
BOOK REVIEWS



By Mark Kritzman

ICEBERG RISK: AN ADVENTURE IN PORTFOLIO THEORY

By Kent Osband

(Reviewed by Craig W. French*)

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“Ignorance is Blight”... Devlin Advogado’s scrawled message across his desk left me with an unsettled feeling, similar to the one I had a long time ago while reading Robert Pirsig’s *Zen and the Art of Motorcycle Maintenance*. Perhaps academic research will someday quote from Kent Osband’s *Iceberg Risk*, much as Richard Roll, in his famous 1977 Critique of tests of the CAPM, quoted from Pirsig. Osband endeavors to help us avoid blight in this enlightening and entertaining story as we follow supersharp risk analyst Devlin and his pragmatic

manager, Conway Wisdon, on a wild ride through the world of investment banking risk management.

But *Iceberg Risk* is more than a novel; indeed, it is really two books in one: each chapter covers the intuition of its subtopic first, through the clever device of Devlin and Conway’s saga within Megabucks Investment Bank; and then delves more directly into the mathematics. Of the math, the reader is encouraged to explore “about as much or as little as you want,” a feature I especially appreciated given my low-calorie mathematical diet. And, just as the novel part is an entertaining read, the quantitative part is a useful summary of the mechanics of portfolio management theory.

Part I of *Iceberg Risk* covers the statistics of probability,

covariance, and correlation, Pascal’s triangles and Bernoulli variables, IID versus non-IID estimates of tail risk, Tchebyshev’s inequality, the Kuhn–Tucker conditions for the solution to a Lagrangian optimization, mixtures of discrete and continuous probability measures, De Finetti’s theorem, the problems with VaR and the ubiquitous (in finance) normality assumption, and even *computer sex* (read the book!). Osband gives us a quick introduction to matrix math (though it is even more sparse than the helpful section in Markowitz’ 1959 book) before concluding the first half of the book with conditional multivariate normality.

Part II of *Iceberg Risk* offers a unique and thoughtful approach to overcoming the deficiencies of standard risk assumptions for portfolio management. In this

part of the book Osband covers convex and nonconvex utility, regret aversion, choice theory, the appraisal ratio of Treynor–Black and even delves into the Bayesian approach to statistics. Partition functions are introduced as a method of combining conditional return distributions with multi-regime risk aversion. Without resorting to Monte Carlo simulation techniques, Osband proposes a numerical approach to generating risk estimates, since there is no closed-form equation available to solve the issue. He even shows how to account for options and other nonlinear payoff assets.

Osband's approach to risk management is fresh and appealing. It would be worthwhile reading for risk managers and portfolio managers. One aspect I liked very much about his writing style is that the characters represent very distinct human traits, much like those of another of my favorite authors, Ayn Rand. For example, we are introduced to the concept of regret aversion when Conway meets Regretta:

“He spun around to see a raven-haired woman dressed in black. She was beautiful, but with the saddest eyes Conway had ever seen. ‘Pardon me for eavesdropping,’ she said, ‘But if Dr. Know-nothing can't help you, maybe I can.’ ‘Go away, Misery Girl,’ snapped Devlin. ‘We don't need you.’ ‘Oh, I think you do,’ she said ... ‘Now here's

what I think you need to do. First measure every outcome in terms of its gross percentage return ... Second, square that return and take the negative inverse. Third, form the probability-weighted average of the various negative inverses. Fourth, pick the portfolio that generates the highest probability-weighted average. Am I being clear?’ Devlin and Conway were blown away. ‘She does math,’ mumbled Devlin to himself.”

Osband makes the observation that “The mainstream seems less interested in managing risk than the appearance of risk.” Readers of Osband's *Iceberg Risk* might just become a bit less mainstream for the reading.

PRACTICAL SPECULATION

By Victor Niederhoffer and Laurel Kenner

(Reviewed by Mark Kritzman)

Never have I read a book with so many analogies to investing: tennis, fishing, physics, skyscrapers, storks, chess, the Catholic Church, and even the movie, *Invasion of the Body Snatchers*, to name a few. Amazingly, most of these analogies are quite apt, and some reveal profound insights. And, as you might suspect if you know anything about Victor Niederhoffer, he and his co-author, Laurel Kenner, embrace controversy with open arms. Among their more provocative claims is the unwitting complicity of Alan

Greenspan in the World Trade Center attack.

I first became aware of Niederhoffer, the squash player, from players who competed against him. Although his achievements on the squash court are legendary, those he played against seem to remember more about what he wore at matches than the beatings they experienced. I also heard of Niederhoffer from University of Chicago Professor, James Lorie, who would tell “Victor stories” at the CRISP seminars. Professor Lorie seemed especially proud to have as his namesake Niederhoffer's pet monkey. Most people in finance, however, know of Niederhoffer as the hedge fund manager who blew up during the 1997 Asian crisis, shortly after writing a best selling book, *Education of a Speculator*. These glimpses of Niederhoffer's storied past give perspective to his new book with Laurel Kenner, *Practical Speculation*.

This is an unusual book — unusual in the disparate range of sources, experience, and knowledge the authors bring to bear on investing, and unusual for the original and often profound wisdom they impart about many of life's challenges. Moreover, it's unusually amusing, especially for those with a fondness for irreverence.

Practical Speculation is divided into two parts. The first part debunks many of the time honored beliefs about investing, including the merits of momentum strategies, value strategies, technical analysis, fundamental analysis, the wisdom of Benjamin Graham, and even the probity of his private life. He devotes an especially derisive chapter to *Barron's* columnist Alan Abelson, as a guide for detecting propaganda.

The second part of *Practical Speculation* offers specific advice about investing. You may question why you should care for advice from someone who failed so spectacularly. It is because prior to Niederhoffer's collapse, he accumulated one of the best track records in the industry, and has since rebounded nicely. These experiences provide the grist for a litany of valuable lessons, which he and Kenner impart with candor, humility, and wit. They even share letters of condemnation sent to them from those who follow their monthly columns on CNBC Money. "You belong in jail," is a typical refrain.

One of my favorite chapters deals with hubris. Niederhoffer and Kenner offer several indicators of hubris, including the construction of skyscrapers, appearance on magazine covers, paying for naming rights of stadiums, and placing celebrities, knights, and lords on boards of directors — the "lords on boards" indicator. According to their clever statistical analysis, hubris begets underperformance while humility outperforms. They are quick to quote Dizzy Dean, though. "It ain't boasting if you can do it."

Their chapter on lessons from tennis features a series of "on the court" — "in the market" comparisons, including grass courts and random prices, inferior opponents and speculators, stamina and asset base, and racquets and Internet connections.

Some of their best advice has applicability beyond market speculation. Intended as a guide to reduce trading costs, they offer lessons on negotiation. This chapter is well worth the price of the book for anyone intending to purchase a new car. Prepare to spend Christmas Eve in a show

room, though, if you want a really good deal.

Niederhoffer and Kenner wholeheartedly embrace the scientific method and employ a variety of statistical tools to make their points. Fortunately, they are adept at communicating complex concepts in simple terms, though sometimes at the expense of their villains. Regulators at the Food and Drug Administration, for example, serve to illustrate the distinction between a Type I and Type II error. The FDA commits a Type I error when they allow a harmful drug and a Type II error when they reject a beneficial drug. Niederhoffer and Kenner include a disturbing tally of the thousands of unnecessary deaths resulting from several FDA Type II errors.

Niederhoffer and Kenner dispense pearls of wisdom for both the seasoned professional and the novice about investing and much more. Though you may not agree with all that they write — I can't imagine anyone would — they will compel you to think and very often, cause you to smile.