S&P Dow Jones Indices

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TalkingPoints

Institutional Carbon Efficiency: Exploring the Tools Japan's GPIF is Using to Achieve Green Objectives

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Climate change is creating risks in the real world, as well as potentially unpriced risk in financial markets, creating a need for new tools to monitor and manage the evolving risk landscape. The S&P Carbon Efficient Indices are being used by institutional investors, including the Government Pension Investment Fund (GPIF) in Japan, to reduce exposure to high-carbon companies in a systematic way, while maintaining a risk/return profile similar to that of their benchmarks.

1. What's driving the increasing desire by institutional investors to understand, measure, and manage environmental impacts in their portfolios and investments, and why now?

Neil: I think the environmental performance of companies has become more of a mainstream concern, and the main driver for this is climate change and the need to reduce carbon emissions. If you look at the Paris Agreement in 2015, over 190 countries signed up for reduction targets, and if those reduction targets are going to be met, then it is almost certain that the price of carbon will have to rise. Indeed, looking at the EU emissions trading system price of carbon, in September 2018, it reached over 25 euros per metric ton,[1] which is a five-fold increase over what it was in May 2017. Therefore, with that cost implication, companies are being encouraged to report on these matters, and we've seen the G20 create a task force that has produced guidance on this. In Japan, the stewardship code was revised in 2017 to encourage companies to proactively look at environmental matters, and in France, the energy and transition law requires not only companies to report but also asset owners and investment managers. Given all these developments, it's not surprising that some more thoughtful investors are starting to look at carbon performance as part of their investment process.

[1] See https://markets.businessinsider.com/commodities/co2-emissionsrechte

To see the original interview and learn more about the S&P Carbon Efficient Indices visit: https://www.spdji.com/topic/carbon-efficient.

2. From a design perspective, what were the key elements that you had to keep in mind when creating the S&P Carbon Efficient Indices?

Andrew: There were two critical points: the first was obviously to reduce the carbon intensity of the index of the portfolio, and the second was to maintain similar characteristics to the benchmark, ensuring a low tracking error to the benchmark. But the two objectives are somewhat in conflict with one another. It's relatively easy to reduce the carbon intensity of a portfolio; you just reduce the weights of the companies that have the highest carbon emissions to revenue intensities. However, it's difficult to balance that with keeping a low tracking error. What we adopted was an industry-group-neutral weighting approach, which means that we maintain the industry weights from the benchmark, preventing industries like energy, utilities, and materials from having an overly underweight active bet in the carbon efficient strategy.

3. If those were the main objectives, were there any secondary or other types of considerations that you built in when designing the indices?

Andrew: For any individual company, there are a few elements that help determine what weight it should have in the index. First of all, we have to consider what industry group the company is in. We define an industry group as either high, mid, or low impact. We do that because certain industries, like banks, are considered low impact and therefore have relatively low range in carbon emissions. So there would not be much justification for reducing or tilting the weights too far away from the benchmark weights, because ultimately we would probably increase the tracking error and not have much benefit in terms of carbon intensity reduction. Therefore, we reserved the highest weight adjustments for the mid- and high-impact industry groups. Second, we looked at companies on a global scale, which was why we created the S&P Carbon Global Standard.[2] Rather than compare companies with their local peer group, we look at their global peer group and use the S&P Global LargeMidCap. Then, after determining in which decile the company sits, we decide how much additional weight should be added or taken away. The final element is about disclosure. We have the Trucost data, which tell us whether a company sufficiently disclosed its carbon data, and we could also use that in the weighting scheme. We added a slight increase in weight adjustment for those companies that have disclosed their carbon data.

4. Carbon emission disclosure is becoming central to the discussion. What was the Trucost carbon data that was used in the S&P Carbon Efficient Indices?

Neil: Changes like the G20 guidance, along with regulation and the investment pressure mentioned previously, are definitely improving disclosure, but there are a number of things that Trucost does that enable these indices. The first of these is our extensive coverage. We cover 15,000 companies, including the S&P/TOPIX Indices, which comprise nearly 2,300 Japanese companies. We also have historic data going back 10 years in many countries, which is incredibly useful for trend analysis and back-testing investment theses. Second, where there are gaps, we have built granular detailed environmental profiles for each business activity, giving us an estimate of what emissions would be in the absence of reporting. That's useful for completing data sets, but it also provides us with a good way to check the information that companies give us, because companies do make mistakes. Third, we engage with every company that we cover. We send a detailed report of their carbon emissions and the sources of data to the companies, and we encourage them to give us further information. As part of that process, roughly one-third of companies respond to us. In the end, we have a carbon data set that has robust quality control, is standardized and complete, and has been used by many investment firms for well over a decade.

5. What are the key points and main characteristics of the S&P Carbon Efficient Indices?

Andrew: The strategy is applicable to many of our benchmark and regional indices. But by and large, what we see are close return characteristics in the back-test to that of the benchmark—meaning significantly low tracking error. In some cases, there may be some outperformance as well. But ultimately, some people believe that the outperformance could become a reality in the future if carbon pricing risk gets priced in. So, we have low tracking error, and at that little expense, we have significant carbon intensity reduction. For instance, looking at the S&P Global LargeMidCap Carbon Efficient Index over the nine-year period ending in September 2018, we see a tracking error of about 60 bps annually. In addition to the low tracking error, the S&P Carbon Efficient Indices can provide significant carbon reduction, typically by 30% to 40%, depending on the index and the region.

2 See more about the S&P Carbon Global Standard here https://spdji.com/topic/carbon-efficient.

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