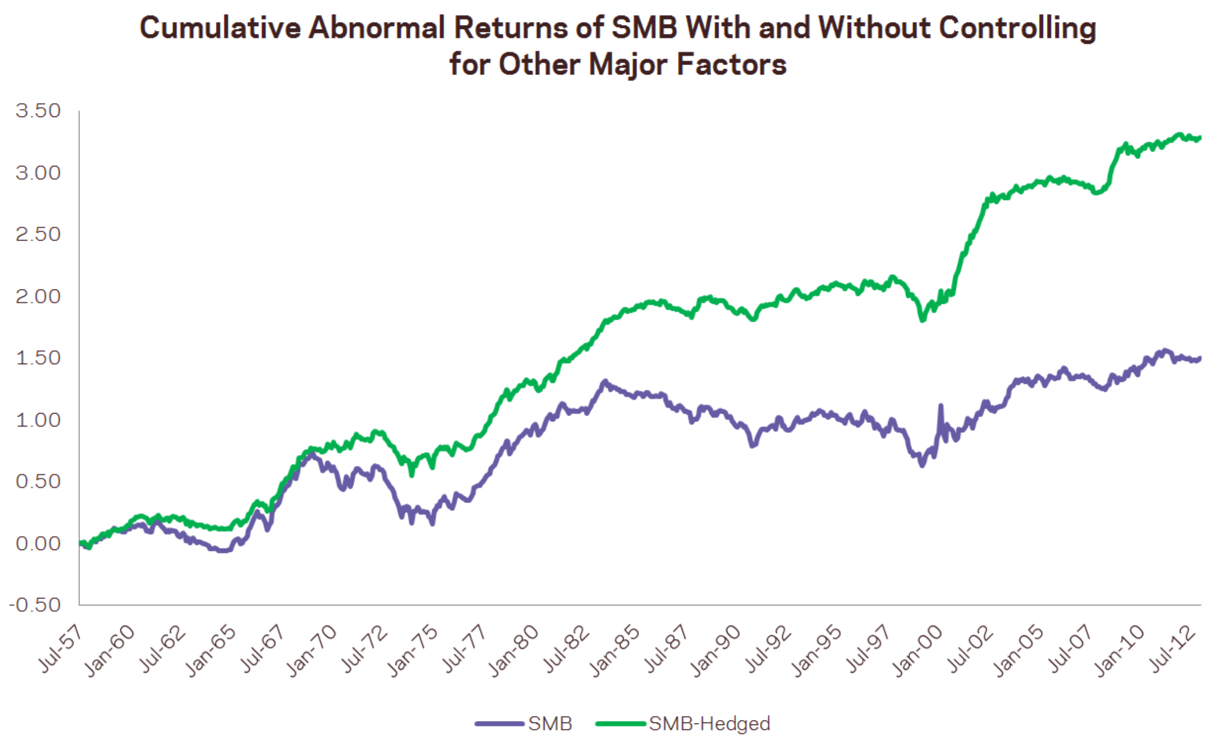
FACTOR/STYLE INVESTING

Quibble Fight!

December 3, 2015

In their recent white paper Reeling in Small-Cap Alpha, Kalesnik and Beck make the correct, if well-known, observation that the prominent factors in modern systematic investing (e.g., value, momentum, quality) are more effective with small-cap stocks than within large-cap. Furthermore, they show, as is also well-known, that the size effect itself is a weak sibling to these other biggies. While they are exploring a well-trodden path, at least none of this is wrong (there are some exceptions however — for instance, Israel and Moskowitz show that momentum delivers pretty similar performance within small- and large-caps). But the message should not be that one should only pursue these factors in small-caps, or even that superior factor performance in small-caps is highly likely. As they note, small-caps are more expensive to trade and have less ultimate capacity for investment; we would add that implementations generally have more tracking error to theoretical backtests. Still, we don't dispute the basics of their review paper. However, at one point they mention our recent paper on the size effect announcing they have a quibble with it. Our paper is by no means a proof. We could be wrong for many reasons. But their quibble is misguided. I don't mean to be querulous or quixotic but their quibble is quite quarrelsome without being a quality query.

Their quibble is actually a bit hard to figure out. It seems to be that we didn't write their paper — that is, we did not simply reiterate the long-known result that the other factors (mostly) work best among small stocks. Rather we attempt (rather successfully, imho!) to resurrect the size effect itself, a very different question. Perhaps that is the real source of their quibble as it complicates their story, which is based on small caps being a good "fishing hole" for factors but not the fish themselves (our results restore it to the status of "fish" to keep going with their analogy). We find that if other factors are controlled for, primarily quality, small stocks are restored to being impressive fish in-and-of-themselves. Figure 1 from our paper perhaps shows this most succinctly, comparing the cumulative excess return of small versus large in the traditional Fama-French SMB (small minus big stocks) construct, and that same return if hedged for the other major factors (the most important difference by far is hedging for quality):



Source: Asness et al., "Size Matters, If You Control Your Junk" (2015). Fama-Miller Working Paper. Data shown from July 1957 through December 2012, gross of fees and transaction costs. The figure plots the cumulative sum of returns over time of (i) SMB hedged with the market, its lagged value, HML, UMD and QMJ, and (ii) SMB unhedged. The cumulative returns use the full sample estimates of the betas on all factors.

This is not the return of a "factor within some strata of another factor," as these authors do in their study. Rather the green curve is the marginal return to small versus large, hedged for all factor exposures (and recall that the purple Fama-French size factor is also hedged by construction for its value exposure, but only value). Again, this is just a different question from whether some factors work better within small versus large.

When they begin their quibble, they say that our paper serves to "document that small-cap companies outperform the market if low-quality companies are avoided." While not inaccurate, that's not the clearest way to summarize our result. Our result is better summarized as "if one holds other factor exposures constant, most importantly those we've all come to call quality factors, small stocks are restored to trouncing large stocks with statistically and economically much stronger results than if you don't control for these exposures." Still not poetry, I admit.

During their quibble they also say regarding our paper "arguing that size matters if you control for junk, rather than arguing that most anomalies generate better performance — or any performance at all — when implemented in small-cap stocks, is not much different from arguing, for example, that rebalancing is a repackaged value strategy." Now, frankly, they've lost us. While we defer to their expert knowledge on repackaging a value strategy, we don't understand another word of this point. We are repackaging nothing. We are doing what modern financial researchers do. We are testing factors marginal to each other, as many are correlated. If you test the size effect marginal to the others (market, value, momentum and quality) you find a rather large size effect itself (the small fish are indeed better, not just a source to look for other factors) and this is mainly coming from including quality in the factors you're neutralizing (as small without this neutralization is too "short" quality, too junky). That is profoundly different from the well-known finding they reiterated that other factors work better (gross and theoretical — remember there are other implementation issues to consider) in small cap.[1]

We find that if you control for the other major factors, most importantly quality, there is a large restored (versus other work finding only a modest small-firm effect) premium to small versus large. In contrast, their paper reiterates the known finding that other factors work better within small. They could've and should've never mentioned us as these are different questions that should entail no quibbles among them.

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[1] As an aside, our paper also partially explains why value is stronger among small caps. Table 8 Panel A in our paper examines the value premium within small stocks and separately within large stocks. It turns out that if you don't adjust for quality, value indeed works much better amongst small. But marginal to the other factors the value strategy among small is actually considerably higher quality than is the value strategy among large. Thus, adjusting for quality also makes the central result of Reeling in Small-Cap Alpha weaker (i.e., that things like value and momentum work much better among small). They were not looking for these effects; our results are brand new, and their results for value are still true if you don't adjust for quality, so this is not really a major criticism, perhaps just a quibble…