Have Your Cake and Eat It Too Investing

Relative Strength at Work, Vol. 5: Process over Outcome

June 30th, 2017

Jim O'Shaughnessy, author of *What Works on Wall Street,* recently wrote a blog post talking about the 7 traits he believes are necessary for active investors to do well in the long run. The one trait he mentioned that struck me as the most important yet under-appreciated was this:

"Successful active investors value process over outcome."

Although we all have heard that 'past performance is not indicative of future results', ask yourself when was the last time you made an investment into a fund because the portfolio manager had a terrible 5 year performance number? Probably never. So although past performance is no guarantee of future results, all things being equal most investors will be more inclined to invest their money with a professional that has a good track record over a mediocre one.

Let me give you an example:

In 2006 I was looking to delegate some of the day to day investment decisions on my client accounts to a third-party fund manager. I was looking for someone who could earn a respectable return without taking huge risks. After going through the usual due diligence, I found what I believed at the time to be the best choice.

O'Shaughnessy writes:

'*In keeping with human nature, we just can't help ourselves when confronted with great or lousy recent performance. "What's his/her track record?" is probably investors' most frequently asked question when considering a fund or investment strategy. And the vast majority of investors are concerned with how an investment did over the last one- or three- year period.*

Yet successful active investors go further and ask "what's his or her process in making investment decisions?" Outcomes are important, but ***it's much more important to study and understand the underlying process that led to the outcome, be it good or bad****. If you only focus on outcomes, you have no idea if the process that generated it is superior or inferior.'* (Emphasis mine.)

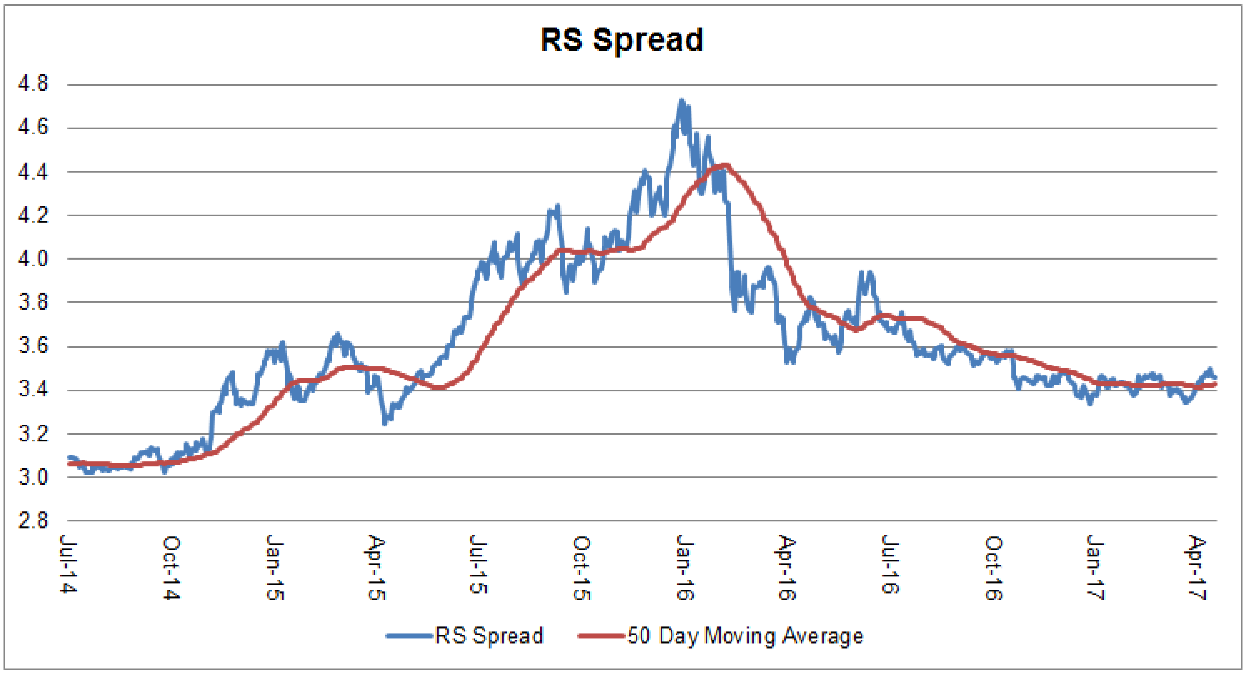
Back to my due diligence which, in hindsight, wasn't as diligent as I thought. The fund manager I picked to manage part of my client's assets had a great 5 year performance number (check!). It was primarily focused on large blue-chip stocks (check!). He was very experienced with over 25 years of investment experience (check!). What I didn't know, and only found out after the fact, was that the manager generated the bulk of his out-performance from betting heavily on oil and gas income trusts from 2002-2005. So while I'll give him credit for identifying that particular opportunity, he did not have an actual process beyond betting on rising oil prices and the continuation of the commodity bull market. His primary strategy for making money worked, but he did not have process to deal with the possibility of the energy and commodity bull markets failing.

As O'Shaughnessy pointed out, as good as this manager's track record was, it was more important to determine **how and why** he generated those returns. Was it based on a theme (commodity bull market) that may or may not continue in the future? Or was it based on a process that is repeatable and adaptive to all kinds of market conditions?

O'Shaughnessy continues:

'*Thus when evaluating an underlying process, it's important to decide if it makes sense. The best way to do that is to look at how the process has fared over long periods of time. This allows you to better estimate whether the short term results are due to luck or skill.*'

Short-term outcomes matter but there is a certain element of luck that can skew shorter term results. For example, 2014 and 2015 were great years for relative-strength based investment strategies. There was a wide variance between winning sectors (tech, health care) and losing sectors (mining, oil and gas) which we capitalized on in our investment portfolios. 2016 and 2017 year-to-date has been less friendly to a relative-strength based approach, with a much lower spread between market leaders and market laggards. You can see that in the chart below[1], where 2014 and 2015 shows a rising spread (big difference between best and worst performers in the market) and the falling spread in 2016 and 2017 (smaller difference between best and worst).



You can see it in the shorter term performance of our portfolios as well. Our North American Growth Portfolio was beating its benchmark by +9.8%[2] at the end of 2015, while spreads were wide. At the end of Q2 2017 that outperformance has narrowed to +1.5%[2]. What does that bode for the longer term success of our relative-strength based investment portfolios?

To answer that question we should review how relative-strength investment strategies have performed over the long term. One study we would reference (one of many, others available upon request) was performed by John Lewis, Senior Portfolio Manager at Nasdaq Dorsey Wright, entitled 'Manage your Luck'.

The purpose of the study was to determine:

1. Does using relative-strength (he refers to it as momentum in this article) investment strategies out-perform over long time periods (20+ years)?
2. How much of a role does luck (aka randomness) play in determining the success of this strategy?

John used a unique approach in the study to thoroughly test whether this strategy was viable or not. First, he created a universe of the 1000 largest most liquid stocks in the US market. Each week he ranked these stocks based on their trailing 12 month relative performance. Any stocks that were ranked in the top 10% were eligible to be bought in the portfolio. Any stocks in the portfolio that fell below the top 25% of the rankings were replaced. The portfolio was set up to hold 50 stocks at all times.

The unique and fascinating part of this study is that the eligible stocks were picked at random. Within the subset of the eligible 100 stocks, 50 were picked at random. When a stock was sold its replacement was also picked at random from the eligible list. This process was repeated every week for 25 years (1990 to 2015). Once he logged the results, he repeated the process, picking 50 stocks at random to create a completely different portfolio and managing it in the same manner over the same 25 year period. In total John ran the process 100 times, to create 100 completely different portfolios with the only thing in common being that he bought stock that were relatively strong and sold them when they became relatively weak.

In other words, what the portfolios all had in common was ***the process.***

The results of the 100 trials are shown in the tables[3] below. Note that there is a lot of data here; by far the most relevant part is the average result of the 100 relative-strength portfolios each year (**Mean**) and the total cumulative return (**ITD – shown on page 4**) compared to market returns (S&P 500).

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
S&P 500	-3.10%	30.47%	7.62%	10.08%	1.32%	37.58%	22.96%	33.36%	28.58%	21.04%
Mean	-7.91%	78.73%	10.71%	35.74%	-3.48%	41.37%	15.67%	31.97%	47.40%	118.14%
Std Dev	3.89%	6.92%	4.16%	4.85%	3.37%	5.84%	3.84%	4.79%	8.56%	15.44%
Max	3.28%	93.21%	21.89%	47.00%	3.49%	56.76%	24.24%	50.05%	70.15%	154.07%
Top Q	-5.46%	82.42%	12.95%	39.00%	-1.15%	45.79%	17.97%	34.83%	53.26%	126.56%
Median	-7.80%	79.35%	10.37%	35.91%	-3.76%	40.96%	15.63%	31.53%	46.11%	118.43%
Bot Q	-10.60%	75.33%	7.84%	32.68%	-6.16%	37.22%	12.98%	29.07%	40.83%	106.88%
Min	-17.88%	58.64%	2.40%	24.31%	-10.88%	27.75%	5.22%	22.91%	31.51%	84.88%

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
S&P 500	-9.10%	-11.89%	-22.10%	28.68%	10.88%	4.91%	15.79%	5.49%	-37.00%	26.46%
Mean	-19.88%	-14.87%	-16.66%	39.97%	16.34%	26.40%	9.39%	13.55%	-48.33%	10.16%
Std Dev	6.46%	3.00%	2.77%	3.89%	3.89%	4.10%	3.46%	4.24%	2.21%	3.68%
Max	-3.40%	-7.69%	-8.51%	50.40%	27.20%	39.75%	18.65%	26.38%	-38.47%	21.02%
Top Q	-15.27%	-12.90%	-14.95%	42.79%	19.11%	29.18%	11.85%	16.49%	-47.03%	12.87%
Median	-19.66%	-14.51%	-16.44%	39.26%	16.10%	26.10%	9.16%	13.16%	-48.64%	9.87%
Bot Q	-24.72%	-16.68%	-18.73%	37.31%	13.50%	23.86%	7.30%	10.30%	-49.89%	7.43%
Min	-35.24%	-22.65%	-23.30%	31.09%	6.19%	15.00%	2.26%	4.65%	-53.71%	3.04%

	2010	2011	2012	2013	2014	2015	ITD	Annualized
S&P 500	15.06%	2.11%	16.00%	32.39%	13.69%	1.38%	907.25%	9.29%
Mean	30.91%	-6.48%	22.14%	40.14%	12.13%	2.30%	3186.23%	14.38%
Std Dev	4.24%	2.51%	3.56%	3.29%	3.68%	2.43%	638.07%	
Max	40.98%	1.28%	33.68%	47.08%	26.99%	8.41%	5384.24%	16.65%
Top Q	34.01%	-4.82%	23.80%	42.22%	14.10%	3.72%	3551.16%	14.84%
Median	30.91%	-6.57%	22.21%	40.57%	11.67%	2.32%	3095.31%	14.25%
Bot Q	28.08%	-8.39%	19.68%	38.09%	9.79%	0.97%	2711.71%	13.69%
Min	19.44%	-11.61%	14.47%	29.65%	3.63%	-3.58%	1862.69%	12.13%

As John points out in his study, what jumps out at you is that even by picking stocks at random, all 100 relative-strength based portfolios outperformed the S&P 500 Total Return Index (as shown in the 'ITD' or cumulative return column above). The worst portfolio of the 100, if you had the worst possible luck in picking stocks over the 25 year period, still finished with twice as much growth as the S&P 500 Index (+1862% versus +907%).

For context, $100,000 in the S&P 500 over the study period returned $907,250. The average test portfolio returned $3,186,230. The worst portfolio grew to $1,862,690, and the best grew to $5,384,240. The bottom line is that the process works amazingly well over long periods of time. It's all about following a well-defined process.

Another very interesting point is that in any individual calendar year the Mean portfolio only outperforms the S&P 500 about 60% of the time. As O'Shaughnessy pointed out earlier, shorter term (calendar-year) outcomes are relevant but not nearly as much as the ability of the investment process to deliver positive longer term results. Despite the dramatic longer term outperformance, on average, you can expect this process to underperform the market about 4 years in 10.

To sum up:

1. Process is more important than short term outcome.
2. Understanding the process is critical to avoid buying into investments where the results came from luck.
3. Relative-strength based investment strategies with a well-defined and properly executed process result in superior longer term results.

References:

(1) From 'Leaders vs. Laggards' By Andy Hyer / Client Portfolio Manager, Nasdaq Dorsey Wright May 23rd, 2017 (http://business.nasdaq.com/marketinsite/2017/leaders-vs-laggards.html)

(2) Performance gross of fees.

(3) From 'Manage Your Luck', By John Lewis / Senior Portfolio Manager, Nasdaq Dorsey Wright May 26th, 2017 (http://business.nasdaq.com/marketinsite/2017/Manage-Your-Luck.html)

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