

## Performance And Capitalization: Yes, It Matters

Last month's discussion of weighting schemes (see "Indexation's Weighty Issues") noted the sensitivity of equal-weighted versus capitalization-weighted index performance to individual equities. For example, a sector where one firm becomes large and dominant, such as Apple within the technology sector, will see its capitalization-weighted sector index trounce its equal-weighted sector index. Conversely, sectors wherein large firms struggle, such as the major pharmaceutical firms within the healthcare sector, will see the equal-weighted sector index outperform. Of course, there is no reliable way of predicting these investing environments.

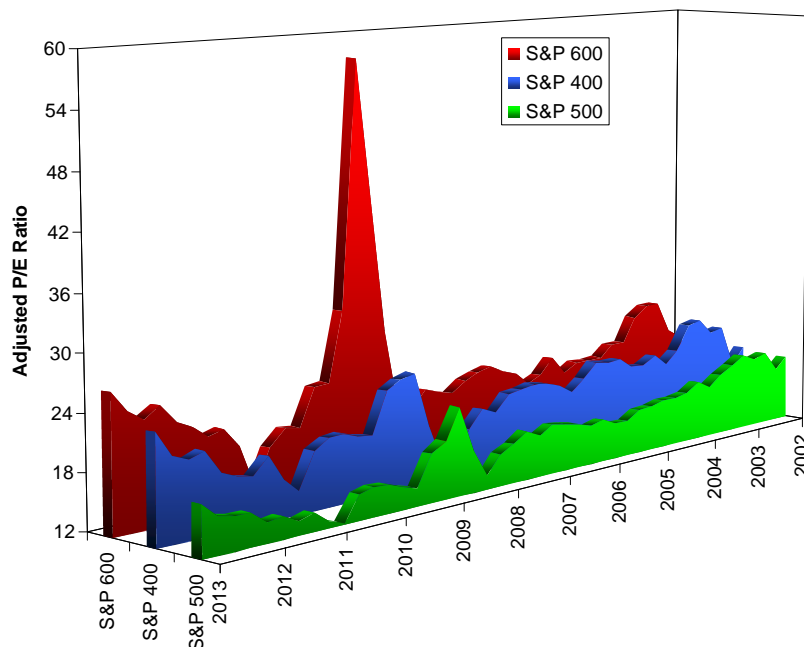
As the member stocks of the large-capitalization indexes are assured of a steady stream of investors who must own the stock in a proportion potentially unjustified by its business prospects, these issues should have different characteristics than their smaller counterparts. Offsetting short-term patches of business struggles is the simple and incontrovertible fact large firms have, at least in their past, demonstrated successful business models. Smaller firms have the potential to grow faster and reward their investors more when they score their initial successes, but to borrow a cliché, long-term investing is a marathon and not a sprint.

### Small, Medium And Large

The S&P 1500 Supercomposite is divided along capitalization lines into the large-capitalization S&P 500, the middle-capitalization S&P 400 and the small-capitalization S&P 600. These divisions are somewhat arbitrary and there is a good deal of mobility between them as firms grow, disappear via merger or bankruptcy or start to shrink. Performance varies greatly, too. Over the preceding ten years, the average annual total return for the S&P 600 has been 10.6 percent, as compared to 10.3 percent for the S&P 400 and 7.4 percent for the S&P 500. Part of the performance advantage for the S&P 400 relative to the S&P 500 comes from the never-ending hedge fund game of buying middle-capitalization issues likely to enter the S&P 500, whereupon they will rise for no reason other than capitalization-weighted index funds must buy them.

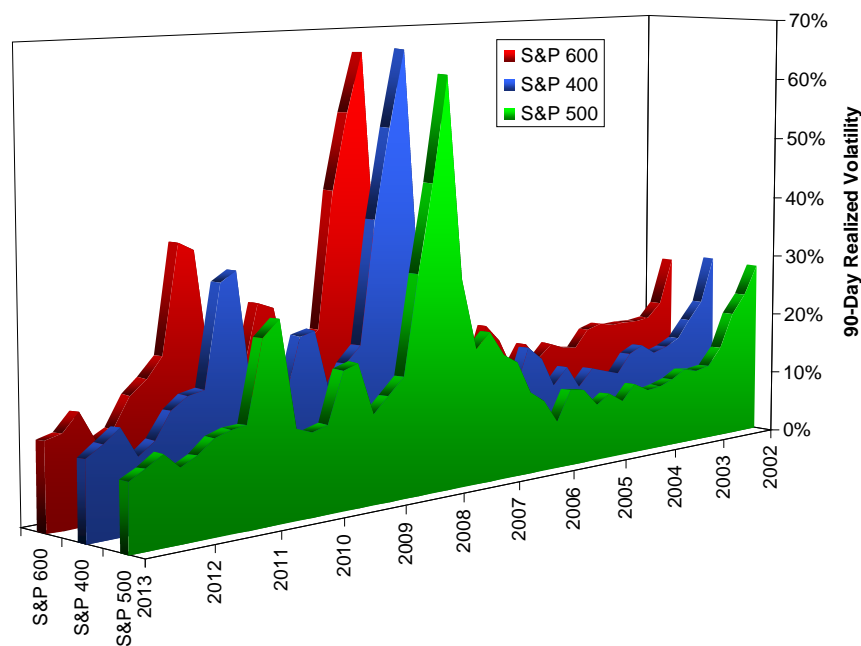
Let's back away from performance and focus on three index attributes somewhat intrinsic to capitalization itself before we return to matters of size-driven performance. The first is the adjusted price/earnings ratio. This is the index' price divided by its trailing twelve-month earnings before extraordinary items are taken into consideration. As smaller firms have the capacity to grow faster than their larger counterparts, their price/earnings ratio tends to be larger. As in the case of any price/earnings ratio, this one can jump as earnings decline during a recession.

Smaller Issues Tend To Have Higher P/E Ratios



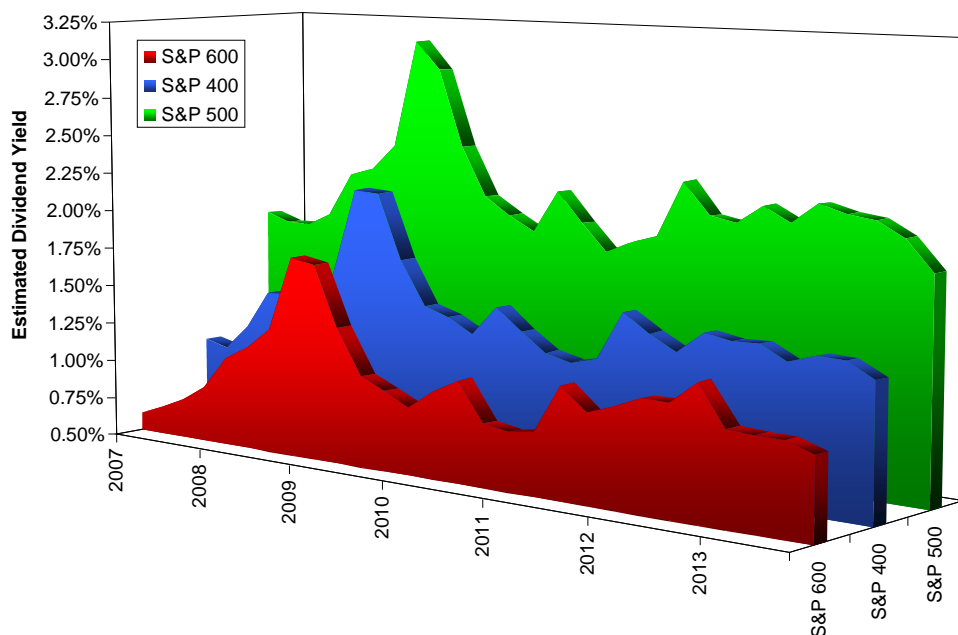
We should expect smaller issues to be more volatile for the very simple reason their capacity to absorb large-scale fund inflows and outflows is lower. If we use 90-day realized volatility to measure variability of returns, we see how this phenomenon has played out over time.

#### Larger Issues Tend To Be Less Volatile



Finally, as larger firms cannot as a rule grow as fast as smaller firms, they have to generate more of their return in the form of dividends instead of capital gains. This feeds right back into the two observations made above: Risk-seeking investors are willing to pay more for the option on future capital gains and higher dividend payouts tend to lower the risk of holding any issue.

#### Larger Issues Tend To Have Higher Dividend Yields



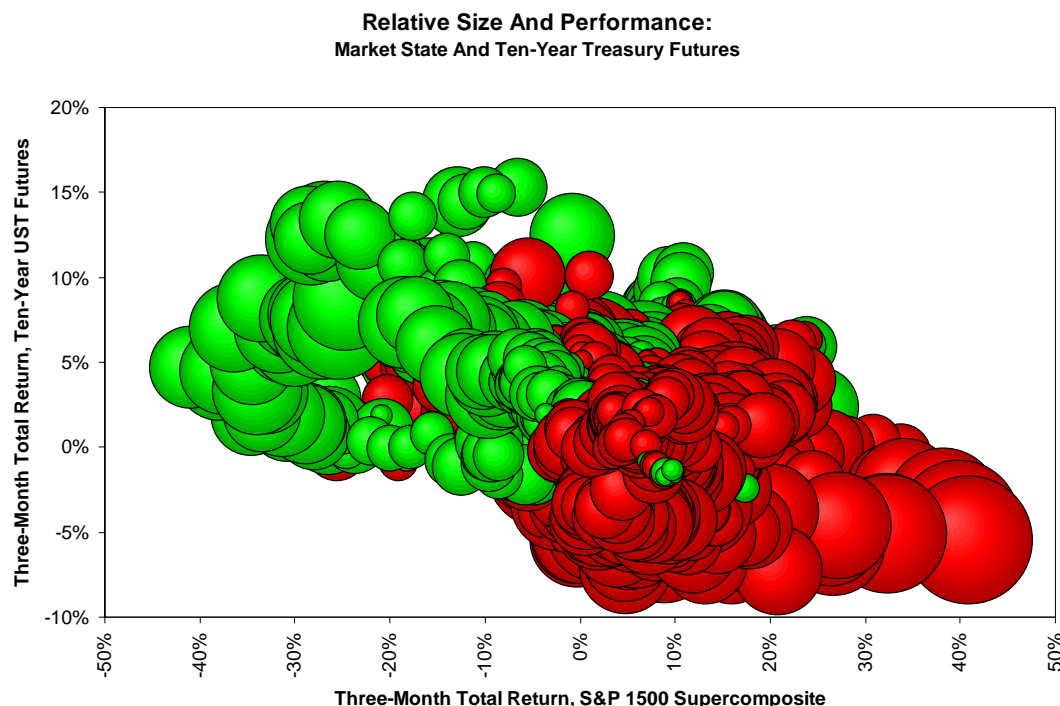
#### Drivers Of Size-Related Performance

Are there any market-environment indicators of size-driven relative performance? Two are suggested; fortunately, both are intuitive and logical. First, larger firms tend to have greater international exposure, not only in their operations and sales but in their mix of process inputs and other cost factors. As seen below, this is a multifaceted

observation. Second, the higher dividend yields of larger firms tend to make their performance more interest-rate sensitive.

Let's switch the measure of large-capitalization from the S&P 500 to the S&P 100, also known as the OEX, to exaggerate the size-driven comparison to the S&P 600. The two charts below depict the three-month total return differential between the S&P 100 and the S&P 600 as a function of three-month total returns on the S&P 1500 Supercomposite and either ten-year Treasury futures or the *Bloomberg* correlation-weighted dollar index. S&P 100 outperformance is depicted with green bubbles, S&P 600 outperformance is depicted with red bubbles; the diameter of the bubbles corresponds to the absolute magnitude of the performance differential.

First, S&P 100 outperformance is concentrated in the northwest corner of the map below. As the stock market shifts into a bearish phase and long-term interest rates decline, investors flee into the perceived safety of larger-capitalization issues. As an aside, this is the exact same phenomenon noted last month with the relative performance of equal-weighted versus capitalization-weighted indexes. To repeat verbatim: "The equal-weighted scheme did not hit its worst prospective patch during the depths of the financial crisis but rather during its early phases when, apparently, investors clung to larger issues in the hope they would best be able to weather the storm."

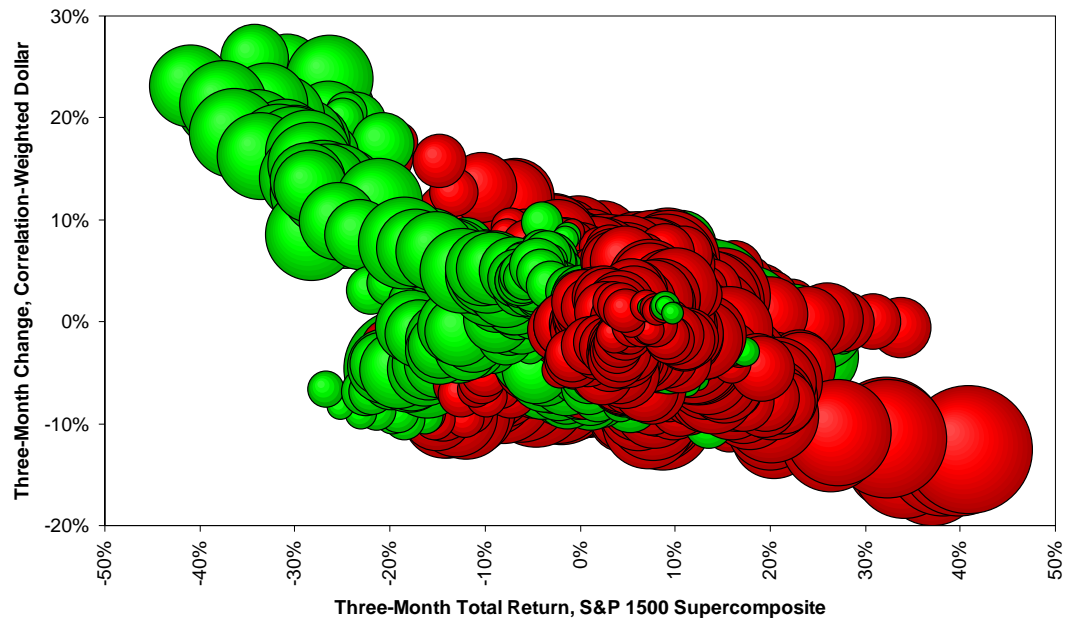


Some of this impulse is nothing other than a vain hope of safety, of course. Once a major bear market such as that of 2001-2002 or 2008-2009 gets underway, the larger stocks are shed with great enthusiasm and their higher dividend yields provide little cushion to overall decline. The author recalls the old days of open-outcry trading when floor brokers took on thousands of dollars of execution risk in exchange for a few dollars' worth of commission.

Now let's shift the Y-axis to the three-month change in the correlation-weighted dollar index, a measure less dependent on the vicissitudes of the euro than is the ICE dollar index. Here the division of performance is equally stark and somewhat surprising to those who have been conditioned to believe a weak dollar rewards multinational firms: The relative performance of the S&P 100 clearly benefits from a stronger, not a weaker, dollar.

Several explanations are likely. First, as the dollar frequently rallies during periods of economic uncertainty, the outperformance of the S&P 100 during periods of market stress simply coincide with this development. Second, while most S&P 100 firms have multinational operations and are exposed to currency translation risks, their sales to overseas customers often are met by overseas production; the smaller firms of the S&P 600 often have to export their goods and services, at which point the stronger dollar becomes a drag on earnings. Finally, the more far-flung operations of S&P 100 firms allow for greater flexibility in sourcing process inputs and shifting production than is the case for the smaller S&P 600 firms.

**Relative Size And Performance:**  
Market State And U.S. Dollar



Your preference for large- versus small-capitalization issues really should be a function of your overall risk tolerance and investment horizon. If you are a short-term trader, the question is somewhat irrelevant. A risk-averse investor who seeks lower price volatility and greater dividend yield should gravitate toward larger-capitalization issues, a strategy often called “blue-chip” preference. Finally, more risk-seeking investors should emphasize smaller-capitalization issues. The question whether this attribute matters can be answered resoundingly, “Yes, it does.”