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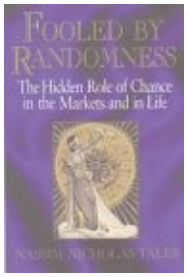
Reviews

'Fooled by randomness'

reviewed by Mark Wainwright

BOOKMARK



Fooled by randomness − The hidden role of chance in the markets and in life

If you watch a steam engine, you may not know how it works but you can soon get a fairly good idea of its behaviour, and you can predict its future behaviour accurately. Even though you don't understand its workings, you can see it's a pretty simple machine, so you can trust it to behave in a simple way: you have confidence in your predictions based on a short sample of its behaviour.

Most things in life are not like steam engines, but people treat them as if they were. Life in general, and markets in particular, involve large random factors, have complicated stochastic structures, and regularly spring nasty surprises. Their behaviour over short timespans may have so little significance as to be nothing but noise. Extrapolation is impossible or meaningless. Yet try as we might, we continue to see patterns where none exist, misunderstand the role of randomness, seek explanations for chance phenomena, and believe that we know more about the future than we do. And that is the point of this book.

Nassim Nicholas Taleb is a market trader and a professional skeptic. He claims mathematical naivety, but he is clear on one thing: the importance of understanding the structure of random events, their significance and, especially, insignificance. He clearly sees that this understanding is more important than actual calculations: "Mathematics is principally a tool to meditate, rather than to compute". He has seen innumerable traders go to the wall − "blow up", in the picturesque jargon of the trade − when a seemingly successful career is brought to a spectacular end by some "unexpected" market collapse. "No−one could have predicted *that*", they say, sadly shaking their heads as they leave the trading floor. They have been fooled by randomness.

There are many ways of being the fool of randomness. One, as here, is to fail to predict the rare event. Nothing can be more certain than that the unexpected will happen sooner or later, but lulled into a sense of security by the periods of relative calm between, people forget to allow for it. Another is to see significance in some random pattern. Taleb explains with crystal clarity why the more often you look at some fluctuating quantity (the value of your share portfolio, for example), the less meaning your observations have. Yet he sees traders who watch prices move up and down in real time on screen − the changes are so small as to be completely random − and think they are learning something.

Another, more insidious, is the "survivorship bias": in a random population, some items will be more visible than others. Say we have a collection of traders whose strategies do no better than random: they will have a good year half the time, a bad year the other half. Half of them will have a good year. A quarter will have two good years in a row, and so on. One in 32 will do well five years running. Of course, it never occurs to them that their success is random: they attribute it to their superior strategy, and imagine they are in the top 3% of traders. The rest of us see an advertisement for an investment fund showing a consistent good performance over five years. "They must be good", we think, not stopping to think that there are many, many competing funds and it is ones who are doing well whose advertisements we will see, even if their success is entirely due to chance.

Taleb's examples are by no means restricted to markets. Random fluctuations and the survivorship bias exist in all fields. And by another effect he notes, they can be magnified by a positive feedback loop: he calls the effect "bipolarity". An actor who flukes an audition becomes known to more people (and directors), and as a result gets more parts and becomes even more well−known. A disastrous piece of software makes a fluke distribution deal, and then suddenly everyone wants it so they are compatible with everyone else.

We are built to see patterns, to find causes for things, and to believe in our own rationality. We cannot help doing it. The attraction of Taleb's book is that he is very well aware of this. He knows nothing he says can dispel the illusions created by randomness, and that he is as susceptible to them as anyone. His only advantage is that he is aware of the failing, and can try to play tricks on himself to circumvent it − by denying himself access to junk information, for example. The book's short but excellent final section deals with this Zen−like problem of trying to break oneself out of a mould of thinking that cannot be broken, even though one recognises its shortcomings.

Taleb's prose is racy and readable, even if it occasionally betrays a charmingly non−native command of English; his publisher, one feels, could at least have provided a copy−editor, if only to remove almost all occurrences of the word "such", on the uses of which the author's views are eccentric. But it seems quite possible that his headstrong personality led him to refuse any interference. His style is idiosyncratic and vigorous, but none the worse for that.

Taleb himself, incidentally, whose family were ruined in the Lebanese civil war, is the founder of a firm which thrives on unexpected events. He reckons that whereas other traders, by forgetting the rare, unexpected events, notch up steady profits which are wiped out by occasional catastrophic losses, he can take an opposite strategy, which he calls "crisis hunting". He did very well out of the market crash in 1998. He seems to be at home in several languages, and to have a fine appreciation of high culture. Yet strangely, the one question he does not ask is that of the value of what he is doing. Does anyone, apart from himself (or whoever's money he is investing), gain by the work he does? Does it contribute in any way to the wellbeing of mankind? It is not, of course, a question that one expects a book by a market investor to address, but there is nothing typical about this book. With his sensitivity to questions of what is valuable and important, it would be surprising if he has not considered this question, but he is silent about it in the book.

On the other hand, whatever the worth of his trading work, he has written this book, and that itself is a contribution of enormous value. The book is classified as "General Business/Finance/Investment", but it is

nothing so specialised: many of his anecdotes are drawn from finance, but what Taleb has written is a manual of how to think. I recommend it to all *Plus* readers.

Book details:

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Nassim Nicholas Taleb
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