

How to Understand What's Driving a Smart-Beta Fund

BY NICK BATURIN AND JOSHUA LITWACK

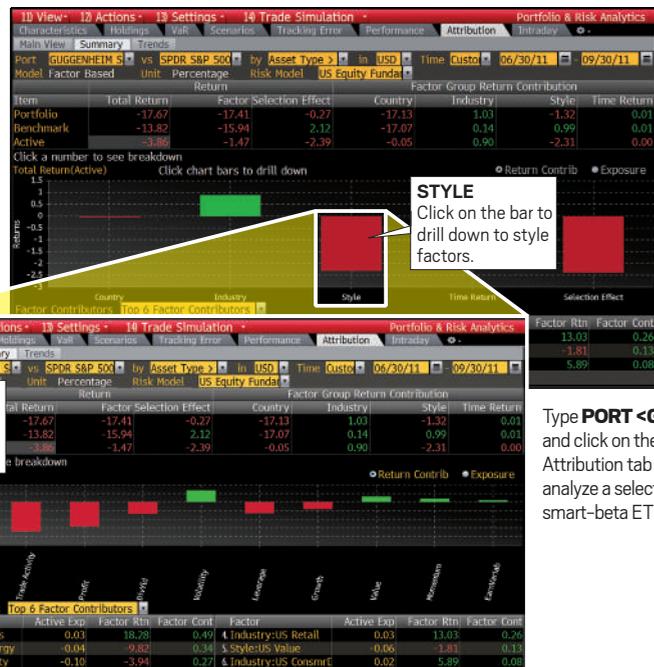
SMART BETA OFFERS the possibility of beating benchmarks. That's the main attraction for smart-beta investors, who hold more than \$400 billion in such exchange-traded funds—about one-fifth of total U.S. ETF assets.

What's the source of smart-beta ETFs' potential outperformance? One way of looking at it is in terms of factors.

Factor models break down the return of a security into its exposures to a set of so-called factor returns. Such models are mathematically complex, but the underlying idea is simple. Take the market factor. The performance of a stock on a given day likely reflects what's happening in the broader market. So the performance of shares of Yum! Brands, say, may be driven by the stock's exposure to the U.S. market factor return—along with its exposure to other factors, such as growth, value, and size.

SMART BETA ISN'T precisely defined, but the term generally refers to ETFs that weight their investments according to some criterion other than market value or price. A dividend ETF, for example, invests in equities that pay high dividends; an equal-weight ETF holds all of its component stocks in equal amounts. So the factor exposures of smart-beta funds differ from those of traditional benchmarks. That's a key source of their potential to outperform. For one thing, smart-beta ETFs may be able to tap into anomalies such as the premiums associated with low volatility or small market caps.

To dig into a selected smart-beta ETF and see which factors are driving its returns, you can use Bloomberg's multifactor risk models in the Portfolio & Risk Analytics (PORT) function.



SIZE FACTOR
In the 2011 period, size was a drag on returns.

Type **PORT <Go>** and click on the Attribution tab to analyze a selected smart-beta ETF.

Let's take a look at the \$11.4 billion Guggenheim S&P Equal Weight ETF, for example. As its name indicates, the Guggenheim fund weights its investments equally. The fund apportions about 0.2 percent of its assets to each of the 502 members of the Standard & Poor's 500 Index. By contrast, the \$176 billion SPDR S&P 500 ETF Trust, or SPY, tracks the market-cap weighting of the benchmark. That emphasizes big stocks. Apple, for instance, accounts for about 4 percent of SPY's portfolio.

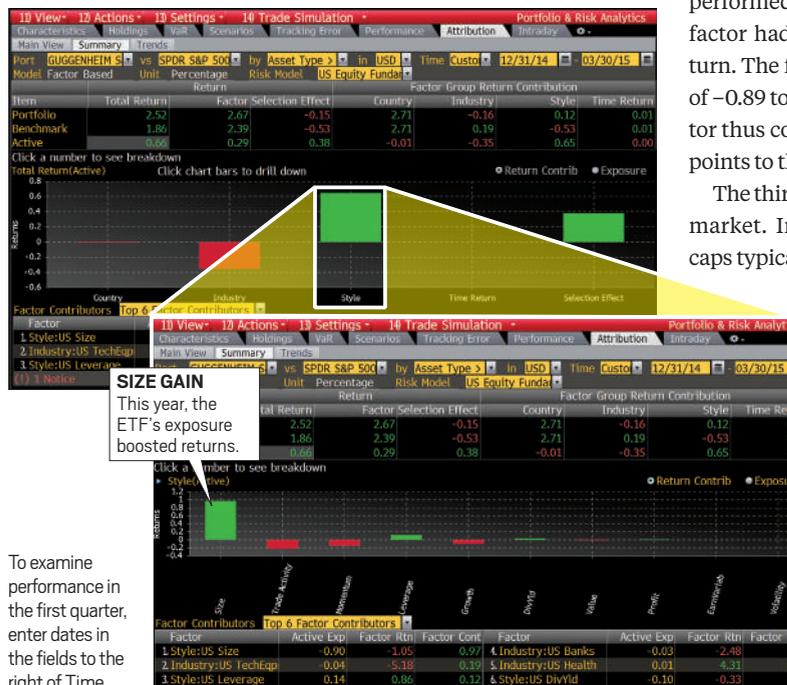
Type **RSP US <Equity> PORT /P <Go>** on the Bloomberg Professional service to run PORT on the Guggenheim fund. To compare it with SPY, click on the arrow to the right of Vs and select [More Sources ...]. Click on Funds/ETFs/13Fs,

enter SPY in the field, and click on the SPY US Equity item. Then click on the Select button.

Click on the Attribution tab. To specify that you want to use factor-based attribution in your analysis, click on the Settings button on the red tool bar and select Calculation Defaults. Click on the arrow to the right of Attribution Model and select Factor Based if it isn't already selected. Click on Save.

underperformance. Industry factors added 0.9 percent to the Guggenheim fund's relative return. Style, however, accounted for 2.31 percent of the underperformance. To drill down to individual style factors, click on the Style bar. The most dominant single driver of return was the U.S. size factor.

Unfortunately for the fund, the factor contribution was negative during the period. Large-cap stocks out-



To examine performance in the first quarter, enter dates in the fields to the right of Time.

This year, the ETF's exposure boosted returns.

performed small caps, so the U.S. size factor had a 1.01 percent positive return. The fund had an active exposure of -0.89 to the U.S. size factor. The factor thus contributed -0.88 percentage points to the fund's relative return.

The third quarter of 2011 was a down market. In dropping markets, large caps typically outperform small caps.

Next, let's look at the first quarter of this year. Enter 12/31/14 and 03/31/15 in the date fields and press <Go>. For that period, the Guggenheim ETF outperformed SPY by 0.85 percentage point. Once again, we see that the U.S. size factor is the main driver. During this period, however, the U.S. size

To use the U.S. equity fundamental factor model, click on the arrow to the right of Risk Model, select US Equity Fundamental, and press <Go>. (For detailed information about the model, type **BPS L#2073620 <Go>** on another screen.)

LET'S EXAMINE TWO different periods: the third quarter of 2011 and the first quarter of 2015.

First, click on the arrow to the right of Time and select Custom. Enter 06/30/11 and 09/30/11 and press <Go>. Click on the Summary subtab. Markets tanked in the third quarter of 2011 amid talk that Greece might exit the euro and the U.S. could default on its debt. The Return section of the screen shows that the Guggenheim fund underperformed SPY by 3.86 percentage points.

The chart in the center of the screen breaks down the relative return into its sources. Country factors contributed a tiny amount to the

factor contribution was positive for the Guggenheim fund: Small-cap stocks outperformed.

Factor-based attribution can give you insight into what happened in the past. What about the future? For the Guggenheim fund, the U.S. size factor will likely remain one of its main return drivers.

Based on Bloomberg research and on numerous academic studies, small-cap stocks have outperformed large-cap stocks over the long term. The cumulative annual return of the U.S. size factor was -2.6 percent from Jan. 1, 1999, to March 31, 2015. So a smart-beta ETF such as the Guggenheim fund, with an average active U.S. size exposure of -0.89, should outperform by 2.32 percentage points a year on average over the long term.

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TIP BOX

Type **ETF <Go>** to find funds that match your criteria.