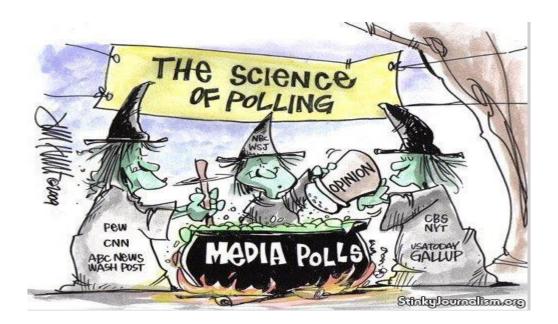
marshfield associates

Letter to Clients April, 2017

Poll Dance

"You know, people talk about this being an uncertain time. But all time is uncertain....[I]t was uncertain back in 2007, we just didn't know it was uncertain. It was uncertain on September 10th, 2001. [A]nd it was uncertain on October 18th, 1987, you just didn't know it."

Warren Buffett



By now, everyone knows that the polls leading up to the presidential election were wrong. But were they? To some extent, they undoubtedly did underestimate the support for Donald Trump, and each of us can speculate as to why that might have been. But in part, they were right—people just misunderstood what the numbers meant.

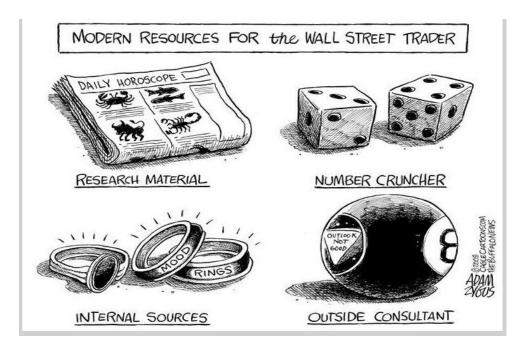
When polls say someone has only a 30% chance of winning, it doesn't mean the candidate won't win. It just means that, statistically, if the race were run three times, he would likely win only one of those races. But statistics don't tell you the order in which that one likely win will occur—hence the low probability outcome coming up trumps in the (one and only) November election.

Investing forces you to look at companies the way you should really look at polls. Because by necessity you're making predictions about their future, you're really in the business of identifying the range of possible outcomes (through the process of asking the right questions and accounting for distorting biases) and then handicapping each of them. Happily, because

our credo at Marshfield has always been to view sins of omission as venial and those of commission as mortal, we've taken the position that we don't have to "vote" in every election—we can just sit the race out until we find a stock we really like. So if we're in real doubt about an outcome, if we don't have enough understanding to even handicap the race, or if the risk of a negative "surprise" is great enough, we just won't buy the stock.

But just as the presidential election made clear, when you do buy a stock you need to be prepared for the possibility that the high likelihood outcome will not be the one that actually happens. So even if you feel that you're on pretty solid ground statistically that things will work out in an advantageous way for a particular company, you still have to be prepared for the possibility that the future has other things in mind. That's why we not only tilt toward very conservative assumptions in our valuations but also why we always build in a fat margin of safety when we set our buy price. These precautions substantially lessen both the likelihood—and the pain—of being wrong.

So how do we figure out how to vote our investment dollars? Not this way:



Instead, we like to buy companies that we think are well-run and that can make money over time—but only when they're cheap, which means when other investors tend to view their future pessimistically, and only when we think that what's made them cheap is temporary in nature. You might well ask where we come off substituting our judgment for that of the crowd; how do we know that our "polling", if you will, is better than theirs? The answer is that for us to be better pollsters, we need to have some kind of analytical advantage over the crowd. We either have to have an **information advantage**, an **intellectual/perceptual advantage**, and/or a **process/discipline advantage** over everyone else. In other words (and in the parlance of today's debate), active management must show that it has an advantage over passive investing (e.g., an index fund) in order to earn its keep. So let's take each of these in turn.

<u>Information Advantage</u>

Much of the supposed information advantage experts have is entirely illusory. To start with, companies are by law constrained in giving information to favored analysts unless they make that information publicly available to all. But perhaps more important, not all "information" is informative. Knowing the details of daily foot traffic in every Yum! Brands restaurant is unlikely to give you a better view into future sales growth than understanding GDP growth trends in their primary markets. In order for information to have relevance within the context of an investment analysis, it has to have predictive value. And in order for it to have predictive value, the question the information is meant to help answer must actually be answerable. Given that we're talking about the future and that by definition the future is unknown, the question really is whether the information in question helps circumscribe the scope of likely outcomes for a company. In this context, it's important to understand that there is a huge difference between what is unknown but subject to a decent projection of odds and what is truly uncertain and any prediction about it is simply a stab in the dark. The classic example of the unknown but not uncertain is a coin toss: the outcome is unknown—it could either be heads or tails—but not uncertain; it's clear that one or the other outcome is assured. It may be hard to fully understand what the percentage of those voting for candidate A versus candidate B (or even C and D if you add in third party candidates) will likely be. But you know that one of them will win. Uncertainty, on the other hand, encompasses that for which the risks can't be enumerated, much less calculated, such as the location and consequences of the next terrorist attack.

Unfortunately, investing typically mixes the unknown with the uncertain. While Yum! Brands' growth rate is highly likely to be within a fairly comprehensible range, outlier events such as a food safety scare can materially alter that range. The trick is to know how to tell the difference between the unknown and the uncertain and then to deal as much as possible in the realm of the former (understanding that there are always uncertainties around the tails), leaving the highly uncertain to speculators. In the investing context, an example of an unknown is how many houses will be built over the next ten years. An examination of historical data pertaining to how many houses were built at various points in the housing cycle and projections of future household formation (also based on demographics and historical numbers) can give you a pretty good feel for the range of what is likely. This can then inform your view of what the future growth rate will be for NVR, for example. But there are some things that are so uncertain as to be effectively unknowable, such as when (and indeed whether) oil prices will hit \$100 a barrel again. No one, however well informed, can know that and any assertion to the contrary is bunk. Similarly, trying to predict when (and indeed whether) Snap will turn a profit or when (and indeed whether) fashion brand Coach will finally turn itself around is a fool's errand. Snap has too little history and Coach too much in the way of missing the mark editorially to be able to justify any such judgment. When something is highly uncertain and subject to forces that can't easily be quantified, analyzed, or predicted based on a significant sampling of past data, then it's impossible to assess the probabilities—and therefore the risk4

associated with it. Investing solely on the basis of such guesses amounts to nothing more than speculation.

But, as in polling, even if you are able to eschew the uncertain in favor of the merely unknown, your output is only as good as your data and your data is only as good as the questions you ask and the sample set that you look at. The further you get from actual fact in making predictions about outcomes in the future, the more speculative your bets become. And also as with polling, you need to try to get the most relevant and highest quality facts that you can, otherwise your handicapping will be skewed by false information. At the same time, you need to avoid pointless and distracting detail (such as foot traffic in stores) that fails to augment the analysis and can even serve to cloud it by providing false precision. When you're making predictions, which are inherently imprecise because you obviously can't know the future in advance, using the best building blocks you can find on which to construct your analysis is crucial.

So what kinds of facts matter to us and where do we find them? Mostly, we look at history, both the particular history of the company and also at the history of its industry (as well as that of analogous industries), at how that company and the industry weathered different economic environments over time, how they dealt with crises, how they priced their products and services in different environments, how they spent their money, and whether and when they bought back stock. SEC filings are helpful for this purpose, as are government databases, which can supply helpful stats on the broader industry and thereby allow us to work up a profile of the competitive forces at work. We look at what the company says about itself and at how it thinks about its business. We look at global GDP growth and how the markets served by the company have grown and changed over time. We look at the various forces we believe will have an impact on those things in the future and get a sense of what has made them tick historically. Perhaps most critically, we speak extensively to management and ask questions carefully designed to help us understand the parameters of what is unknown but capable of being assigned odds. In this regard, we believe we punch above our weight in both our access to management (which appreciates the long-term orientation of our questions) and the kinds of information we compile. While no one can (legally) have an information advantage when it comes to next quarter's earnings, we ask questions that probe management's approach to strategy and its view of the marketplace in which it operates. In this way, we develop a theory of the company using our own information and insights. Developing such an understanding can absolutely confer an informational advantage, though not of the kind that most analysts value. 1

While an information advantage over other investors is very hard to come by, information is nonetheless the coin of the realm. Moreover, having the ability to discern the difference

¹ We also like companies that seek out and maintain an information advantage of their own. For example, **Expeditors**, the non-asset based freight forwarding and logistics company with which we met last month in Seattle, explained to us why, when ocean carrier Hanjin filed for bankruptcy and its container ships were stalled offshore, they had no cargo onboard. Expeditors stayed up to speed on Hanjin's financials and understood that, notwithstanding its long-term relationship with Hanjin, it couldn't risk stranding its customers' goods. Competitors to Expeditors were not so disciplined or lucky.

between what is unknown and what is uncertain and having the judgment to steer clear of the latter can produce a material analytical advantage. But, at the end of the day, it's really how you cull that information, reducing it to its essentials, and then apply judgment to it within the structure of a repeatable process that differentiates the good investors from the mediocre.

Intellectual/Perceptual Advantage

Different investment styles offer different kinds of approaches to the analysis of information. Quantitative styles, for example, focus on pools of data from which investors mine relevant information via "proprietary" algorithms. Fundamental analysts, among whom Marshfield counts itself, seek to provide better insights in order to acquire and maintain an advantage over other investors.

When it comes to analyzing information, some things that are unknown but not uncertain can be best understood by those extremely and deeply immersed in a particular subject matter on which the rest of us have no business opining, such as the quality and likely success of a pharmaceutical company's drug pipeline. Those without specialized training and experience cannot possibly take an educated view on that. But those who have a deep understanding of the underlying science as well as the workings of the FDA, the U.S. Patent and Trademark Office, and the healthcare system as a whole are better able than the rest of us to understand how the odds stack up.² Interestingly, knowing that others have an intellectual advantage over you itself confers an advantage over competitors in the market; understanding where your polling is likely to be outmatched is an important way to sidestep error.

While we don't purport to have specialized drug industry or hot-shot technology expertise (not that such "expertise" helps much in the inherently uncertain and fast-paced tech world), we do have what we consider to be a competitive intellectual advantage within our particular circle of competence. A circle of competence includes those companies/industries that you have the tools to analyze with relative accuracy and where that analysis is likely to be superior to the analysis of others. It excludes businesses where you don't have an advantage in understanding both the odds of future events and the critical boundary between what is unknown and what is uncertain. It is difficult to overstate the importance of recognizing what lies within and without your circle of competence, as much success in investing lies in the simple act of avoiding mistakes.

We at Marshfield define our circle of competence as encompassing, among other industries, financial services as broadly construed (property casualty insurance, commercial and investment banking, payments, and financial analytics), other regulated industries (e.g., railroads, for-profit education), as well as such conceptually simple but difficult to execute

² This is not to say that understanding such a pipeline at a granular level is necessarily either relevant or dispositive in the analysis of a pharmaceutical company. The likely success of a particular drug is just one of many elements that needs to be understood in assessing the merits of an investment in such a highly technical and regulated industry.

businesses as fast food, logistics, retail, and manufacturing. This is not just because we tend to like these industries but because we believe that we have a differentiated ability to separate the good from the mediocre within them. We're particularly drawn to highly regulated industries (again, financial services, railroads, etc.), both because we believe regulation can actually bestow a competitive advantage on the best players in the industry and because we believe our own collective backgrounds confer an advantage in understanding the rather arcane world of regulatory development and enforcement. What these industries also have in common is the need for a disciplined approach to their businesses and a sharp focus on execution and blocking and tackling in order for them to succeed. This emphasis, in turn, is dependent upon an excellent management team, a culture designed to support the discipline and rigor demanded, and an industry structure that allows for such management and culture to extract "economic rents" in the form of sustainably good returns on equity and capital over the long-term.

Oddly enough, the first advantage we have in assessing these attributes is our long-term focus on them. Culture, in particular, is dismissed by most investors as "soft" and ill-defined. But this doesn't mean that you can't "know" it. And given that it can spell the difference between a company that, for example, is able to weather the transition from one CEO to the next—among the most dangerous events in a corporation's lifecycle—and a company that founders postsuccession, it is a critical piece of information. Companies as diverse as Union Pacific, Waters, and Expeditors have experienced remarkably seamless C-suite transitions due in large part to a strong and resilient culture that endures beyond a single charismatic chief executive. Because the ability to understand culture (and management, for that matter) has a Potter Stewart "I know it when I see it" ring to it, it's rarely discussed, hard to demonstrate, and impossible to get right if you don't deeply believe in its importance. But repeated attention paid to it, in the form of listening closely to management's description of it, identifying markers in various communications attesting to both its durability and its authenticity, and recognizing when it is or isn't appropriate to the business tends to pay off. Similarly, exercising the analytical muscle of industry structure analysis consistently and with rigor helps to build both capability and also a "library" of attractive structures against which to compare a new industry. So, going back to the topic of information advantage, if detecting that which others don't care about confers a distinct advantage, then the ability to analyze and understand the importance of that information only serves to enhance that competitive edge.

Process/Discipline Advantage

The polling geeks among you will understand the precision with which a good poll's methodology is developed and tested. Issues around appropriate sampling techniques (whether to stick with probability-based sampling or whether to employ non-probability tools like social media), framing of questions, and bias (including confirmation and nonresponse bias), to name but a few, abound—and each needs to be properly addressed in order to maximize the validity of a poll's results. As Nate Cohn, polling guru for The New York Times, has said,

Polling results rely as much on the judgments of pollsters as on the science of survey methodology. Two good pollsters, both looking at the same underlying data, could come up with two very different results....[P]ollsters make a series of decisions when designing their survey, from determining likely voters to adjusting their respondents to match the demographics of the electorate. These decisions are hard. They usually take place behind the scenes, and they can make a huge difference.

Not only is the decision-making process employed by investors critical to the "accuracy" of the investment decision, but an intellectual/perceptual advantage, as noted above, can be reinforced and deepened by a well-constructed process and a disciplined adherence to it. Marshfield's research and analytical process is designed to respond to many of the same concerns that inform polling methodologies. Its overall goal is to provide a framework within which better and more reliable decisions can be produced and evaluated (and reevaluated) over time. It is designed specifically to reject ideas that rely more heavily on what's uncertain rather than unknown. Most important, perhaps, it is designed to make it very difficult for an idea to make it into the Marshfield portfolio.

The process accomplishes these things in a number of overlapping ways. First, it seeks to systematize decision-making so that critical analytical steps, such as understanding the competitive ecosystem in which the company operates, are not inadvertently left out or given short shrift. It seeks to reduce margin for error by introducing conservatism at each step of the valuation process. By establishing cash as the default option if there's nothing good and cheap to buy, it uncouples buy from sell decisions, forcing each to stand on its own merits. It seeks to reduce return-sapping **emotional interference** through a group process better able to cancel out impulsive or anxiety-induced decisions, while preserving **emotional intelligence** as a tool for evaluating culture, management, and risk. It attempts to leverage our team's broad knowledge and experience by tasking it with identifying analogous situations in order to better understand the company being analyzed. And it specifically attempts to illuminate—and therefore, as much as possible, to eliminate—bias by explicitly asking each member of the research team to identify and discuss any latent biases, pro or con, that they might have relating to a particular company, industry or decision.

Conclusion

Investing, much like polling, is obviously not an exact science. By trafficking in what will happen in the future, this is necessarily the case. But by leveraging mutually reinforcing advantages in analytical capabilities, either because of an information, intellectual/perceptual, or process/discipline advantage, an investor can produce decisions that beat the market's "polls". Not all the time, and not in every stock, but over time and in the context of a judiciously constructed portfolio.

This is all very well and good under typical circumstances, you might say, but how do you deal with an investing environment that seems, almost overnight, to have moved from a state of the unknown to a state of uncertainty? How does one deal with the possibility of a border

adjustment tax or (not that we are in any way predicting this) even a constitutional crisis? On whichever side of the political divide you fall, it is hard to argue that recent elections, both here and abroad, have not both expanded the breadth of the seemingly possible and introduced elements of sheer unpredictability into the political and economic equation. At a minimum, the awareness of tail risk seems to have been amplified. The answer as we see it is to continue to understand what we can and can't know—and that might mean a more considered assignment of things to the "uncertain" category—and to rely more than ever on the guardrails of process that have served us well over the last twenty-eight years, through times of apparent placidity, times of surprising turbulence, and times of fears that failed to materialize.

Marshfield Associates

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