Seminar Leader
Subject Outline
Comments from Previous Attendees
Who Should Attend
General Information & Fees
Locations and Dates

A Seminar with Laptop Computer Lab

Chicago, IL - June 21st 2002
University of Chicago Gleacher Center
(312) 464-8787

Stanford University - July 19th 2002

New Yor, NY - September 18th 2002
Location To be Announced

For more information,
Call 800-400-2120

In dealing with uncertainty, there is no substitute for experience. And as we enter
the new millennium, computer simulations can provide a lifetime of experience in a
matter of seconds. This is enhancing our perception of risk and uncertainty as
dramatically as x-rays enhanced our perception of broken bones. Bring your laptop
computer with Microsoft Excel to this seminar and learn how to simulate simple
portfolios, retirement accounts, options and risky projects. All additional software is
included.

Sam Savage is an acclaimed author and lecturer whose hallmark is the clear explanation of
traditionally confusing subjects. He is a Consulting Professor at Stanford University's Department of
Management Science & Engineering and President of AnalyCorp, a firm that develops executive
education programs and software for business analysis.

"Sam Savage is a rare expositor.
He has a killer instinct for the
heart of the matter and a fabulous
talent for making it fascinating,
easy, fun, and, perhaps most
important, profitable."

"Rarely has such sound theory
been provided in such an
entertaining manner."

"This is the most common
sense, easy to grasp
approach to evaluating risk
that I have ever heard"

- Peter L. Bernstein
author of "Against
the Gods - The
Remarkable Story
of Risk"

- Harry Markowitz
Nobel Laureate
in Economics

- Steve Grittner
ARCO
Petroleum
Investment, Risk, and Simulation in Spreadsheets will enhance the management of investment or risk modeling in:

- Banking
- Pharmaceuticals
- Electric Utilities
- Research & Development
- Financial Services
- Semiconductors
- Health Care
- Telecommunications
- Manufacturing
- Trading
- Petroleum
- Venture Capital

...and any other industry involving uncertainty.

**SUBJECT OUTLINE**

The Basics of Simulating Uncertainty
Connecting the Seat of the Intellect to the Seat of the Pants

By generating tens of thousands of random numbers, computers can simulate uncertain future scenarios. The graphical output of these programs provides an intuitive feel for uncertainty not usually provided by the statistics you were taught in school.

**Diversification and Risk Reduction**

We have all heard that you shouldn’t put all your eggs in one basket, but how many baskets should you use?

You will learn how to create interactive graphs like the one at right based on historical data (in this case Hollywood film revenues) and evaluate the effects of diversification among investments.

**The Flaw of Averages**

You may have heard the story about the statistician who drowned while crossing a river that was on average 3 feet deep. This is a classic example of what Dr. Savage calls the Flaw of Averages. Unfortunately the statistician's fate is analogous to what may happen when "average" values of uncertain numbers are plugged into financial plans.

Simulating the financial plan not only maps out the river-bottom before you wade in, but also suggest the safest place to cross. The example below shows the cash remaining in a retirement account assuming "Average" returns (left) vs. simulated returns (right).
Statistical Dependence
Words like correlation and covariance do not adequately describe this important subject at the heart of investment theory, and furthermore they confuse people.

Models based on raw data, on the other hand are often easier to understand and more adaptable than traditional methods.

Classical statistical tests are being replaced by Berkson's Inter Ocular Trauma test which measures whether or not the evidence hits you between the eyes.

**Since 1990** Dr. Savage's publicly offered seminars have armed thousands of managers with practical approaches for dealing with today's turbulent business environment. Comments from some past participants:

"I found this complex subject matter as presented to be easily absorbed, eminently practical and immediately useful."

-Keith J. Birdwell
Budget Director, Harborview Medical Center

"The seminar was stimulating, eye-opening, and of immediate value. Clear, practical examples provided effective guidance on how to tackle real-world problems."

-Paul Lundegard
Asset Management Group, Unocal Corporation

"Business schools teach the theory and the math, but Sam's approach is intuitive and visual. His tools work right in the spreadsheet, so most people can hit the ground running and bosses will have no trouble reading and interpreting the results."

-Matthew Raphaelson
Senior Vice President, Wells Fargo & Co.

"This course pole vaults the student over a cross-bar of theory into a new understanding of the real financial world."

-John W. Beach
DSD Labs

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-Peter L. Bernstein
Author, "Against the Gods: The Remarkable Story of Risk"

"Sam's course was fun, but more important, valuable. In just a few hours I gained important and sometimes unintuitive insights into business planning that I could use in assessing and managing my firm's risks."

-Dr. Joel L. Prakken
Chairman, Macroeconomic Advisers, LLC

**General Information**
Seminars start at 9 a.m. and conclude at 5 p.m. with a lunch break from 12 to 1. Morning and afternoon coffee breaks are provided but lunch is not included. For more information, call the AnalyCorp Seminar Office at (800) 400-2120.
These seminars are accredited by the Illinois Department of Professional Regulation to provide 7 hours of CPE credit per day. They are also eligible for a maximum of 7 hours per day of Chartered Financial Analyst (CFA®) Continuing Education credits for members of the Association for Investment Management and Research. The seminars are structured to provide 7 hours of productive learning time per day. Members should consult AIMR's Continuing Education policy to determine the appropriate number of credits.

Fees
First Participant $995
Each additional participant from the same organization $895

(Corporate rates and in-house seminars also available)

CANCELLATIONS
Cancellations received more than three business days before the seminar date are subject to a $75 service charge. Cancellations within three business days of the seminar date are subject to the full fee. AnalyCorp Inc. reserves the right to cancel the seminar, in which case registrants will receive a full refund of the tuition fee.

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Friday, June 21st 2002
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Chicago, IL 60611
(312) 464-8787

Stanford University
Friday, July 19th, 2002

New York, NY:
Wednesday, September 18th, 2002
Location to be announced

Attendance is limited and early registration is strongly recommended.