MOI GLOBAL

Series on Position Sizing (Part One): Research Stages

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> "There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones."
> –Donald Rumsfeld, Secretary of Defense (2002)

Earlier this year, we wrote about our thinking on how many stocks an investor should own in their portfolio. While the average mutual fund portfolio holds in the range of 100-200 stocks, we argued that the ideal number of stocks in a portfolio is closer to 25 and that anything over 50 was likely a significant negative indicator of the portfolio's potential to outperform. While there are strong theoretical reasons for why the optimal number of stocks in a portfolio is around 25, we also cited evidence that while most actively managed portfolios underperform, the top 25 stocks in the average actively managed portfolio actually tend to outperform. In other words, for all the talk of active managers underperforming, the real issue is that they hold too many stocks in their portfolios, not that they are no good at stock picking.

But even once you've decided how many stocks to own in a portfolio, you need to decide exactly what percentage of your portfolio to invest in each stock you've selected. So with this post, we're starting a series on how we think about position sizing at Ensemble Capital.

We consider three inputs when we size our positions.

- *Return potential:* Higher return potential stocks get higher weights, all else equal.
- *Conviction:* Companies in which we have more conviction about their future get higher weights, all else equal.
- *Research stage:* The longer we've actively researched a company the higher weight it gets, all else equal.

Return potential is pretty straight forward. We value companies based on the amount of cash we think they can return to shareholders over the long term. Conviction we'll explore in a follow up post. So today we'll focus on Research Stage.

Earlier in my career, I thought that it made the most sense to do all the research on a company up front and then invest the full amount you intended to invest at once. My thinking was that you shouldn't invest at all if you haven't finished your research and if you have finished your research, then you should make your full investment.

This makes good theoretical sense, but it ignores the way that humans actually collect information. The assumption I was making earlier in my career was that I could control what I learned or didn't learn during the initial research phase on a company and thus I could collect all the needed information to assess a company prior to making an initial investment. But this isn't how the human mind actually operates.

The short video below is a rather amazing demonstration of what we're going to discuss in this post. Give it a view before reading the rest.

Did you pass the test? If so, well done. But studies show that less than a third of viewers notice what's most important in the video. So even if you passed, if you were to take a lot of tests like this one, you'd likely fail over two thirds of them. Of course, now that you know what to look for, if you rewatch the video it will be impossible to miss.

This concept shows up in a number of different contexts. The "cocktail party effect" for instance, describes the way that when you are at a crowded cocktail party you are able to filter out all the many sounds and visual stimuli, and focus your attention on the person you are speaking to. Of course, while this is an important skill for humans, this filtering also means that when you are focused on a particular person at the cocktail party, you won't notice much about what is going on around you.

The psychological concept of "priming" plays a role here too. Priming is when your brain is prepared ahead of time to notice certain things (and thus, as we saw in the cocktail party effect, ignore other things). In the video, you were primed to notice the number of passes being made. But had the narrator not primed you, you would have been much more likely to notice what was really important in the video, as your focus would have been more diffuse. That being said, without being primed to count passes, you almost certainly would not have known how many passes had been made.

Importantly, these effects operate at an unconscious level. You might think that your conscious mind can overcome these effects and you can choose what to pay attention to. But all I have to do is say "don't think about an elephant" to demonstrate that the conscious mind has little ability to override unconscious thought processes.

OK, so what does all this have to do with position sizing? Basically, the amount of relevant information you have about an investment opportunity plays an important role in the likelihood that your assessment of that opportunity is accurate. Unfortunately, your ability to gather a portion of that information is limited due to the effects above.

Prior to researching a company you can not know what is most important to pay attention to. Until you figure out what to pay attention to, some critical aspects of a company will be literally invisible to you no matter how hard you look.

An example: Years ago, we invested in ScottsMiracle-Gro (SMG). I owned a house with a lawn at the time, but I had never paid that much attention to it. After researching the company and making an investment I suddenly found myself noticing a lot about my lawn (in particular, how poorly I had been maintaining it). I also started noticing other people's lawns. I began noticing ads on the radio for lawn and garden supplies and most importantly noticed that most of the ads for Scotts products were actually ads being paid for by Home Depot and Lowe's. Why in the world were the retailers paying to advertise a manufacturer's product? The answer to that question held the key to understanding Scotts.

All of this information had already been present in my life prior to investing in Scotts but had been effectively invisible to me. But actually making an investment in a company focuses the mind. While this type of information may not have been critical to the research process in isolation, it all worked together to help build the mosaic of understanding I constructed over time about Scotts. It broadened my context and helped me place critical information into a more robust understanding of the value proposition of the company.

The priming of our brains to pay attention to relevant information about an investment takes time. But it is critical to minimizing the scope of what Donald Rumsfeld called “unknown unknowns” in the quote at the top of this post. When you first start researching a company, most of the information is unknown unknowns and it is impossible to prime your mind to pay attention to things that you don’t even know about yet.

This process is not just about general information of the type I described in the Scotts example. It is also critical to absorbing the most important information from research reports and company data.

An example: When we first invested in Netflix in the summer of 2016 our thesis was similar to the same thesis we have today, with one key difference. We understood from our initial research that Netflix was building a moat around their business. And we understood that the more content they offered, the higher they could push up the subscription price while the higher they pushed the subscription price, the more content they could afford to offer. We knew that the company was underpricing their subscription offering and that it would move higher over time. But initially we didn’t have a robust view on where exactly pricing might go over time as we didn’t yet fully appreciate how massively important the assumption around long term pricing was to the value of the business. But as we spent more time as shareholders, we came to focus more and more on the long term subscription price and begin understanding data that we already had in hand in a new light.

As the video showed, the research stage position sizing process isn’t just about giving ourselves time to find new information, it is also about giving ourselves time to see the information that is right in front of our nose.

It seems like this should be so easy! But as George Orwell wrote in 1946, “To see what is in front of one’s nose needs a constant struggle.” This is particularly true because humans use “conventional wisdom” or “whatever the tribe believes” as an initial filter to process information. But investing is about building a differentiated point of view. Thus when we are first researching a company, you will not see what is in front of your nose, you will only see what everyone else says is in front of your nose.

Early in a research process, it is easy to recognize “known knowns.” We can also establish the “known unknowns.” But by definition, it is impossible for us know what the “unknown unknowns” are.

Eliminating unknown unknowns takes time. Not time of detached contemplation and consideration, but time filled with the emotion rich focus that comes with making an investment and caring deeply about its outcome.

After coming to understand this dynamic, Ensemble moved to a three stage research process.

- *Starter positions:* After performing initial research and coming to a conclusion that a stock is a buy, we will only take a very small position.
- *Research positions:* After a stock is qualified as a starter position we continue researching, but now we’re better primed to process what’s most important and can better focus on the critical information and filter out the noise. After a period of time following the company in this phase, we will increase our position size to about half of a full size position.
- *Core positions:* After following a company for a bit longer as a research position, we

begin to build confidence that there are no significant unknown unknowns that will impact the outcome. We've established the known unknowns and determined that they are not critical to the investment thesis or that they constitute a level of known risk that is acceptable within the context of the overall investment thesis. At this point we take a full size position.

Unknown unknowns can of course be positive attributes or opportunities, but in limiting our initial position sizes we are focused on limiting our risk of exposure to negative unknown unknowns. Importantly, this process is not about "averaging into a position." We do not increase our position over time in an attempt to pay a lower average price. Instead, the scaling into an investment is about increasing our position size as we become more confident that we have minimized the risk of unknown unknowns with potentially negative implications.

Next up in this series on position sizing, we'll explain how we transform qualitative assessments about a company into a quantitative conviction score and then use these scores to size positions in our portfolio.