

## SOCIETY OF ACTUARIES

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### EDITORIAL

## **RETIREMENT AGE ARITHMETIC**

#### A Guest Editorial by Robert J. Myers

It is convenient and useful to examine the implications of whatever retirement age is chosen for a national pension plan in terms of a "retirement expectancy" index, viz.:

(probability of survival through the working life span)

 $\times$  (life expectancy at retirement)

Let us do this first for Germany, the country with the oldest social security system of modern type.

#### Germany

Almost a century ago, when Chancellor Otto von Bismarck chose age 70-not age 65 as some have believed (see The Actuary, April 1978)-for the German plan, that was a relatively advanced age. The official German population life tables for 1871-80 showed that only 29.9% of males (the vast majority of the work force then) survived from age 20 to age 70, and then had an expectation of life of only 7.34 years. Thus, their retirement expectancy index was 2.19 years (.299 x 7.34).

By the early 1930's these figures had increased so that the corresponding index for retirement at age 70 was 4.88 years (.539 x 9.05). For the Federal Republic of Germany in 1977-79, this index had risen further to 6.05 years (.612 x 9.88). Meanwhile though, the retirement age in Germany had been lowered to age 65, in 1916.

#### **United States**

In contrast, for the current "normal" retirement age of 65 for the United States, using the U.S. 1978 male population mortality, the index measured from age 20 is 10.0 years (.714 x 14.0). When our program was being developed in the mid-1930s, if the "normal" retirement age selected had been the equivalent at that time of what age 70 had been in Germany fifty years earlier, it would have been 75. This is in vivid contrast to the age 65 actually adopted, and still in effect.

The Office of the Actuary, Social Security Administration has made an analysis along these lines of what the retirement age should be now (and also in future years) if age 65 were treated as "correct" for the 1940-see Francisco R. Bayo and Joseph F. Faber, Actuarial Note No. 105, June 1981. Based on combined female-male mortality, the equivalent retirement age would be about 71. Interestingly, if that equivalent retirement age is measured in terms of only the life expectancy at time of retirement, the same age, 71, emerges.

· F. L. Y. L. L. M. Marson A. C.

## **ACTUARIES AT WORK IN OTHER** LANDS: IRELAND

by R. Peter Delany

Ed. Note: This is the third article in a series.

At a meeting in the Russell Hotel, Dublin, in May 1972 at which all sixteen actuaries then employed and resident in Ireland were present, the Society of Actuaries in Ireland was established with the following objectives:

(1) To further the general interest of the actuarial profession in Ireland, and to present it as may be required.

(2) To encourage communication between members and with other societies both in Ireland and abroad.

(3) To hold meetings from time to time to discuss papers or matters of interest to the profession.

Membership is open automatically to F.I.A.'s and F.F.A.'s resident in Ireland, and by invitation to others deemed suitable for membership by virtue of their experience or qualifications.

Often before 1972 the founding of such a body had been discussed informally, but the numbers were too small (only 10 in 1966), and until the seventies most, being employed in one location, met each other frequently.

Current membership is 45 — 38 F.I.A.'s and 7 F.F.A.'s; 25 are in insurance companies, 6 in consulting practice, 7 are insurance brokers or pension consultants, 3 are in banks, 2 in miscellaneous occupations, and 2 retired.

In recent years the Society has been involved in discussions with, and submissions to, Covernment Departments about public pensions, i.e., a National Income-Related Pension Scheme, an activity that is soon to be resumed if further developments occur as anticipated. Otherwise, work of actuaries here is broadly similar to that of actuaries in Britain, but with one noticeable exception. Where damages or compensation are awarded for personal or fatal injury, an actuary's assistance in capitalizing future loss, requiring evidence in court by the actuary, is invariably needed here.

Although the small number of actuaries precludes our becoming an examining body in the foreseeable future, our Society's existence is desirable if not a ~ necessity so that the profession can speak as one voice on legislative and other matters affecting it and the country.  $\Box$