



SOCIETY OF ACTUARIES

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# The Actuary

The Newsletter of the Society of Actuaries

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## THE SOCIETY'S PUBLICATIONS

by Anthony T. Spano,  
Director of Publications

I hope this will be the start of what I think is a necessary two-way dialogue between those of us responsible for the Society publications and you whom we serve and to whom these publications are directed.

Let me start with a quick description of the Society's periodic publications. I'll restrict myself to publications containing actuarial literature as opposed to administrative publications such as the *Yearbook*.

- The *Transactions* is our formal, technical journal. It consists primarily of papers that have undergone an approval process, and discussions of the papers. It is published annually, with an index every few years.

- Closely associated with the *Transactions* are the *Reports of Mortality and Morbidity Experience*. This volume is scheduled to be published annually also, but since the last edition was published in 1983 and covered the 1981 mortality and morbidity reports, some skepticism is completely understandable (explanation and discussion of this later).

- The *Record* is just that—a record—of presentations and discussions at the Society's meetings. An issue is published for each meeting, with an annual index.

- The *Actuary* is the Society's newsletter and the publication that is probably most familiar to the membership. It is published monthly except in July and August.

- The *Pension Journal*, a new publication of the Pension Section, made its appearance in April. Other Sections have from time to time put out newsletters. More publications under

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## PENSION FUNDS TAXATION IN THE UNITED KINGDOM

by Alistair Neill

Under the UK system of taxation major changes can be made by the Chancellor of the Exchequer at his own whim without proper prior discussion or debate.

Such is the party discipline in the Houses of Parliament that the proposals in the Budget each March are automatically matters on which the Government get their way, and in fact some changes take effect immediately on the day of the Budget speech.

Last autumn it seemed (though they are, of course, very secretive about their doings) that the Treasury were thinking very seriously about changing the method of taxation of pension funds, the most likely target being the tax free build up (which also applies to life offices as they are allowed tax exemption for the benefits they insure for trustees of pension funds, and for the funds held for individual self-employed policyholders) and the commutation of pensions at retirement (which within limits is allowed by the Inland Revenue at present completely tax free). The Life Offices' Associations decided that something would have to be done to try to protect the status quo, so a campaign was started to make MPs and others aware of the possibility of change and of the probable effects in lower benefits for employees or higher (probably unacceptable) costs to employers. The problem was to convince people that the offices were not acting purely out of self-interest, and there were significant opposite viewpoints, particularly in the press, on the desirability of "fiscal neutrality" (all forms of savings should be taxed the same, with no advantage for pension funds).

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## BE AN ACTIVIST

by Bob Likins

This is the third in a series of three articles brought to you by the Society's Committee on Professional Development. The first encouraged members to author papers, the second encouraged participation in actuarial meetings, and this one encourages you to develop yourself professionally by being active on a Society or other actuarial committee.

### Which Committee?

Are you wondering, who needs your help? All the committees need willing and able actuaries to carry out their charges. The Society of Actuaries alone lists some 60 committees, task forces and sections in the *Yearbook*. Besides the national actuarial organizations, closer to home there are the local actuarial clubs.

If you have the time and interest to serve on a committee, compare your interests with the committee charges. For Society committees, read the charges in the *Yearbook*. To find out more, call the chairperson.

### Do You Qualify?

I talked to a few chairpersons, including some on the E&E Committees. Even though generalizations are forced, here are a couple:

- Chairpersons generally have to seek out members. They are looking forward to the updated SOA survey on your committee interests.

- Among the best candidates are those seeking membership by their own initiative and those referred by a departing committee member.

- Committee members for the few committees I contacted were expected to contribute from 10 up to 100 hours per

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## AERF AWARDS

The Actuarial Education and Research Fund is pleased to announce two awards in its 1985 Grants Competition.

One of these awards is to Professors Stephen P. D'Arcy, FCAS, and Neil A. Doherty, Department of Finance, University of Illinois. They propose to write a monograph entitled "Applications of Finance Theory to Property-Liability Insurance Pricing." The objective will be to provide actuaries, regulators and insurance faculty with a single source explaining the basic finance theories applicable to P & L insurance pricing.

The second award is to Dick London, FSA, who is well known for his specialization in actuarial education. He proposes to prepare a new textbook covering the theory and practice involved in the creation of actuarial survival models to be entitled "Survival Model Construction." His objective will be to combine the broader scope of the texts that have emerged in biostatistics with the actuarial practicality of the standard actuarial texts that have served so well in past years. □

## Pension Fund Taxes In UK

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While the public could see the immediate loss of benefits from the taxation of lump sums (with it being said that senior police officers were far more worried about whether to retire so as to get their benefits before any change than about how to police the miners' picket lines), it was more of a problem to convince people of the results of a tax on investment income.

The campaign has been a success, being taken up particularly by the Confederation of British Industry (the employers' organisation). The Chancellor announced in the Budget speech, rather grudgingly, that he was not making any change.

Various actuaries have been involved in this campaign (the most sophisticated lobbying campaign ever, according to some people), including your correspondent, who has found it a most interesting away-from-the-normal experience. □

## SOCIAL SECURITY: 50 YEARS OLD AND DYING?

by A. Haeworth Robertson

Thanks to the actuaries who advise the Social Security Trustees, the 1985 Trustees Reports (published March 28, 1985) contain enough information for the careful reader to estimate the remaining life expectancy of the present system, which will be 50 years old on Aug. 14, 1985.

Table E3 on page 123 of the OASDI report can be used to derive the ratio of projected income to outgo for the OASDI and HI part of Social Security that is financed primarily by the FICA tax, under various alternative sets of assumptions, as follows:

Time Period	Ratio of Income to Outgo		
	Alt. I	Alt. II-B	Alt. III
25-Year Averages:			
1985-2009	1.26	1.10	.94
2010-2034	1.14	.81	.55
2035-2059	1.09	.69	.41
75-Year Average:			
1985-2059	1.16	.83	.56

The key economic and demographic assumptions on which these alternative projections are based may be summarized as follows:

	Key Economic and Demographic Assumptions after the Year 2010		
	Alt. I	Alt. II-B	Alt. III
Total Fertility Rate (1.8 in 1984)	2.3	2.0	1.6
Productivity (annual real increase)	2.7%	2.1%	1.8%
CPI (annual increase)	2.0%	4.0%	5.0%

The CPI assumption is shown for completeness but it is not critical to the projections so long as the COLA approximates the CPI. Most of the assumptions vary for the next several years, reaching their ultimate level around 2010, after which the baby boomers begin attaining age 65.

Ignoring the public restlessness and looking only at the above statistics, what can one reasonably conclude about Social Security's remaining life expectancy? Social Security is probably immortal if you believe the Alternative I assumptions: that women will begin to bear 2.3 children during their lifetime instead of the current 1.8; and that "real productivity" will increase by 2.7% per year.

Note: The OASDI report states on page 79, "For the 30 years 1955-84, annual increases in productivity for the U.S. economy averaged 2.0%, the result of average annual increases of 2.7, 1.9 and 1.3% for the 10-year periods 1955-64, 1965-74 and 1975-84, respectively."

The remaining life expectancy of the present Social Security system is probably less than 15 years if you believe in the Alternative III assumptions: that the long-term decline in fertility rates will continue for a while longer, and that it is imprudent to count on unprecedented productivity increases for the next 50 to 75 years to continually breathe new life into a dying system.

There is probably an interesting correlation between one's own life expectancy and one's estimate of Social Security's life expectancy. Indeed, it would be surprising the concern of most people about Social Security extended beyond their own life ex-

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