SOCIETY OF ACTUARIES

Article from:

Forecasting & Futurism

September 2009 – Issue 1

BOOK REVIEW

Fortune's Formula: *The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street*—by William Poundstone

Review by Dave Snell

This book is a concise look at the evolution of formal investment theory and related financial forecasting, with continual contextual references to its ties to gambling and to organized crime. Additionally, it is a hilarious and insightful history of gambling from the Bernoulli's in the 1700s through the hedge fund traders of the late 1990s.

The author devotes over 50 pages to notes and the index. This was appreciated since I wanted to look up more about so many of the anecdotes he included.

Poundstone poignantly describes the downfall of high-flying firms such as LTCM, where the investment wizards went from the darlings of Wall Street to the dredges of the investment community in large part because they were so clever; and they started to believe they were infallible.

> One LTCM road-show presentation was held at the insurance company Conseco in Indianapolis. Andrew Chow, a Conseco derivatives trader, interrupted Scholes. "There aren't that many opportunities," Chow objected. "You can't make that kind of money in Treasury markets." Scholes snapped: "You're the reason - because of fools like you we can." (Page 281)

Soon afterwards, the derivatives market started to implode and LTCM lost hundreds of millions of dollars in a matter of weeks.

Warren Buffett marveled at how "ten or 15 guys with an average IQ of maybe 170" could get themselves "into a position where they can lose all their money." That was much the sentiment of Daniel Bernoulli, way back in 1738, when he wrote: "A man who risks his entire fortune acts like a simpleton, however great may be the possible gain." (Page 291)

Poundstone also points out the real world flaws in some theoretically appealing scams. The St. Petersburg Wager seems mathematically correct; yet it overlooks a vitally important constraint (pages 182-184). Another is the unfounded weight we unconsciously give to historical returns, as evidenced by his retelling of another Warren Buffett story:

> In a 1984 speech, Buffett asked his listeners to imagine that all 215 million Americans pair off and bet a dollar on the outcome of a coin toss. The one who calls the toss incorrectly is eliminated and pays his dollar to the one who was correct. The next day, the winners pair off and play the same game with each other, each now betting $2. Losers are eliminated and that day's winners end up with $4. The game continues with a new toss at doubled stakes each day. After twenty tosses, 215 people will be left in the game. Each will have over a million dollars. According to Buffett, some of these people will write books on their methods: "How I Turned a Dollar into a Million in Twenty Days Working Thirty Seconds a Morning." Some will badger ivory-tower economists who say it can't be done: "If it can't be done, why are there 215 us?" "Then some business school professor will probably be rude enough to bring up the fact that if 215 million orangutans had engaged in a similar exercise, the result would be the same - 215 egotistical orangutans with 20 straight winning flips." (Page 314)

The author follows the lives of a few major contributors to investment theory, information theory, and betting theory: Claude Shannon, who invented Information Theory and paved the way for the digital computer age; John Kelly, who developed the formula for gains with no possibility of ruin; and Edward Thorpe, who built upon these findings and beat the roulette wheels, the blackjack tables and the investment fund managers.

It's a fast read—only 329 pages before the notes and index. You bet I recommend it! ▼

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