Trading Reflections

 $\begin{array}{c} \text{milanlx} \\ 03/15/2021 \end{array}$

Disclaimer: All opinions and information discussed below are from personal research and experience, and cannot be used as investment advice.

Roadmap

It has been almost one year since the fourth circuit breaker has been triggered in the stock market. Surrounded with fears and uncertainties, to maintain a sober state of mind during that period seems to be the hardest thing. To get relief from watching the digits declining, I sold out all my holdings right around the bottom of the market. In retrospect, seriously, that was my starting point of learning investment, even though the account was open back in late 2016. Just as my portfolio, I have been going through peaks and valleys in the past years, and hardly bring my account back to its historical high. However, there are a lot of lessons I have learned during the process, and I would like to write them down in case someone might find it enlightened.

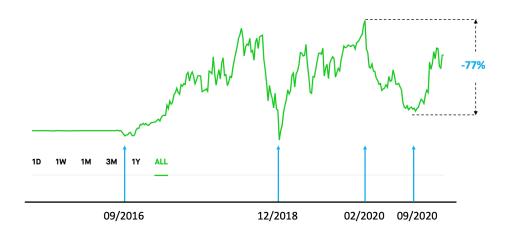


Figure 1: Screenshot of RH portfolio

The story began at September 2016, when my PhD life has just started. With the salaries I made during the summer internship, I began to look for some good candidate stocks to pour the money on. The first one came to my mind is BABA, since I have used the platform several times for online shopping. The second one is AMD, since their rival NVDA was the dominant GPU supplier for deep learning application, so that it might have some potential to catch up with the big brother. Well, honestly the former was chosen because it was much cheaper. Since the only name I have known is Warren Buffett, I decided to follow his well-known strategy, which is buy-and-hold. I kept accumulating these two tickers until early 2017, with a 100% margin. To be honest I have no idea

how risky it could be at that time. Once finished, I just checked my account several time per week to make sure everything is right. Luckily, the portfolio kept ascending, without turning negative until December 2018. I have tried out some other stocks using a similar logic, but these two are my dominant holdings (more than 80%) that I have never modified for years.

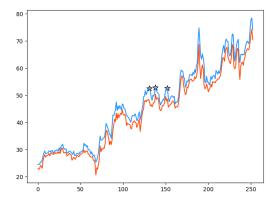
Obviously I didn't have any clue on why the market pulled back so hard. However, it was the first time my account turned negative, which is equivalent to a 100% loss of profit given the size of the margin. Luckily, at that time I was on the winter vacation back in China, where the time difference made it hard for me to take any action in time. As a result, I chose not to think about it anymore during the vacation. This strategy (ignorance) worked as a miracle, and my account has come back in five months.

Since then, I kept holding the stocks all the way till November 2019, when I cleared all my positions with nearly 100% profit. The main reason for this is I am afraid that another black Christmas might happen. Well, The story could have had a happy ending, if I didn't jump back in to the market at January 2020. It was an annoying experience to realize your expectation was wrong, while the stocks you used to own are soaring way higher. What's more, the media was full of bullish headlines to make me ignore the sporadic news covering the potential spreading of the virus. Everything seemed to work quite well until late February when the market suddenly tanked. As stated in the opening paragraph, I reacted with panic selling, and the real pain for me has just started.

The market bounced back strongly in April, while my expectation was proven to be wrong again. It was the first time that I realized how little I know about the stock market. I don't even have any idea about the indexes (DOW, NASDAQ, S&P), nor to say anything on the fundamental/technical. Being unwilling to accept the big loss, I decided to sit down and learn investment seriously (even as a research topic). The first step I took was to browse YouTube/stockwitz for stock recommendations and follow without hesitations. On the other hand, I also started reading books on options, and allocated more than half of my positions to try them out. By watching tons of videos, I was convinced that airline and oil would have a quick recovery as the tech has done, so on April I chose to started call positions (expire in June) on AAL and UCO, and kept adding in the dip all the way till I was out of cash. Unsurprisingly, most of them went to zero, while a V shape recovery has been confirmed for NASDAQ sector.

The failure and frustration have totally blew my mind. I could not take a moment to rethink carefully what I did wrong. Instead, I switched the focus to the tech sectors, and bought more short-term out-of-the-money call options. The strong willing to make up my loss quickly has turned that period to be pure gambling. Still, most of them have expired worthless, and my portfolio has bottomed since there was no more cash to bet. Seriously, this time I took a rest for two months, and made deep reflections on how I could make improvement in the future.

Luckily as usual but in a different way, with relative small amount of principal, my portfolio has recovered in a steady pace, and I am still working hard to get back to historical high with patience. I have totally discarded the previous ideology, and tried out something new with cautions. For example, I have coded some algorithm to detect a repeated pattern for later breaking out, and twitter scraper to keep track of daily stock related posts. For example, to track the unusual activity of options. While the system is still under updating and needed to be validated in a longer period of time, I would like to summarize the things might work by avoiding their bipolar counterpart.



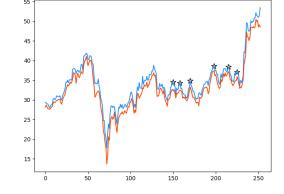


Figure 2: CHWY Signal

Figure 3: *UBER* Signal

Experience

- Try not to use cause and effect analysis when making judgment or decisions. In my understanding, the movement of market is influenced not only by objective but also subjective factors. A observation of $x \to y$ can be a pure random event. Even if there is a causal relationship, i.e., $y_t = f(x_t; \Theta_t)$, it is still hard to discover the parameters. Updates: later when I read Soros's book 'the New Paradigm for Financial Markets' I realize this is what he defined as reflectivity. Quite interesting!
- Keep it simple. Although I am not that good at math, but think about the elegant and precise equations that govern the world, i.e., $E = MC^2$. The expression is quite straightforward, but also remember it is still an approximation of the reality. Similarly, if your strategy and ideology for trading is also an approximation of perfection, it can also be something simple as long as it works with a certain winning rate.
- Dare to be independent and different, but in a right way. I remember reading somewhere that only 10% of people can make consistent profit in this zero sum game. If your decision making coincides with the mainstream, it is likely you are part of the 90%. However, don't force yourself to be different.
- Hedge your greedy with caution. Interestingly, I started to make consistent gains when switching my goal from making huge profits to not losing principals. If "buy low, sell high" is the most obvious way to make profit, then you have to fight against with your mindset of thinking the price would go higher and higher.
- Open to make mistakes and learn, but keep the loss within acceptable range. If you want to prove something is right, you might need to try out the alternatives and testify they are wrong. In Reinforcement Learning algorithm, allowing the agent to take some random actions would also improve performance. In this manner, the exploration of something you haven't done in the stock market may also boost your achievement. The aim is to learn, and profit might come alongside as a natural product.
- discover something from your everyday life. At least it works for me when picking stocks. I found stocks from courses, online platforms, eating out, and talking with friends from a different field. Actually the good companies are all around you, because they have beaten down other similar products in this process. In other words, enjoy the fruit of survival bias.
- Adapt to the tempo of the market.

- Only synthesize objective information
- Define and know your risk
- Let your emotion be your friend
- patient, patient
- simple plan, even if it is totally wrong.

Readings

- [1] Adaptive Markets: Financial Evolution at the Speed of Thought., Andrew Lo
- [2] Zero to One: Notes on Startups, or How to Build the Future., Blake Masters and Peter Thiel
- [3] The Most Important Thing Illuminated, Howard S. Marks
- [4] Basic Black-Scholes Option Pricing and Trading., Timothy Falcon Crack
- [5] Confusion de Confusiones., Joseph de la Vega
- [6] the New Paradigm for Financial Markets., George Soros
- [7] A Man for All Markets., Edward Thorp