PRE-MORTEM

1.

> "*If you have been asked to develop ML [Machine Learning] strategies on your own, the odds are stacked against you. It takes almost as much effort to produce one true investment strategy as to produce a hundred, and the complexities are overwhelming: data curation and processing, HPC infrastructure, software development, feature analysis, execution simulators, backtesting, etc. Even if the firm provides you with shared services in those areas, you are like a worker at a BMW factory who has been asked to build an entire car by using all the workshops around you. One week you need to be a master welder, another week an electrician, another week a mechanical engineer, another week a painter . . . You will try, fail, and circle back to welding. How does that make sense? Every successful quantitative firm I am aware of applies the meta-strategy paradigm (Lopez de Prado [2014]). Accordingly, this book was written as a research manual for teams, not for individuals.*" ~Marcos Lopez de Prado (2018)

The problem, which Marcos Lopez de Prado emphasizes in the above quote from his recent book "Advances in Financial Machine Learning" (2018), is that the process of finding successful financial strategy is a multi-person job, where each member of the team deals with a certain aspect of the whole process. In my case the tasks that could be separated out and assigned to different individuals are: data collection and organization, coding the parallelized algorithm, data backtesting, and the financial execution. Hopefully, the large amount of data that needs to be tested doesn't become overwhelming with all the different analysis parameters, and does in the end produce some viable results in the allotted time.

2. The scientific research and technological project deployment tend to be on the opposite poles of human intellectual endeavor. Scientific research is based more on hypothesis testing where one should be allowed to fail beyond one's comfort level in order NOT to neglect some detail that might bring a breakthrough; and in the end successful results might be a small fraction of all effort, but there are no shortcuts. The project deployment, however, tends to be more about efficiency, with lesser or greater disregard of every tiny detail, since one already has a big picture. Although most of the research work on this project was done prior to the OSV grant, deciding to pursue some research tangent could potentially consume a lot of time and eventually turn out to be a dead end.

3. Fundamental failure of this quantitative approach would be if it didn't bring superior risk/reward performance compared to other established financial strategies; although having another non-correlated strategy could be a plus for the similar performance if achieved. There are multiple ways this failure can play out: either some financial instruments might perform worse than others and thus the average performance would be diminished, or the synthetic, rather than historical data backtesting could show lower potential returns and/or higher risks.

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