Do market-cap differences translate into performance variations?

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U.S. equity benchmarks are more alike than different. Still, those distinctions can lead to meaningful performance differences, especially in the short run. Here are some of the ways the major index providers approach the markets.

There is no shortage of ETFs to choose from among U.S. equity funds. While tactics can vary, it’s reasonable to say that the starting point for many clients’ equity portfolios—the basic ingredients of flour and water, if you will—is market-cap-weighted building blocks, such as large-, mid-, and small-cap index funds.

Although many market-cap-weighted U.S. stock ETFs seem similar, there are more nuances than you might expect. The ingredients are largely the same, but the recipes can be different. The question is: Which differences matter and to what degree? Let’s explore.

According to Bloomberg and Morningstar data, about 225 ETFs currently track a market-cap weighted, non-leveraged US equity benchmark, with a total of approximately $1.5 trillion in assets under management – the most of any ETF category. These ETFs track benchmarks from providers such as FTSE Russell, S&P Dow Jones Indices, and CRSP.

Importantly, a large-cap benchmark from S&P Dow Jones Indices is different in many ways from an ostensibly similar large-cap benchmark from FTSE Russell, CRSP, and others. These differences derive from the different methodologies the benchmark providers employ to select and categorize stocks and result in potentially meaningful differences in performance. Evaluating such differences is key to the analytic process of selecting an ETF.

Market-cap differences

Over time, the major benchmark providers have coalesced around generally accepted best practices with fairly minor methodological differences, such as turnover management and growth/value style definitions. However, a remaining major point of differentiation is the definition of break points in the market-cap spectrum used to delineate size. For example, let’s compare the S&P 500, Russell 1000, and CRSP US Large Cap Indexes. All are legitimately defined as large-cap indexes. However, the
Russell 1000 includes twice the number of stocks and covers about 92% of the market capitalization relative to the S&P 500’s coverage of about 82% of the market capitalization. CRSP, a provider of benchmarks for Vanguard ETFs, delineates size break points slightly differently, by holding steady the percentage of capitalization coverage and allowing the number of securities in each benchmark to change. For instance, the CRSP large cap index will always cover 85% of the market capitalization, which will be made up of a variable number of stocks (598 at year-end 2016).

Note: In this case, CRSP’s methodology accounts for the fact that the number of stocks in the market changes over time. There are currently about 3,600 investable stocks; two decades ago the number was more like 8,000. By defining the proportion of the market considered large, mid, and small by capitalization coverage, CRSP argues that its indexes better accommodate the market’s inevitable evolution.

The differences in market-cap coverage are illustrated in the figure above.

Performance variations

The exposures that result from differing definitions of large-, mid-, and small-cap portions of the equity market create tangible performance differences during certain periods—or in the short term. Though highly correlated, investors should expect to see different returns between, say, the CRSP midcap
index and the S&P mid-cap index simply because they include different subsets of stocks. Neither is necessarily more right, or better, but they will lead to different performance. An analysis, shown in the figure on the next page, indicates the magnitude of performance difference that can be expected. Since 2000, for instance, the median one-year return difference between Russell, CRSP, and S&P large-cap indexes was about 0.6%. Among mid-cap indexes, the median was 2.6%. Among small-cap indexes, it was 2.9%. These are meaningful differences—but they are, generally speaking, not something that can be predicted or controlled. Performance differences are time-period dependent and random.

Ranges in 1-year returns between CRSP, Russell, and S&P indexes

![Ranges in 1-year returns between CRSP, Russell, and S&P indexes](image)

Source: Vanguard.

Notes: Ranges computed monthly from January 2000 to January 2017. Before April 2012, the differences were between S&P and Russell indexes only. Large-cap stocks are represented by the S&P 500, Russell 1000, and CRSP US Large Cap Indexes. Mid-cap stocks are represented by the S&P MidCap 400, Russell Midcap, and CRSP US Mid Cap Indexes. Small-cap stocks are represented by the S&P SmallCap 600, Russell 2000, and CRSP US Small Cap Indexes.

Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Application
So how can you apply this knowledge to your investment process?

- First, while it’s necessary to understand coverage differences—and you may philosophically align with one set of exposures relative to another—it is important to focus much of your time on decisions that can be controlled, such as the cost or tradability of an ETF.

- Advisors constructing U.S. equity portfolios in a building-block framework—and who are concerned about the potential for gaps or overlaps in market coverage—may want to consider prioritizing benchmark provider consistency in their due diligence. Mixing ETFs tracking benchmarks from different providers will introduce gaps or overlaps in a portfolio. For example, using an S&P 500-tracking ETF in combination with a CRSP small-cap-tracking ETF, even if they’re both from Vanguard, could result in a gap in coverage of about 13% of the market.

- Another best practice is to avoid overreacting when one provider’s large-, mid-, or small-cap benchmark radically differs in performance from another provider’s respective benchmark. Remember these differences are transitory.

- When thinking about your strategy in U.S. equity, consider whether a total-market ETF may make more sense than assembling a portfolio of specific style or market-cap ETFs. The performances of total-market indexes, such as the CRSP US Total Market Index and the Russell 3000 Index, have historically been very similar. Unless you wish to over or underweight a particular market segment, it may be easier to explain and understand performance with a simplified portfolio.

- No matter which index provider you prefer, Vanguard recommends that you consider constructing the core of the portfolio around the broad market, whether you are assembling it with pieces of the market or using a total-market product. Then, even if you layer in an additional element such as a dividend-focused ETF or a minimum-volatility product, the portfolio will have an anchor in the broad market.

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