



SOCIETY OF ACTUARIES

Article from:

# The Actuary

November 1995 – Volume 29, No. 9

# New textbooks enhance Finance Track courses

by James Backus, Jonette Nagai, and Judy Strachan

The spring 1996 Finance Track will add three new textbooks, one in each course.

## V-480, Derivative Securities

Restructuring Course V-480, Derivative Securities: Theory and Application, to focus on derivatives created an opportunity to address stochastic calculus more thoroughly. Professor Kerry Back of Washington University, a speaker at *Risk Magazine* Seminars on Derivatives, recommended adding the new text, *Finance in Continuous Time: A Primer* (Blackwell Publishers, 1992), by David Shimko. The first two chapters are included on the syllabus and cover applications of Brownian Motion, Ito's Lemma, Jump Processes, and Differential Equations to financial problems.

## F-580, Corporate Finance

Chapters 1, 8, 9, 13-19, 26, 28, and 33-35 from the text, *Principles of Corporate Finance, 4th edition* (McGraw-Hill Inc., 1988), by Richard A. Brealey and Stewart C. Meyers, will be used for Course F-580, Corporate Finance. This replaces the text, *Financial Theory and Corporate Policy, 3rd edition*, by Thomas E. Copeland and J. Fred Weston. Both books are highly regarded within the field, but the Brealey and Meyers' text is widely recognized as the industry standard.

## F-585, Applied Corporate Finance

Course F-585, Applied Corporate Finance, will also adopt a new text. *The New Corporate Finance: Where Theory Meets Practice* (McGraw-Hill Inc., 1993), edited by Donald H. Chew, replaces *Inside Investment Banking, 2nd edition* by Ernest Bloch. The chapters used in the Chew text are the Introduction, I.5, I.7, IV.3-IV.8, IV.11, V.1-V.2, VI.1, VI.3 and VI.5.

The Chew text is an assembly of articles from well-known authors that reflect current thinking and practice in the applied finance markets. The introduction provides a good overview of the revolutionary changes in finance during the last half-century, such as:

- Development of powerful quantitative methods for pricing securities and managing portfolios and associated financial products
- Understanding of the impact of agency costs on financing decisions
- Recognition of signaling as a component of the underwriting of securities offerings

Syllabus readings from the Chew text focus on financial innovation, agency costs, signaling, and risk management. Agency costs are shown to have important explanatory power on the emergence of new financing vehicles. Similarly, signaling is recognized as a component of securities underwriting, but the significance of this component has only recently been recognized. Several articles in the text identify statistically significant price effects of underwriting and credit announcements. An understanding of these phenomena is useful to the corporate treasurer in choosing among financing alternatives.

James Backus, valuation actuary with the Annuity Business Unit of Aetna Life and Casualty in Hartford, and Jonette Nagai, senior assistant actuary with John Hancock Mutual Life Insurance in Boston, are on the E&E Finance and Investment Track Education Objectives Committee. Judy Strachan, SOA education actuary, is staff liaison to this committee. Her e-mail address is 74507.2253@compuserve.com

## Research paper earns Fellowship credit

by Rich Lambert

The Education and Examination Research Paper Committee recently awarded 30 Fellowship credits to Gary Parker for his paper, "Stochastic Analysis of the Interaction Between Investment and Insurance Risks."

The abstract is as follows:

A portfolio of different insurance policies such as temporary, endowment, and whole-life insurance policies are studied in a stochastic mortality and interest environment. The first two moments of the portfolio's present benefit value are derived. The portfolio's riskiness as measured by the variance of present benefit value can be divided into insurance risk and investment risk in two different ways. One way leads to a more natural interpretation of the two risk components. A simple portfolio is used to illustrate the results.

Members interested in reading this paper can contact Ellen Bull, SOA research librarian.

The committee thanks referees Jed Frees, Daniel Dufresne, and Gordon Klein, and also acknowledges the contribution of Harry Panjer, Parker's supervisor.

Students interested in writing a paper for credit should consult the catalog. Applications can be obtained from the SOA Education Department.

Rich Lambert, SOA Research Paper Committee chair, is vice president and chief actuary for Prudential Preferred Financial Services in Liberty Corner, New Jersey. His e-mail address is usprurmg@ibmmail.com