

Take a chance on this

Fooled by Randomness: The Hidden Role of Chance in the Markets and in Life

by Nassim Taleb

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Peter Bernstein's 'Against the Gods' has found the perfect counterpart in 'Fooled by Randomness'. Both share a first theme, randomness, but they diverge in their second theme, which is how to deal with chance. Whereas 'Against the Gods' is an ode to scientific progress, in particular probability, financial theory and risk management, 'Fooled by Randomness' takes a nihilistic view of such progress.

The first thesis here is that chance plays a major role in financial markets and, more generally, in life-long success. Ergo, we should be more humble about our achievements. Likewise, we should view 'track records' with a sceptical eye. This alone makes the book worth reading.

The problem, of course, is that we only observe one actual track record. Instead, Nassim Taleb advocates imagining alternative 'sample paths'. Drawing from hypothetical Monte Carlo simulations, he recommends evaluating a track record among possible alternatives. This yields a number of interesting insights. Luck is a function of the variability of outcomes and number of initial players. For some professions, luck plays a minor role, eg, dentistry or law. But for others, such as proprietary traders, the effects of luck and attrition are likely to overwhelm skills.

This issue also has implications for the debate on the equity premium. Taleb debunks such notions as 'markets will always go up in any 20-year period', which have been used as a basis for investing in stocks for the long run. Indeed, US stocks have done spectacularly well in the twentieth century. The question is whether this can be ascribed to survivorship bias. Starting in 1900, investments in Russian or Argentine equities did not fare so well. In his words, 'the highest performing realization will be the most visible'.

I agree with this. Real life is littered with examples of the role of chance and erroneous inferences. Presidents take credit for economic expansions or suffer blame for economic downturns that have little to do with their actions. Corporate executives claim success from bold strategic actions such as mergers; others fail miserably fol-

lowing apparently similar actions. Strategists at top investment banks make convincing recommendations that turn out to be not much better than coin tosses.

This might not matter if the public recognised the role of chance in such outcomes. But Taleb argues that humans are not 'wired' to comprehend probability. I feel we would all benefit from widespread teaching of probability and statistics, as early as in high school.

While laudable, most of these ideas are not new. John Paulos also bemoaned mathematical illiteracy in his 'Innumeracy' books. Finance academics also recognise the role of chance in the track record of asset managers. After all, this laid the groundwork for index funds, which have become wildly successful. Survival is also by now recognised as a worrisome source of bias (see Brown *et al*, 1995, and Samuelson, 1994). Jorion and Goetzmann (1999) in fact examined the cross-section of global stock markets over the twentieth century, which represent alternative sample paths. Curiously, US equities have the highest return for this sample, which supports the survival story. There is also much work on the effects of data mining and uncertainty in true probabilities, known as 'estimation risk', in finance research.

Dealing with randomness

The second theme of the book is more controversial, in my view, in its prescriptions for dealing with randomness. Taleb discusses situations where traders 'blew up' after an apparent string of profitable years. This is defined as losing 'more money than one ever expected'. John is a high-yield trader, Carlos an emerging markets wizard. Other examples include MBS funds, Victor Niederhoffer and LTCM. All of these have in common short positions in options, which generate steady income but rare and spectacular losses.

Instead, the author advocates dealing with extreme events by buying options (such as stop-loss strategies), on the grounds that they are generally 'undervalued'. This is not so clear. Indeed, much academic research has shown that options have implied volatilities that are too high, even over long periods. Thus buying options is an expensive form of insurance. After all, the richest investor in the US is Warren Buffet, who pursues opposite, value-based strategies that sell insurance when the price is right.

We also learn little from what Taleb describes as truly great traders, such as

George Soros. Such traders seem to hold no firm opinion, changing their minds as often as a weather vane. This absence of 'path dependence' is seen as a virtue, while 'market fools' were earlier described as having a 'tendency to change their story'.

Finally, I eagerly awaited the punch line, which should have been an explanation of the author's trading strategy. This is described as follows: 'I will use statistics and inductive methods to make aggressive bets, but I will not use them to manage my risks and exposure.' There is, unfortunately, little information as to how statistics can be used for the former purpose but not the latter.

Later, the whole concept of Markowitz portfolio risk is rejected out of hand as 'charlatanism'. I feel quantitative risk management *does* offer a set of useful tools, provided they are adapted to the purpose at hand (I agree that recent historical data is inadequate to measure infrequent risks). But 'stress-testing' methods are no different from the alternative proposed by Taleb, which consists of intuitively assessing the worst loss in some scenarios. Even such method is limited by the brain's ability to concoct worst-case scenarios.

Overall, this book is worth reading. Its primary message, which I support, is that chance plays an enormous role in success in financial markets. Taleb's stratagem of alternative hypothetical paths also provides a useful method to evaluate the effect of randomness. Scepticism is the best lesson to be learned here. ■

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