Data Science and Alpha

As the investment community embraces data science, we should not be blind to the reality that many of our active-management peers are or will be devoting a lot of resource to capturing whatever informational edge they think or hope is out there. In that vein, we listened to another one of Patrick O'Shaughnessy's interesting podcasts, this one with Michael Recce. Michael had been the head of data science at Point 72 (formerly SAC), then GIC, and is now at Neuberger Berman. This is the podcast link: http://investorfieldguide.com/reece/. If you haven't heard it yet, you should have a listen.

As we discussed in "_Hunting for Alpha_"[1], our firm's philosophy and culture is built around a notion that there are no sustainable _informational_ edges in the market. There may have been years ago, but today we believe that significant fundamental alpha can mostly (perhaps only) be generated by an expert, unbiased process; a process which seeks to de-bias itself from behavioral mistakes, and one that takes advantage of Mr. Market when he doesn't. The relative objectivity is one of the things that potentially helps us to achieve an analytical edge.

This isn't us either.

Yes, the biggest firm with the most assets, the fastest computers, and employees with the most propeller hats will be able to parse out the digital residue from demographic credit card data faster than anyone else can, and perhaps will use that information make a few pennies across a wide range of diversified investible assets; but that has _always_ been the case. The likes of Renaissance, Two Sigma, and DE Shaw compete here; and we never will, nor should we. Meanwhile, less diversified (but still asset-gathering) firms like the SACs (aka Point 72s) and Millenniums of the world have _always_ played a similar game. Even before big data showed up, they were clamouring for that vaunted "informational edge" so that they could get in front of the big mutual-fundy supertankers before they made their turns. That is still their game, but we don't play it with them.

And to be clear, when we discuss how the study of big data can enhance (or perhaps entirely support) some of these informationally-led investment strategies, we should be clear that there is a distinction between this sort of activity and that driven by pseudo-passive, systematically-active smart-beta strategies. As we discussed in "_Robots and Alpha_"[2] last autumn, these guys are going to capture factor exposures that were formerly considered as alpha. They'll do this in diversified portfolios across hundreds of securities, without much/any regard for idiosyncratic risk. That is different than trying to get "the edge". What remains after all that pseudo-passive activity is the true alpha. In the competition for this alpha, the spoils will not only be divided between the informational and analytical edge camps in some proportion, but in the aggregate there will be as many winners as there are losers (in dollar terms). The net alpha, before fees, will be zero.

So with that, let me re-state my favorite metaphor for what we do here. We are sitting at a poker table, playing five-card draw against other active managers, and they represent Mr. Market. In this game, each of us has the exact same cards as the other players. Each card contains some piece of information about the company in which each player is considering investing. The winner(s) will be the one(s) who correctly identify which four cards don't matter, and which one does. The loser(s) will be the one(s) who misidentify the importance of each card – the importance of each piece of public information.

Will the data science guys know that an automaker's underlying YoY US unit sales are growing double digits after backing out the out-of-production models to get true LFLs? Maybe. Or might they overreact to what appears to be a negative datapoint, when it in fact is positive? Maybe. Will they confuse spurious correlation with causality when oil prices move and buy or sell the oil services companies? Maybe. Will they understand how successful a CEO may have been at his previous, unrelated company, and that he may have a mandate to repeat the same feat and just needs time? Maybe. And the same questions should be asked of ourselves and our traditional peers. Will _we_ confuse correlation with causation, will _we_ naively extrapolate bad news, and will _we_ overreact to vivid newsflow?

The rewards to active management don't change in this new regime. In the aggregate, they were zero before (before fees) and they are still zero. We simply need to follow a process that a) realises this fact and b) eliminates our biases so that we may capitalize on others', with the goal of ending up on the right side of zero. That should be your goal too. But again, half of us will fail.

[1] https://albertbridgecapital.com/drew-views/2018/6/18/hunting-for-alpha
[2] https://albertbridgecapital.com/drew-views/2017/10/16/robots-and-alpha