibit 4: S&P DJI ESG Score Affects Reweighting About Four Times More in the S&P PA Indices than the S&P CT Indices

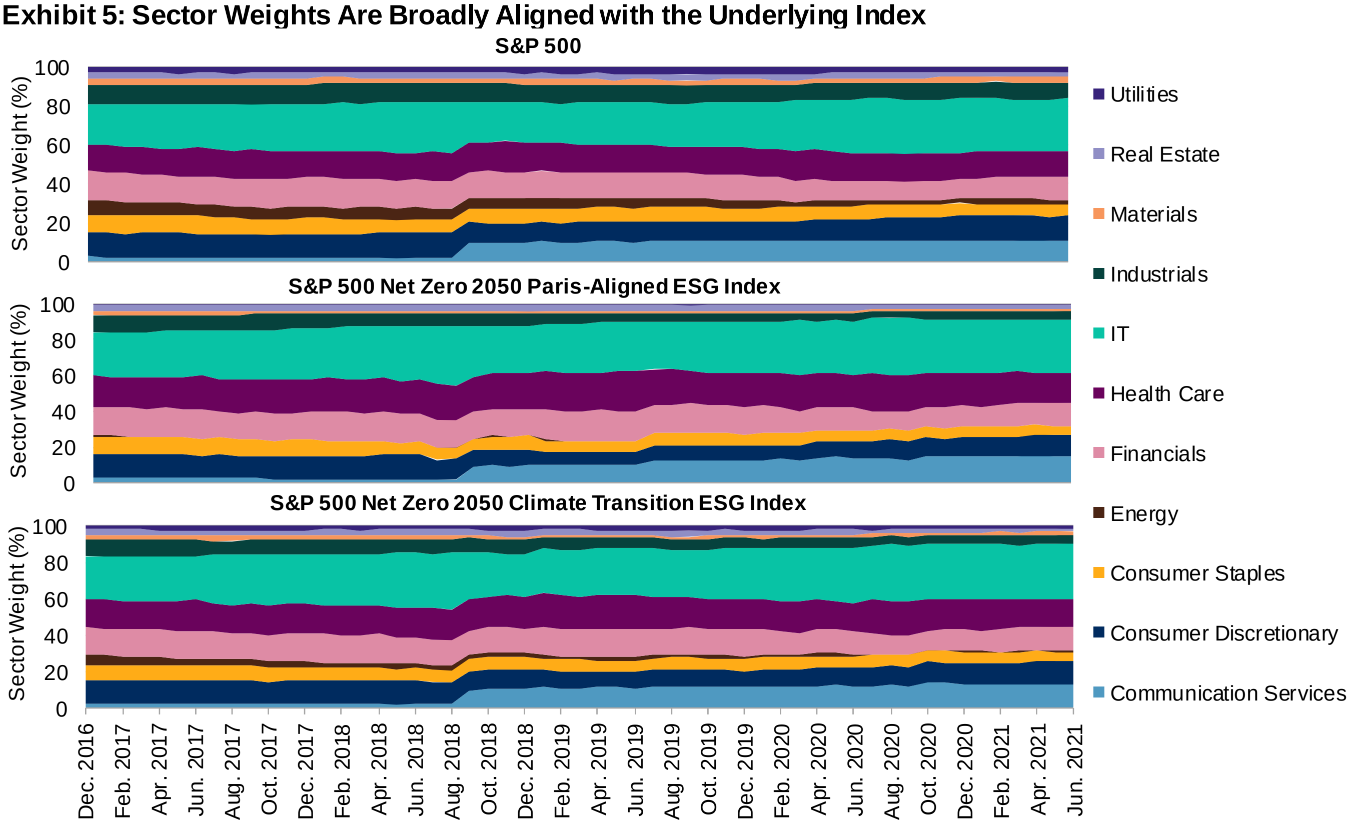


Source: S&P Dow Jones Indices LLC. Data as of June 30, 2021. Chart is provided for illustrative purposes.

Over time, sector weights tend to be similar between the S&P PACT Indices and the underlying index (see Exhibit 5). The Energy sector, the exception to the rule, has been totally excluded from the S&P PA Indices as a consequence of the minimum standards specified by the EU PABs (fossil fuel-based exclusions)—this remains fairly consistent in other regions, with only a handful of Energy companies being eligible globally (in the regions currently covered by an S&P PACT Index).

The new exclusions have created slightly greater sector deviations, but they are still fairly well aligned, especially in the S&P CT Indices.

Exhibit 5: Sector Weights Are Broadly Aligned with the Underlying Index



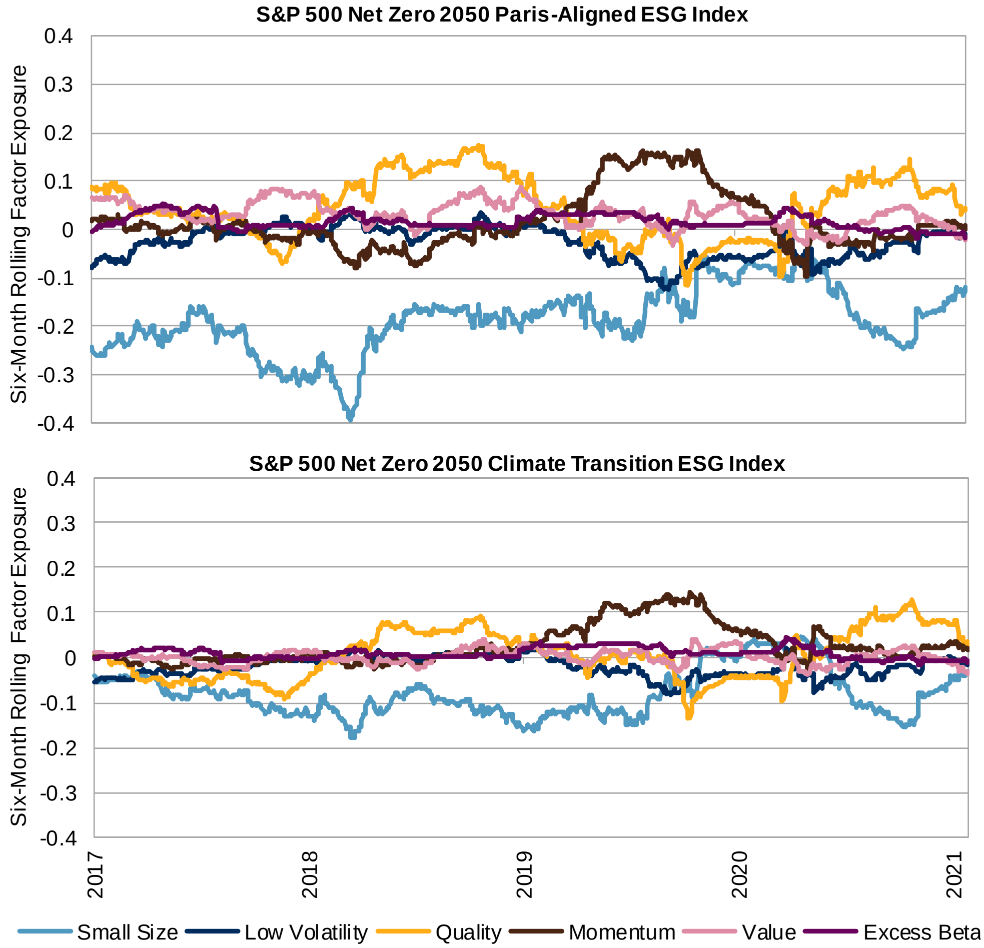
Source: S&P Dow Jones Indices LLC. Data as of July 2021. Charts are provided for illustrative purposes.

When looking at factor exposures, we see a persistently sizable, statistically significant ($p<0.01$ over the whole period) active large-cap tilt within the S&P 500 Net Zero 2050 Paris-Aligned ESG Index, which aims to improve the weighted average S&P DJI ESG Score, but not for the S&P 500 Net Zero 2050 Climate Transition ESG Index (see Exhibit 6).[4] The large-cap exposure is unsurprising given that the S&P DJI ESG Scores have a large-cap tilt. Other factor exposures are either statistically insignificant or economically small for both indices over the period.

When looking at factor exposures, we see a statistically significant active large-cap tilt within the S&P 500 Net Zero 2050 Paris-Aligned ESG Index…

…but not for the S&P 500 Net Zero 2050 Climate Transition ESG Index.

Exhibit 6: The S&P 500 Net Zero 2050 Paris-Aligned ESG Index Has an Active Large-Cap Exposure



Source: S&P Dow Jones Indices LLC. Data as of September 2020. Charts are provided for illustrative purposes.

[4] Before the consultation, the environmental pillar of the S&P DJI ESG Score was included in the S&P PA Indices.

WHAT ABOUT THE HISTORICAL PERFORMANCE?

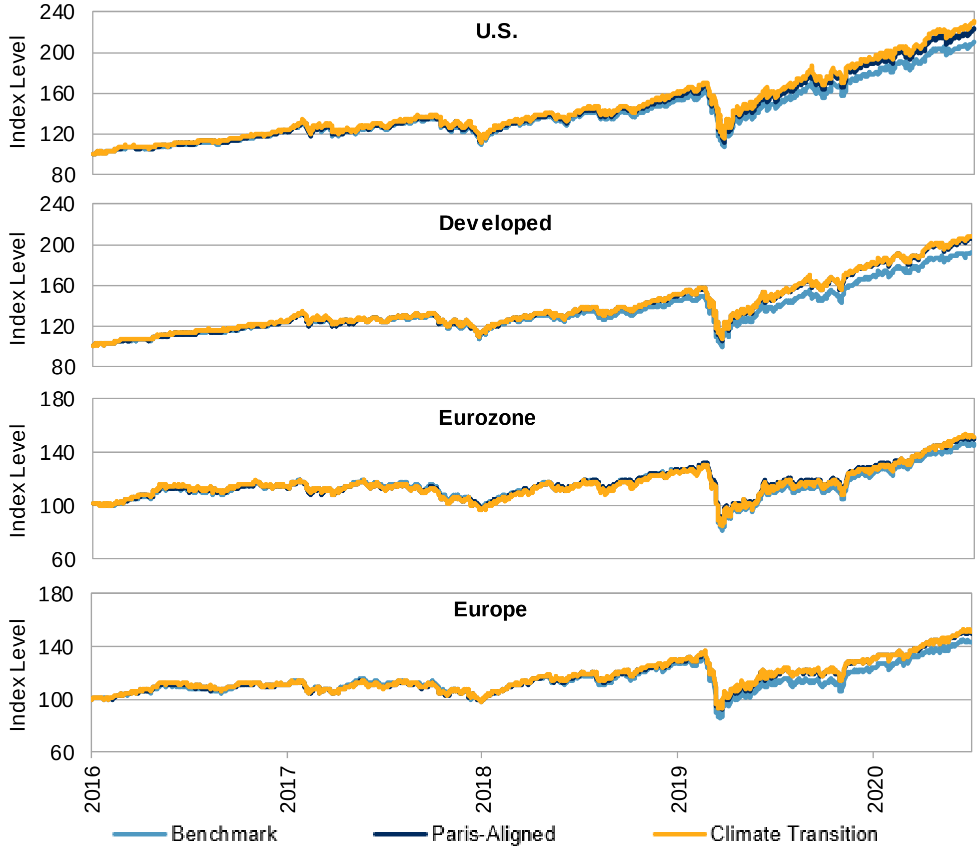
Each S&P PACT Index has posted excess returns over the underlying index since inception…

Each S&P PACT Index has posted excess returns over the underlying index since inception (see Exhibit 7). For the S&P 500 PACT Indices, this outperformance is statistically significant when adjusting for sensitivity to the market, but when the market, factors, and sectors are controlled for, this unexplained alpha becomes weakly significant for the S&P 500 Net Zero 2050 Paris-Aligned ESG Index and insignificant for the S&P 500 Net Zero 2050 Climate Transition ESG Index (see Exhibit 8).

While the S&P 500-based S&P PACT Indices may have posted excess returns historically, this can largely be explained by sector and factor deviations from the underlying index. However, as we can't back-test climate change, there are plenty of theoretical reasons why this may change in the future.

…though this can largely be explained by sector and factor deviations from the underlying index.

Exhibit 7: S&P PACT Indices Showed Excess Return Historically



Source: S&P Dow Jones Indices LLC. Data as of July 2021. Index performance based on total return in USD for U.S. and Developed and EUR for Eurozone and Europe. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 8: Weakly Significant Alpha from the S&P 500 Net-Zero 2050 Paris-Aligned ESG Index

BETA CONTROL	FACTOR CONTROL	SECTOR CONTROL	ANNUALIZED ALPHA (%)
S&P 500 NET ZERO 2050 PARIS-ALIGNED ESG INDEX			
Yes	No	No	1.9415**
Yes	Yes	No	1.7577**
Yes	Yes	Yes	0.8706*
S&P 500 NET ZERO CLIMATE TRANSITION ESG INDEX			
BETA CONTROL	**FACTOR CONTROL**	**SECTOR CONTROL**	**ANNUALIZED ALPHA (%)**
Yes	No	No	1.2320**
Yes	Yes	No	1.0452*
Yes	Yes	Yes	0.4909

Significance levels represented as * p<0.1, ** p<0.05, *** p<0.01
Source: S&P Dow Jones Indices LLC. Data as of July 2021. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

In summary, the recent changes to the methodology for the S&P PACT Indices mean that these indices now incorporate both broad ESG rules and net zero/1.5°C goals.

CONCLUSION

In summary, the recent changes to the methodology for the S&P PACT Indices mean that these indices now incorporate both broad ESG rules and net zero/1.5°C goals, with fairly small sector and factor deviations. They have shown an excess return over the underlying index historically, which has been explained largely by the relatively small sector and factor tilts they take on.

PERFORMANCE DISCLOSURE/BACK-TESTED DATA

The S&P 500 Net Zero 2050 Paris-Aligned ESG Index, S&P 500 Net Zero 2050 Climate Transition ESG Index, S&P Developed Ex-Korea LargeMidCap Net Zero 2050 Paris-Aligned ESG Index, and S&P Developed Ex-Korea LargeMidCap Net Zero 2050 Climate Transition ESG Index were launched June 1, 2020. The S&P Europe LargeMidCap Net Zero 2050 Paris-Aligned ESG Index and S&P Europe LargeMidCap Net Zero 2050 Climate Transition ESG Index were launched May 4, 2020. The S&P Eurozone LargeMidCap Net Zero 2050 Paris-Aligned ESG Index and S&P Eurozone LargeMidCap Net Zero 2050 Climate Transition ESG Index were launched April 20, 2020. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at www.spglobal.com/spdji. Past performance of the Index is not an indication of future results. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results. Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

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