



BOOK REVIEW

The Signal and the Noise:

Why So Many Predictions Fail – but Some Don't

Komsan Suriya

This is the review of the book titled “The Signal and the Noise: Why So Many Predictions Fail – but Some Don't” written by Nate Silver. The book was published by The Penguin Press in 2012.

I am sure that the topic of prediction and forecasting is interesting among economists especially readers of EEQEL. Many papers in 2012 in EEQEL deal with the accuracy of forecasting. Some papers find appropriate techniques to make the forecast accurate such as Kanjanatarakul and Suriya (2012a), Kunanopadol and Suriya (2012), Pathompituknukoon, Khingthong and Suriya (2012) and Suriya and Sudtasan (2012) . Some papers predict the impacts of some counterfactuals on the nationwide economy which also needs the accuracy such as such as Kanjanatarakul and Suriya (2012b), Li et al (2012) and Zhou et al (2012).

Nate Silver, the author of the book, begins his introduction by raising Paul Krugman's word to him in 1970s that the world is at the point for “vast amounts of theory applied to extremely small amounts of data”. He mentions that human tries to model the world with crude data and hidden assumptions behind the model. Consequently, the predictions are never close to reality but human often claim they are.

Nowadays, we are in the era of “Big data” when we generate huge amount of data daily that are larger than we can ever imagine during just last two years. Human tries to find suitable ways to process these data and transform them into knowledge. However, this process is somehow takes time.

The author says an interesting sentence “Before we demand more of our data, we need to demand more of ourselves.” This comes when he observes that the more data we use in predictions, the more failures that the predictions yields. He points that even though the predictions sometime also succeed, the odd-ratio of being failed rises.

Studying pattern in the past to predict the event in the future is human’s basic need. However, the future always shocks us by introducing new pattern that we don’t know or even opposite to what we believe. When everything in the world is subjected for the change, there is nothing that we can rely on the patterns in the past. This is one thing that makes the predictions fail.

A lot of assumptions that have to be made behind the predictions are the second source of the failure. We have to admit that human cannot mimic the real world no matter how they try. We might lack of crucial knowledge about relationships of matters. We might also lack of data to fill our curiousness. Therefore, it is unavoidable to make some assumptions. Then the danger of the predictions originates from this point. The predictions will be workable just under the circumstances that compile to the assumptions. It means, unfortunately, that under other circumstances, the predictions will probably fail.

The third cause of failure is human error. Suppose we know everything perfectly and can model the world in every detail, we are subjected to the imperfection of human beings. It is true that human try to move closer to the perfection of God. But it is also true that we never and will never reach that stage. Therefore, the imperfection makes the prediction biased toward self-interest.

Nate Silver shows a lot more interesting points that make the predictions fail and how to improve them. Among his 13 chapters, I like a hopeful chapter, chapter 8, “Less and less and less wrong”. We have to admit that we can never do every right at every time. The only thing that we can do is to reduce the mistakes.

Human will never be perfect as God. Therefore, human will never predict everything accurately. To tell us what would accurately happen in the future, only God knows.

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