

SOCIETY OF ACTUARIES

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## **CURRENT ISSUES IN ACTUARIAL EDUCATION**

by Anna M. Rappaport. Vice President for Education and Examination

Actuarial education is a major activity and concern of the Society of Actuaries. Over the past decade, the Society has incorporated a number of changes in its education system so that the system as it now stands:

• allows actuaries to specialize in life, health, or pension actuarial matters, but still allows them to switch specialties as they go through the syllabus;



• provides different content for U.S. and Canadian actuaries;

• includes the mathematics which allows actuaries to recognize variance;

• is coordinated with the Joint Board for the Enrollment of Actuaries Examinations in the United States.

In spite of several syllabus changes and continual work on study material. there are still policy questions which must be addressed by the Society, as there always will be. Some of the major concerns today include:

How do we build the problem solving skills which will enable actuaries to identify and solve the unknown problems of the future and to communicate well about them?

What is the proper role of the computer in the educational process and how can today's technology be effectively used in actuarial education?

What are the most effective teaching methods for the future?

How are the needs of pension practitioners best served by the educational system?

# VICE-PRESIDENT TURNER RESIGNS. **RUGLAND IS APPOINTED**

I regret to announce that Sam Turner, recently elected as a Vice-President of the Society, has found it necessary to resign. Expressing his deepest personal apologies to the Society and its members, Sam cited business pressures in his position of President and CEO of Life of Virginia, and Vice President of its parent, Continental Group, following the latter's acquisition by private interests. Given Sam's significant contributions to the Society in the past, and his continuing commitment to the profession, I appreciate how difficult this decision was for him.

In accordance with the Society's Constitution, the Board of Governors has appointed Walter S. Rugland to serve as Vice-President for the balance of this year. We are fortunate that Walt is willing to take on this assignment on top of his already busy schedule. This fall Fellows of the Society will be asked to vote for a Vice-President to complete the remaining year of this term in addition to those usually elected.

> Preston C. Bassett President

## THE STOCK MARKET: GETTING **ABOARD THE BULL TRAIN**

#### by Robert A. Nix

For those who care, there are both pleasure and profit to be gained from buying a ticket on the bull train in a timely manner. Doing it two or three months before departure, or just after the journey has begun, is the best way-your ticket costs more later on.

# NEW DISABILITY VALUATION TABLES

#### by William J. Taylor and W. Duane Kidwell

The report of the Society of Actuaries' Committee to Recommend New Diability Tables for Valuation was presented to the Board of Governors on January 15, and was authorized for an exposure draft to Society members. An abridged section of the report was mailed to all members February 1. The full report is available upon request to Mark Doherty, Director of Research, at the Society office. There will be a panel discussion of the Committee's Report at session PD46 at the Spring Meeting of the Society in San Francisco, April 1-2.

Notably different in this report is the parametric aproach used in the construction of continuance tables. Each variable that was found to be significant has been numerically quantitied in its relation to the other variables and is directly reflected by duration in the calculations. Although appearing complex at first glance, the approach is very simple and adds dimension and flexibility that enable the table to fit any company's mix of business. The tables are very practical to work with through simple computer programs. At this writing, the Society is attempting to make one or more software packages available which would compute continuance tables, net premiums, policy reserves and claim reserves for any defined set of variables (sex, cause of disablement, occupation class, elimination period, benefit period and interest rate). Cause of disablement is accident, sickness or a combination of both accident and sickness. The basis of the computation would be either the DTS Experience Table or the proposed DTS Valuation Table, each combined with

# The Stock Market

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There is some substantial help available for timing your ticket purchase, judging by the bull trips that began in August 1982 and August 1984.

## The Specialist Short Selling Ratio

This indicator tends to be earlyperhaps several months early. The specialists on the Exchange floor must maintain an orderly market in the stocks they trade. Thus, they buy or sell when buyers or sellers are not forthcoming. At the end of a market decline they have accumulated substantial long positions as a result of accomodating the eager sellers and so have less need to go short when selling. This phenomenon can be measured by the specialist short selling ratio, being the ratio of the number of shares sold short by specialists to the total number sold short by the specialists themselves, other professionals and the public.

These statistics are available on a two-week delayed basis in the Wall Street Journal and Barron's. The author has calculated this ratio for the New York Stock Exchange on a fourweek moving average basis since 1980. Historically a ratio of 40% or less is deemed bullish and the first ratio of 1982, as of January 1, was 34%. It drifted up to 38% in April, touched 30% as of June 4 and 36% as of July 30, two weeks before the week of the huge August move. From that point the ratio moved up to 52%, generally considered a neutral reading, early in November 1982.

Picking up the thread again in 1984, we find that the ratio touched 31% on July 13, 30% on July 20 and 32% on July 27, with the big upmove beginning in the week ending August 3 (only the 31%, July 13 statistic was available prior to that week). As of this writing, late December 1984, another big upward thrust has occurred and the latest available ratio before that move was 36%, as of November 30.

Finally, it's of interest that at the end of 1983 the ratio was only 27% when the market was in fact in a downward correction, but perhaps heavy tax selling accounted for that extreme low value. Although there was a strong rally in the first week of January 1984, it petered out rapidly, and the other indicators did not in fact support a bullish case at the time.

### **Trends in Market Indexes**

Various indexes, or averages, are available for each business day-Dow Jones, Standard & Poor's and the Wilshire 5000, for example. The writer follows them on a weekly closing basis along with the 30-week moving average which he calculates. Around mid-1981 the moving averages began declining with the weekly figures below and pulling them down, (see S. & P. 500 chart accompanying this article). In April/ May 1982 all three weeklies moved up to penetrate their 30-week averages. While the downward action then resumed and the moving averages maintained their downward course, this upside penetration was nonetheless a clue that the trend might be changing.

The subsequent bull move in August was one of the most powerful of the century. All three weekly averages pierced their 30-week averages decisively, which, as a result, began trending upwards. At times the rising moving average curve was concave upward, thus demonstrating (with a look back at



#### **Election Committee Invitation**

Fellows who have the experience, interest and time to serve on the Board of Governors, but think our committee might overlook them when compiling the customary first ballot list, are cordially invited to write to me before April 12, summarizing their accomplishments and background. Barbara Lautzenheiser

Chairman, Committee on Elections

our calculus texts) positive price acceleration. Purchases could most profitably have been made through September and somewhat less profitably right up to the spring of 1983. But the point is that when the moving average is intersected by the weekly average and consequently rounds under and starts up, that is prime 'ticketbuying' time. In October of 1983 both the S. & P. 500 and the Wilshire 5000 moving averages were penetrated on the downside by the weeklies and early in December the Wilshire moving average rolled over, this action being duplicated by the S. & P. 500 in January 1984 and by the D.J. in early February. The bear market lasted until late August 1984 when all three averages arced up; they remain in an uptrend at the time of writing.

#### **Conclusion:**

Tracking the trends in the indexes, their moving averages and noting the times when their curves intersect can be helpful in timing the departure of the bull train—or, indeed, the bear train. When relationships such as the specialist short selling ratio reach certain levels, this again may be helpful. Other indicators, e.g., interest and discount rates, advances and declines, highs and lows, puts and calls should also be followed. When enough of the signs are bullish, that is the time to buy your ticket—you might be early, but you'll be getting it at a good price.

Finally, as a commentary on the hazards of this kind of stock market analysis ('technical'), consider the following statements in a recent report by the Mansfield Stock Chart Service, by two professional technical analysts:

First analyst: "Gaming issues...have technical patterns with good potential."

Second analyst: "Underperformers currently include:...Gaming...They currently have technically poor patterns."