January 1, 2020

2019 Annual Letter

Wiedower Capital is focused on high-quality companies and CEOs that have industry tailwinds behind them and long runways for growth ahead of them. Research is focused on how an industry may evolve over the next 5-10+ years and if a company's competitive advantage can expand within that evolution. Qualitative factors are emphasized over quantitative, and the portfolio is concentrated with long holding periods. See Appendix 1 for a summary of Wiedower Capital's investment philosophy.

Earlier last year, I went back and analyzed every single trade I have made since starting Wiedower Capital. Numerous times over the past few years, I felt like emotions and cognitive biases were getting in the way of me making more optimal decisions. By studying every buy and sell, I wanted to see if there were any patterns of mistakes I could correct.

Well, the pattern basically jumped off the page: there was a clear trend of me buying large positions too quickly after researching a new company. I would research a company for a month or two, get excited about its potential, and buy a 10%+ position. This behavior cost us money more often than it benefitted us.

I believe this tendency to buy full positions from the start is a holdover from earlier in my career when I focused on traditionally cheap investments that I thought could get less cheap (i.e. classic Ben Graham net-net type investing). Back then, I would invest in 20-40 companies at a time with position sizes around 1-5% each.

But as my investing philosophy evolved to focus on owning fewer higher quality companies, my portfolio management never evolved with it. Instead of owning 20-40 companies at 1-5% position sizes, I was now investing in 5-10 companies at 5-30% position sizes. Thus, when I was wrong about a company, buying a full position right from the start hurt a lot worse than it used to.

Basically, my investing philosophy and my portfolio management were no longer symbiotic. And sadly, it took me years to notice. As the first paragraph of every one of these letters repeats, I want to invest in high-quality companies for 5-10+ years. Over that long of a holding period, however, stocks are inevitably going to go through several volatile periods. Thus, there is no reason for me to rush into them.

There is no shortcut to building the confidence required to hold an investment for 5-10+ years. That confidence is slowly built over time by following the company and establishing trust in the management team. Given my concentrated, long-term investing style, I think it makes more sense to gradually buy into positions as my confidence builds, and as the market occasionally offers attractive buying opportunities.

Analyzing all of my previous trades made it evident that I needed to implement my investing philosophy in a less emotional way. I needed to create a process to mitigate my weaknesses and emphasize my strengths. Thanks to this analysis, I realized that one of my biggest weaknesses was getting too excited about newly researched companies.

I'm a bit like an excited puppy when I find a new company that aligns very well with my strategy. When it comes to investing, there is nothing more exhilarating than discovering a company that checks the high-level boxes I'm looking for: strong competitive advantage, founder-led, secular tailwinds, and a long runway for growth. When I find a company that right off the bat is a potentially great fit for our portfolio, I drop everything else I'm working on to research it.

Appendix 1 of every shareholder letter includes this line: "Even more than investing, I love learning. Investing just happens to be a perfect outlet for that—there will always be more companies, industries, and countries to learn about." This love of learning manifests itself the most in the first couple weeks of researching a new company. That is when I'm most engaged working late nights and on the weekends. Previously, I did a poor job of letting this initial excitement die down before making investment decisions.

To implement my investing philosophy in a less emotional way, I decided to transition my portfolio management to a model-based approach. The idea was to build a model from the ground up based on my own investing philosophy. The model would then make all buy and sell decisions for me.

The entire process of building the model I now use took me over a year. Not that I was working on it every day, but it took me a long time just to think through how to quantify the qualitative aspects of my investing philosophy. As I repeat in the first paragraph of every shareholder letter, "Qualitative factors are emphasized over quantitative." But when those qualitative factors become inputs into a model, they have to be turned into numbers.

How do I quantify barriers to entry? How do I quantify whether a CEO is aligned with outside shareholders? Those types of questions were not initially clear to me. And deciding how those different qualitative inputs should be weighted to most accurately reflect my investing philosophy required a lot of tinkering.

Next, I needed to write the actual formulas behind the model. In October of 2019, I hired a programmer to put the finishing touches on everything. Thus, the model has only been fully finished for less than three months. Before then, the model had been usable, but not complete, since summer of 2019.

Since last summer, my strategy has not changed—I'm still seeking high-quality companies and CEOs to invest in for many years—but how I implement that strategy has changed greatly. After my initial research on a company is complete, which generally takes anywhere from a couple weeks to a couple months, the first thing I now do is score the quality of the business. Every company I research is scored on the same criteria. While there is subjectivity to this scoring process, I have tried to make it as objective and repeatable as possible.

As discussed above, deciding what criteria to score and how to weight that criteria was one of the most critical aspects of building a model to take over my portfolio management. If the model does not accurately represent my investing philosophy, then I'm back in the same place I started: where my investing philosophy and portfolio management are not symbiotic.

Each company receives a quality score that is made up of three parts: moat, management, and understanding. The moat score is my rating of how strong a company's competitive advantage is. The management score is my rating of how good a company's management and board of directors are, including incentives and corporate governance.

Finally, the understanding score is there to represent how understandable a company is for me. Due to my life experiences, interests, and investing background, some businesses are inherently easier for me to grasp than others. For example, businesses that sell to consumers are almost always more understandable to me than businesses that sell to other businesses. Thus, B2B companies get penalized. For similar reasons, companies that

don't do a significant portion of their revenue in the US get a deduction as well. My understanding of other countries and economies is inherently less than the one I've lived my entire life in.

Another important element of the understanding score is how long it's been since my research began—recently researched companies are penalized. The score deduction for a company that I've been following for less than three months is enough that it's now almost impossible for me to invest in a company that I just finished my initial research on. This time-since-initial-research penalty is then gradually decreased over time.

Similar to that time-based deduction of the understanding score, I also implemented max position sizes (at cost) into my model that are based on how long I have been following a company. If I invest in a company within three months of when I first read its 10-K—which I described above as being very unlikely—the max position size I can make it is 2.5%. That max position size then gradually increases over the next three years until it reaches my maximum size for any position, which is 30%. To be clear, max position size at cost does not mean that is the position size. It's just the maximum size the model is able to recommend for that specific holding.

30% as the maximum allocation is not a number I picked out of thin air. It's based on Kelly Criterion calculations that I've run. The Kelly Criterion is a way to estimate what the optimal size is for any bet a person can make—from horse racing and sports betting to picking stocks. Based on the calculations I've done, my opinion is that the maximum I should ever allocate to one position is 30%. With that being said, the model recommending a 30% position should be very rare going forward.

When Trupanion briefly fell into the low-$20s in October—what I thought was an extremely undervalued price for one of our highest-quality holdings—the model still only recommended a position size of 22%. And then as Trupanion's stock rebounded—and thus my estimate of its expected value decreased—the model suggested gradually decreasing our position size, which is what I did.

If you remember from earlier, my main takeaway from analyzing all of my historical trades is that I have tended to buy large positions too quickly. My weakness is that I find a new company, get excited about it, and buy a large position before I understand the company and industry well enough to fully appreciate the risks. That realization only comes after that initial excitement dies down.

I believe this has also resulted in me overpaying for companies in the past. Had I been managing our portfolio through my model at the time, Facebook and Issuer Direct are two holdings that would not have been purchased at the prices they were. We continue to own both, and I believe they are high-quality companies, but the model would not have suggested purchasing either company until their stock prices dropped further (which, coincidentally, would have been late 2018 for both).

Nonetheless, I very purposefully built this model to protect myself against these weaknesses of mine. The model penalizes recently discovered companies and has small position sizes for newly researched companies. The net effect is that most new investments cannot be made until I've been following the company and industry for a minimum of 6-9 months.

To give a specific example, I first read Spotify's most recent annual report on 4/1/19. That is when my research started. Based on my estimate of the company's quality, the soonest my model will even allow me to invest in the company is tomorrow, January 2nd—nine months after I started following the company. Because Spotify is currently uninvestable by me, I do not have a valuation estimate for the company. If a company is uninvestable, there is no reason to value it. On my to-do list tomorrow is to go through my valuation process for Spotify.

When a newly researched company is scored, there is a minimum quality score it must achieve to even be considered for purchase. If that quality threshold is met, I go through my valuation process. If the quality

threshold is not met, the company goes on either my watch list or want-to-own list without me even attempting to value it. Valuation is left until the end to protect myself against biases.

If valuation is done earlier in my research process, it biases my opinion on the quality of the business. If I think a company is cheap, I may have a tendency to get excited about that potential undervaluation and overlook qualitative red flags, which I have been guilty of in the past. By doing valuation last, my opinions about the quality of the business have already been formed.

In choosing between the two, I'd rather my opinion of business quality influence valuation rather than valuation influence my opinion of business quality. If you're thinking that this may lead to overpaying for high-quality businesses—a previous problem I pointed out above—I agree and have tried to guard against that in my valuation score.

Similar to my process for judging business quality, every company is valued in the same three ways: a bottoms-up discounted cash flow analysis, a more top down industry analysis, and finally, estimating owner earnings and an appropriate multiple to apply. My goal when valuing a company is not to be precise. Companies have uncertain futures and I come up with a wide range of possible fair values to attempt to reflect that. It is not uncommon for the high end of my fair value range to be 100% or 200% higher than the low end. That fair value range is then compared to the current stock price to give the company a valuation score.

Just like the quality score, the valuation score has a minimum threshold that must be met to even be considered for purchase. This minimum undervaluation threshold is there as a barrier to help protect myself from overpaying for new companies I get excited about. Together, the quality score and valuation score are how all my buy and sell decisions are now made.

Using the quality and valuation scores, the model's goal is to constantly optimize our portfolio's expected value. As stock prices constantly go up and down, the expected value of each of our holdings is always changing. And how they change in relation to each other determines how each holding should be sized.

However, taken to its extreme, this would result in daily position size adjustments. That is why the model doesn't suggest minor changes. There is a margin of error in everything when it comes to investing and I believe there would be a real negative effect to me looking at our portfolio and making trades on a daily basis.

When it comes to buying a new position, that only happens when a company on my want-to-own list has a quality score above the threshold, a valuation score above the threshold, and, very importantly, inclusion into our portfolio would increase the expected value of our overall portfolio. If all three of those boxes are checked and thus a new position needs to be purchased, the model tells me what holdings to sell down and by how much, and that's what I do.

In summary, my research provides the inputs for each company via their quality and valuation scores, and then the model makes all portfolio management suggestions. I just do what the model tells me. There have been times where I'm feeling down on a holding and the model tells me to buy more and I do. Likewise, there have been times where the model tells me to sell down a holding that I'm excited about, and I do. In fact, that is the entire point.

This mental commitment to the model has allowed me to achieve my original goal: to remove emotion, bias, and subjectiveness from my investment process. It actually shocks me how few emotions I experience as part of my decision-making process now.

I briefly discussed the Trupanion example above. Whether it was selling other positions to load up on Trupanion as the stock price fell, or selling down Trupanion as the stock rebounded, there was significantly less emotion involved in those trades than there would have been previously. I trust the model because I designed it based on my own investing philosophy. And because I trust the model, I do what it tells me. If a certain trade increases the expected value of our portfolio, then that's the only logical thing to do.

The most recent adjustment I made to the model is how visible the inputs and outputs are. From early on, stock prices were hidden in the model. However, I could still see scores that gave me to have an idea of what the stock prices were. For example, if a company's valuation score was 8.2—because I built the model—I knew roughly what that correlated to. That needed to stop.

Now, everything is hidden. I run the model once a week and all I can see is cells with "Yes" or "No" in them—indicating whether I need to make a change or not. If a change is needed, then I dig in and see exactly what it is. Most weeks don't require adjustments and thus I have no idea what stock price movements occurred that week.

Anchoring bias is a very common problem among investors, and it's one I've struggled with in the past. Basically, this is when investors focus too much on past stock prices when making current decisions. An example is when an investor is hesitant to purchase a stock at $100 because they previously passed on it at $80 (i.e. the investor is anchored to the $80 price). But that is meaningless. What matters is the expected value from this point forward. That's it.

Thankfully, anchoring bias is not even a thing with this new portfolio management model. With stock prices completely disaggregated from my investment decisions, I don't even see prices until after the model tells me what needs to be done and I go to make the recommended changes. By the time I open Interactive Brokers to make those trades, the stock prices I see don't matter. I've already decided what I'm doing.

Realizing the benefit of removing stock prices from my investment process, I've taken it a step further. I used to get financial and investing news from a website that displayed in large print the live movements of stock market indexes and tickers at the top of each page. Because I checked that site almost daily, I was seeing what the market was doing every day. I no longer go to that site for my news. I replaced it with other sources that don't display live tickers. It's a subtle thing, but "out of sight, out of mind" works.

Likewise, I started using Twitter more often in 2019. I've found it can be a great way to connect with other investors, crowdsource idea generation, and aggregate news. However, a lot of investors on Twitter care about macro news, daily market fluctuations, and all sorts of things I don't want to see. Thus, I have muted a ton of words and phrases so, for the most part, I don't see anything related to topics that aren't helpful to me. Muted phrases include S&P, NASDAQ, Dow, VIX, P/E, CAPE, futures, stock market, and many others. Combining these few changes, I can now go weeks without having a clue what the overall markets—and our holdings—are doing.

Maybe other investors can check stock prices and market movements on a daily basis while still maintaining a long-term focus, but I started to notice the negative effects it had on me. When I accidentally do see daily returns, I can't help but think about them and our portfolio. But when I don't see those numbers, I don't think about them and I don't seek them out. My daily focus needs to be on learning and researching companies, not what the market or our portfolio companies are doing each moment. It's hard to worry about stock prices and the overall market if I don't know what they are doing.

One result of this model-based portfolio management is that my trading around holdings has increased. Importantly, buying new positions or completely selling out of current positions has not changed at all. This remains infrequent. But I am adjusting position sizes more often than I used to. As the stock prices of our

holdings constantly go up and down, their relative expected values are always changing. As I said above, I run the model once a week and make sizing adjustments when needed—generally every few weeks or so.

However, there's no guarantee that this increased trading is adding value to our portfolio. That is one reason why I'm tracking all inputs and outputs of the model over time. First, I can measure how our portfolio would have performed if trades were not made. If it turns out that our portfolio would perform better if I traded less, I could adjust the model to reflect that. If the data suggests that increased trading around positions adds value to the portfolio, I'll continue doing so.

Second, I'm tracking all inputs to the model with the hope that I will have enough data in a few years to improve the model with. For example, I may see that certain inputs correlate to future stock returns while other inputs do not. With that knowledge, the model can be adjusted and continually improved upon over time.

However, being a concentrated investor with long holding periods, it will be several years before I have enough of a sample size to get useful insights. What I want to do is be able to make these decisions and adjustments based on data and evidence, not emotions and gut feel.

The truth is, I don't know if I have a behavioral advantage over other investors or not. I believe the evidence points to not. And if I don't, I want to create an environment for myself that encourages and incentivizes better behavior. I want to create barriers that protect me from my areas of weakness. It's not easy to look in a mirror and admit what I am bad at. But I am very excited about what that process has resulted in.

Travis Wiedower

Appendix 1: Wiedower Capital's Investment Philosophy

1. Long-term focus: I look at companies through a long-term lens. When I invest in a new company, I go in with the mindset that I will own it forever (while recognizing that won't come to fruition very often).

   A company is worth its future free cash flow discounted back to today. A discounted cash flow analysis shows that the majority of a company's intrinsic value comes from the distant future, not near-term results. If how a company will perform over many years is the majority of its worth today, then the durability of their competitive advantage is of paramount importance.

   Because of this, my research is focused on how an industry may evolve over the next 5-10+ years and if a company's competitive advantage can expand within that evolution. This is only possible if the CEO is focused on, and incentivized by, the long-term success of the company. Often, the CEO traits I look for are found in passionate founders who are internally driven to see their own business succeed.

2. I'm very picky: The vast majority of companies are un-investable for me at any price. I have a small circle of competence (that is slowly expanding) and I have zero tolerance for management that isn't aligned with me.

3. Learning mindset: Even more than investing, I love learning. Investing just happens to be a perfect outlet for that—there will always be more companies, industries, and countries to learn about. Beyond that, a lot of outside disciplines indirectly help my investing. Much of what I consume on a weekly basis may not directly benefit my investment results, but I believe there is a lot of value to learning broadly and trying to understand the world better.

4. Alignment of interests: As much emphasis as I put on finding CEOs who are aligned with outside investors, I also want the same alignment between myself and my partners.

   Wiedower Capital is structured to align my own incentives and my partners around a long-term investment strategy. My performance fee is earned over multi-year periods and new partners are subject to a three-year lockup. In addition, performance fees can be clawed back, management fees scale down as assets under management increase, and assets are capped at $100 million.

Appendix 2: Historical Results*

Period	Wiedower Capital	S&P 500
2015	-11.91%	-1.37%
2016	19.19%	11.95%
2017	22.28%	21.82%
2018	-18.61%	-4.39%
2019	-3.36%	31.48%

Cumulative	0.98%	69.09%
Annualized	0.20%	11.43%

* Started February 24, 2015. Wiedower Capital results are net of fees and are based on a model account that has been active since inception. The model account pays fees as a non-qualified client, which is currently 2% per year. All accounts are managed the same, but individual account results may vary from the above results based on different fee structures and minor position size differences. S&P 500 results include dividends.