Letter to Clients
August 2015

Diamonds are Forever

"See it? Oh, I have no interest in seeing it.
Seeing it might get in the way of my opinion."

Richard Greenberg, *The Violet Hour*

Baseball, more than any other American sport, features a discrete and measurable set of outcomes. If you watch a single football play, it is difficult to credit any individual player without taking into account the many actions of that person's teammates. Baseball, on the other hand, is mostly a series of one-on-one battles broken down into discrete, easily-definable moments: a single pitch, a plate appearance, an inning, a game, a season, a career. These moments, captured either statistically or anecdotally, provide fodder for the never-ending debate that occurs thousands of times at every game, in every city, every year: given two players, who is better, and how do you know?

Take two hitters, and since we are based in Washington, home of the Washington Nationals, why don't we call the hitters Jayson and Bryce. Jayson scratches his beard, steps into the batter's box, swings at the first pitch he sees, shatters his bat, and the ball flies just over the shortstop's glove and drops mere inches onto the outfield grass for a hit. With Jayson standing on first, Bryce strides to the plate and after taking a number of pitches and working the count full, launches a ball deep into right field, only to be robbed by a leaping outfielder who brings his massive drive back into the park with a highlight reel grab.

Since this is a hypothetical example, and to emphasize the point, pretend each repeats this outcome 100 times in a row. Jayson has a perfect record, hitting 1.000 (with a 1.000 on-base percentage, the king of all baseball skills!), while Bryce sports an "oh-fer," 0-100, never having been on base. There is no debate that Jayson owns a better record of production. However, if we had to extrapolate future performance from this (small) sample size of activity, on whom would you bet? More fundamentally, who is the better player based on this information?

Maybe the answer is obvious, or maybe it isn't, but until perhaps 20 to 30 years ago, even the smartest baseball front office assigned a higher value to Jayson. After all, who could argue with his results? Jayson was an on-base machine, while Bryce failed each time up to even get on base.

Borrowing from behavioral finance, this type of judgment is subject to two cognitive biases. First is what is known as the "availability bias", putting undue emphasis on information that is readily available, which is often just the most easily retrievable data. Jayson's immediate track record is certainly better than Bryce's. But if the question we are trying to answer is "who is better?" we need more information than this. In addition, the sample size is far too small, even with 100 at-bats, or about 15% of a full season. Most baseball analysts agree that in order to judge a player, you must use at least 500 plate appearances – and preferably upwards of 1,500 – to get a truly accurate record of player performance.

Perhaps more importantly, baseball analysts frequently fall prey to a bias called "illusion of control." In this case, it means forgetting how much of a role luck plays in how successful an individual player is, especially over short periods of time. In the late 1990s, a sabermetrician (one who focuses on the empirical analysis of baseball) named Voros McCracken noted that by excluding all walks, strikeouts, and home runs from a player's record, about 30% of balls hit within the field of play end up as hits. This 30% number has remarkable staying power across time and hitters, giving credibility to the idea that much more of the game of baseball is luck than previously thought.[1] While the aphorism "better to be lucky than good" may be true over the very short run, in order to make educated predictions about the future, being lucky in the past does one no good at all.

Most professional decision-makers in the sport now realize that measuring the discrete outcome is a blunt-force instrument and provides only the starting point for a deeper, more encompassing fundamental analysis. Looking at the underlying process and understanding the anatomy of the individual results and how they relate to the bigger picture allow for a vastly superior analytical framework in order to make value judgments about the future. Looked at through such a lens, Bryce's deep fly ball outs are much more likely to turn into game-changing home runs, while Jayson's streak of lucky broken-bat singles is far less repeatable and convertible into game-influencing outcomes over the long-run. **For us, buying (and selling) stocks demands a similar analytical approach. Any decision we make is inherently some sort of prediction about the future, and what happened in the past, especially the very-near past, is only one data set among many that we examine in order to extrapolate future performance.**

Virtually any history of the financial crisis starts with a story about the housing bubble in the United States in the early 21st century. In 2005, homebuilders in the United States began construction on 2.1 million housing units. By 2008, that number fell to just over 900,000 and would fall to a low of 554,000 new housing starts in 2009. **NVR** rode the wave in the early 2000s, cresting at a price of $938 in mid-2005. Post-Lehman 2008 saw the stock plummet to $347 a share. While we cannot claim to have timed the bottom perfectly with our purchase, one thing we did understand was that NVR's slump

[1] Getting far into the weeds, McCracken's research focused on what *pitchers* can control, which are the so-called three true outcomes: walking hitters, striking out hitters, and allowing (or not allowing) home runs. Outside of these outcomes, he noted that pitchers have very little control over what happens once the ball is put in play, and that hitters tend to hit about .300 (30% success) on balls in play, or BABIP. Hitters have more control over these "in play" outcomes than pitchers, and the very best hitters tend to have higher BABIPs as elite hitters hit the ball on a line more frequently, which typically results in more hits than hitting the ball on the ground, while speedsters can use their legs to reach base more frequently than a hitter with average speed.

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was akin to Bryce's missiles headed into an outfielder's glove. With a healthy balance sheet, virtually no inventory on hand due to its strategy of buying options on land rather than the land itself, and a corporate culture that experienced bankruptcy in the early 1990s and never wanted to feel that pain again, we felt NVR's poor near-term performance was simply cyclical, not secular, and certainly not predictive of long-term success. While annual housing starts in the US have only crept back to 1 million annually (as of yearend 2014), NVR has managed to quadruple its stock price, maintain its pristine balance sheet, and emerge as the envy of the entire homebuilding industry.

When we bought **Strayer Education** in the fall of 2014, we believed that, like NVR in 2008, the company faced major headwinds, but they were headwinds that would eventually subside. In the case of Strayer, some of the problems they faced were cyclical in nature, some were regulatory, and some were inspired by increasingly negative media coverage. Despite the industry's insistence that education was recession-proof or at least recession-resistant, enrollment dropped at most for-profit schools beginning in 2010, including at Strayer. Rather than proving resistant to recessionary pressure, the macroeconomic downdraft merely delayed the recession for for-profit players. Compounding those troubles, the sector found itself a target of the Obama Administration's Education Department. Because the for-profit education sector is such a large recipient of Federal student lending, and because of admittedly poor behavior of many of the sector's bad actors and the disproportionate default rates demonstrated by for-profit students, the administration subjected the entire industry to stricter regulation, most notably to "gainful employment" rules. These rules force for-profit institutions to disclose program costs, loan repayment rates, and graduates' debt-to-earnings ratios. If schools violate the government-mandated statistical thresholds, their students can lose the ability to receive federal student aid, which contributes up to 75-90% of revenue for the school. Despite the fact that Strayer violated none of the government covenants, investors treated each institution similarly, with the media failing to differentiate between good actors and bad. This cast aspersions on the entire industry, helping to hasten the decline in enrollment across the space.

The bear case on Strayer has long been apparent, particularly given the repeated bad headlines generated on a near-daily basis. Lurking underneath the bad news, however, we continue to see strong fundamentals. The undergraduate degree in the United States in the 21st century fills the same role as a high-school degree a generation ago; the credential is nearly mandatory for employment in the white-collar world. Strayer offers a gateway to this world for many who would otherwise not have the opportunity to attend college. In addition, the school has long catered to working adults who understand the sacrifices and difficulty that attending college entails and the potential rewards a degree can offer. One of the company's strengths has been its relationship with corporate partners, like Verizon and Chrysler, who offer their employees discounted or free education at Strayer as part of the professional benefits package. We believe such "perks" will only become more widespread as competition for employees heats up but as employers continue to try to forestall wage increases. Lastly, the company has a near-pristine balance sheet after paying off the last of its debt in early July 2015. In late July, Strayer released earnings that demonstrated the school's first year-over-year enrollment growth since 2010, and the stock rose 34% in two days. While we are clearly pleased with that result, we think of the increase much like we might regard a slumping ballplayer who after a horrible month of play hits home runs in back-to-back at-bats. Does the sudden success indicate a hot streak is coming, or is it merely a case of being lucky and "running into one"? The reality for us is that the near-term performance of the stock is fine, but not that relevant to ascertaining whether or not Strayer is an all-star or one that will be sent back to the minors. It could take years to figure that out, and while we are not there yet, we certainly see the underlying talents.

Sometimes strong price performance can transform a “Bryce” investment into a “Jayson” investment. Take the case of **Martin Marietta Materials**, which we sold in the first six months of 2015. Our long-term investors have heard at length our bullish take on the aggregates sector. Martin Marietta Materials has access to a difficult to acquire commodity, one that is absolutely necessary in any infrastructure project, and the low value-to-weight nature of sand and gravel makes transporting it from afar nearly impossible, giving sellers of the product strong pricing power, and, in effect, local monopolies. None of that has changed. The market today believes Martin Marietta to be significantly better than the actual fundamentals would lead you to believe.

	15 Year Average	**Current**
EV/EBITDA	11.15	16.90
Price/Sales	1.84	3.32
Price/Earnings	26.71	47.34

We sold Martin Marietta not because the company has deteriorating financials or diminished prospects, but because we believe the price to be unrealistically high. We think that some of its hits, if you will, are going to start finding the shortstop’s outstretched glove, rather than the outfield grass. However, the company and industry is strong, and it is possible we could revisit the investment in the future, hopefully at a lower, more reasonable price.

Returning one final time to the diamond, most baseball front offices have evolved in the last 30 years. The common misperception that certain discrete outcomes define performance is, but for a few laggard organizations, gone for good. The nice news in our field of work is that despite a near-infinite amount of practice, most investors fail to understand that recent stock performance does not define the quality of a company. Others may wish to buy stocks that have ascended to the moon despite not having sustainable cash flow, a moat around the business, or other attributes that justify that price. We, however, will try to restrain ourselves from gawping at them in astonishment while we wait for companies that have durable competitive advantages and the correct price in order for us to play ball. The lessons from the diamond are many; perhaps most fundamental is that investing, like baseball, is a long game.

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