

Finally, a Practical Solution for Decomposing Returns into Alpha and Beta

by Peter Hecht

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By now, I'm sure many of you are tired of hearing about this magical asset management term called "alpha". In fact, I'm almost at the point of automatically tuning out every time I hear a hedge fund manager (or any active manager) or investor throw around the word "alpha". For an industry that uses the word "alpha" like it's going out of style, I find it amazing that the asset management profession has made so little progress when it comes to actually trying to measure it in practice. Given its importance to active management (no alpha = no active management industry) and given all of the verbal airtime "alpha" receives, you would think managers and investors would spend a healthy amount of time trying to actually measure it on a regular basis. Unfortunately, this is not the case.



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Why is this? While I am sure there are many reasons, I think the main one has to do with lack of access to cheap, easy to use, easy to understand, consistent, "alpha measuring" infrastructure. For equity-oriented strategies (which is the focus of today's piece), firms such as Barra and Axioma have been offering "alpha measuring" performance attribution systems for years. Unfortunately, these systems require a nontrivial amount of time and money to setup and maintain, which can act as a barrier to entry for many managers. Furthermore, performance attribution methodologies differ across the various "off the shelf" and "in house" systems, making it difficult for investors to compare manager results.

There is, however, a solution to the above problem. Bloomberg recently released an institutional quality, holdings-based, factor-based (a la Barra and Axioma), performance attribution system. It has all of the first order, desired qualities, and it has an incremental price tag of zero for Bloomberg users. Since most asset managers already use Bloomberg, it's effectively free and solves the crucial "comparability of results" issue. Additionally, it's easy for the manager to load complete portfolio positions on a daily basis, and the output is easy to digest. Results are available in tabular form or in pretty bar charts. And lastly, unlike most attribution analysis used by managers today, the Bloomberg system has the ability to control for the main "smart/alternative/style" betas (e.g. value, momentum, carry, low vol, etc.) prevalent in today's marketplace...in addition to the more conventional market and industry betas. Given all of this, why wouldn't an equity-oriented asset manager or investor want to utilize the Bloomberg system in some capacity?

In order to best demonstrate its capabilities and have the most impact, I think it's important to go through a quick demo. Before doing that, however, let's just make sure we're all on the same page with respect to the importance of measuring alpha. The argument is fairly straightforward. There are many high quality passive/"rules-based" asset managers able and willing to give investors targeted exposure to various market, industry, and "smart" betas at a competitive fee. On the other hand, there are active managers (e.g., long/short equity hedge funds, long only active equity, etc.) promising to do "security selection" (i.e., alpha generation) *above and beyond* the embedded betas at a higher fee. In other words, the passive/"rules-based" manager represents an opportunity cost to the investor who chooses to go active, and, thus, the active manager needs to beat this opportunity cost on a net of fee basis. Otherwise, there's no reason for the active manager to exist. No rational investor would choose an active manager if they could obtain a higher net of fee return with the same beta (risk) profile from a passive/"rules-based" manager. It really is that simple.

Back to the demo. Since I want you to be able to easily replicate my results, I'm going to analyze the February 2015 "13F" returns of a long/short equity manager called Cloud Gate. These are NOT the actual returns of Cloud Gate. They represent the returns from mimicking Cloud Gate's publicly available, quarterly 13F filing (as of December 31, 2014), which generally only includes the long, physical, US equity listed securities held by the manager (i.e., no short positions, swaps, etc.). Fortunately, Bloomberg automatically loads the 13F holdings of Cloud Gate and many other managers, which makes this demo really easy to perform and replicate. However, in practice the following analysis should be performed on the manager's *entire* portfolio – not the 13F.

Below are the February 2015, Bloomberg, factor-based attribution results for Cloud Gate's long only, 13F portfolio. I chose the S&P 500 (proxied by the S&P 500 ETF SPY) as the benchmark. During this period, Cloud Gate's 13F and the S&P 500 generated a 5.57% and 5.74% return, respectively. Thus, Cloud Gate's long "naïve" alpha (labeled "active" below) was -0.17%...at first glance, a fairly uneventful alpha month. I call it "naïve" because this is the natural first thing to calculate, it's what most people do, and, most importantly, it does NOT control for all of the various beta (labeled "factor" below) differences between Cloud Gate's 13F and the S&P 500.



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In order to get closer to a "true" alpha (or stock selection) number, we need to control for the differences in industry and "smart" (labeled "style") betas. Focus your attention on the "style" and "industry" active results (the other factors are irrelevant for this simple US example). "Industry" effects detracted 2.57% while "style" contributed 1.10% to the "naïve" alpha. Once the industry and style effects are taken into account, the "true" monthly alpha (labeled "Selection Effect") is 1.30%, which is materially different than the impression one would garner from focusing on the "naïve" alpha. In other words, controlling for *all* betas can make a big difference in the end alpha results!

If you're interested in getting more detail on the industry and style return drivers, just click on the respective bar chart or table number. The "industry" details are below. As you can see from the large red bar, Cloud Gate's 13F overweight to the financials sector was a big industry return detractor (relative to the S&P 500).



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The "style" details are below. As you can see from the large green bar, Cloud Gate's 13F overweight to more highly levered firms was a big "style" return contributor (relative to the S&P 500). Popular style factors, such as value and momentum, were inconsequential during this time period.



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While there's a lot more functionality in the system, I think this gives you a good, high level introduction. Go try to replicate this at the office, and give me a call if you need help. I mean it. 847-423-0786.

Before people start taking me too seriously, it's important to note that the Bloomberg attribution tool is based on a model. As my dissertation advisor, Eugene Fama, always said, all models are false by definition. That being said, models can flesh out many first-order effects and, thus, be extremely useful in practice. I definitely think the Bloomberg model meets this standard. It's not perfect, but it is materially better than the alternative – doing nothing. Ignorance is NOT bliss in the world of higher fee-based active management.

Is this tool (or beta/alpha analysis in general) relevant for fundamental, benchmark agnostic, and/or absolute return managers? Of course it is. Don't be fooled by these sleight of hand slogans. Understanding the source of one's return (beta vs. alpha) is foundational to the entire asset management industry. Period. The main caveat for this tool applies to "beta timers". Although most active, equity-oriented managers focus on security selection ("stock pickers"), a handful of them try to time the various betas, which is an additional active management lever. For those rare cases, the return from beta needs additional attention and deserves a different interpretation.

In the end, the Bloomberg attribution tool provides an opportunity to materially improve the transparency surrounding the marketing-filled, active asset management industry. Investors, embrace the tool. It will allow you to better underwrite, monitor, and incent (alpha fees for alpha; beta fees for beta) your active asset managers. Managers, embrace the tool. It will improve your dialogue with both investors and your analysts, and it could improve your portfolio construction (e.g., is it worth hedging out an unintended beta bet?). But nothing comes for free...with additional transparency comes additional accountability. For investors, being held accountable means some of you will need to improve your manager selection process. And for managers, being held accountable means some of you will need to better align your fees with your alpha production.