



SOCIETY OF ACTUARIES

Article from:

The Actuary

January 1977 – Volume 11, No. 1



The Actuary

The Newsletter of the Society of Actuaries

VOLUME 11, No. 1

JANUARY, 1977

ESTIMATING SOCIAL SECURITY BENEFITS IN AN ACTUARIAL VALUATION

by Lawrence N. Bader

Valuing pension or long-term disability plans with Social Security offsets generally requires some assumptions about the future course of the wage base and benefit formula. The usual approach is to select annual percentage increases for these two variables which relate reasonably well to the valuation salary scale, and then to project Social Security on that basis. Since costs can be very sensitive to the Social Security projection and recent history offers little guidance, how can the actuary and plan sponsor be comfortable with a particular choice of parameters?

A useful test is based on the concept of replacement ratios. Consider employees earning, say \$7,000, \$11,000 and \$15,300 and retiring in 1976 at age 65. Their primary Social Security benefits will replace about 51%, 40% and 30% of their pay at retirement. Now suppose instead that the employees are 30 years old and earning the same amounts. Under the proposed assumptions, what percentages of their pay at retirement will be replaced by Social Security?

If the second set of percentages is much lower than the first, the actuary is assuming that Social Security benefits will play a decreasing role in meeting retirees' needs in the future. If the second set is much higher, he is assuming that Social Security's role will continue to increase. If the second set is about the same, the actuary is effectively assuming stable replacement ratios for Social Security.

Analyzing the Social Security assump-

(Continued on page 8)

DISABILITY INCOME

Disability Income Insurance—Cost Differentials Between Men and Women, New York Insurance Department, June, 1976, pp. 59.

by Gary N. See

Due to charges by various groups of discrimination in the underwriting and establishing of premium rates for individual disability income insurance, the results of this study have been eagerly awaited by many segments of the insurance industry. Fears of substantiating uni-sex rates were unfounded as the results of the study generally conformed to those of the Society of Actuaries which the industry has relied on to a great extent in the past.

The study was initiated as a result of a suit filed by the New York Civil Liberties Union. The Department committed itself to an extensive review of available data to determine whether sex is a statistically valid characteristic of the disability income insurance risk. Twenty-one companies submitted experience, including 57,541 female claims, over the years 1968-1973, inclusive.

Concluding that sex is a major factor affecting the cost of disability income insurance, the New York Department provided overall statistics showing significantly different morbidity patterns. While the pattern was different for accident-only coverage, no variation was found in the age-specific ratios with changes in elimination periods, renewal guarantees, benefit years, and no evidence was found of a shift during the years studied. Although there was some variation by occupational class, the basic pattern was very similar.

Comparisons are made in the booklet to other studies as published by the Society of Actuaries producing similar results. However, the most interesting and

(Continued on page 8)

OPTING OUT

Editor's Note: Currently there is considerable comment on the desirability of public employee groups withdrawing from the Social Security system. We are indebted to William M. Mercer, Inc. for permission to use their December 1976 Bulletin as a basis for this article. We are also indebted to Mr. A. Haerworth Robertson, Chief Actuary for the Social Security Administration, for his comments.

State and local government employees participating in Social Security number about eight million and represent slightly under 10% of the total group covered by Social Security. More of these groups are coming into the system than are leaving, but some are leaving and the numbers are growing.

It is estimated that about 70% of state and local employees are covered by Social Security. Public employee groups have the option to withdraw from the Social Security system after seven years of coverage, provided notice has been given to the Social Security Administration two years in advance. The notice can be cancelled in the two-year period.

Opting Out

The two most prominent public groups that have given notice of withdrawal from the Social Security system are the State of Alaska, with 13,000 employees, and the City of New York, with 300,000 employees. But, contrary to reports, Alaska is not out yet, and New York City has cancelled the notice. The majority of those who have actually opted out, or served notice, represent small political units in California, Louisiana and Texas. Here are some of the reasons set forth by public employee groups to justify withdrawal:

(Continued on page 7)

Opting Out

(Continued from page 1)

(1) Social Security is not a "good deal" for younger employees because they are putting far more into the system than they expect to get out of it. In supporting the current generation of beneficiaries, they are not so sure that the next generation will be able to support them.

(2) Unlike private pension plans, public retirement systems require substantial contributions by the employees. Typical contribution rates range from 5% to 8% of the employee's wages. Public employees covered by Social Security and earning at or below the Social Security Wage Base, pay roughly 11% to 14% of their wages into the two systems.

(3) A better package of benefits can be purchased for the same or lower contributions through private pension plans.

(4) There is concern that the Social Security system is going to collapse in the near future because of inadequate funding.

(5) Most public retirement systems provide greater early retirement benefits than non-public systems.

Public vs. Private

Most consultants who have assisted public groups in evaluating alternative programs to replace Social Security benefits agree that duplication of these often substantial public benefits through private plans is not possible. However, for certain individuals in certain situations, Social Security may not always be a good buy.

In spite of all of the articles written about the imminent financial collapse of Social Security the possibility of such a collapse seems remote. Most experts concede a serious short-range problem in financing the system due principally to adverse economic conditions, a decrease in the rate of population growth, and changes in 1972, particularly those tying benefits to full changes in the cost-of-living, and an error in plan design which must be corrected (euphemistically called the need to decouple) in order to correct a benefit redundancy for new retirees.

Before coming to a decision on withdrawal there are a great many questions

CHAIRMEN

The following changes should be made in the list of Committee Chairmen which appeared in the December issue.

Julius Vogel has resigned as Chairman of the Committee to Establish New Mortality Tables. Charles A. Ormsby is the new Chairman.

Mr. Vogel has been appointed Chairman of the Society of Actuaries Steering Committee to carry out the recommendations of the Special Committee on Reorganization of the Actuarial Profession, which were adopted by the Board in October. This Committee should be added to the list of Special Committees.

that have to be answered or at least considered by the officials of the public employee group. Some of these considerations are:

(1) For the vast majority of workers, entitlement to Part A of Medicare is achieved through Social Security retirement or through receipt of survivor benefits. Does the public system have hospital and medical benefits available similar to Part A of Medicare? And what is the cost?

(2) Withdrawal from Social Security could involve a significant loss of disability and survivor benefits. Again, it must be determined if adequate replacement programs exist within the public retirement system or through private insurers. (Most employees will retain eligibility for some Social Security disability for five years after withdrawing from the system).

(3) What type and level of retirement benefits should be provided? Would it be better to allow employers to pocket some of their former contributions to use as disposable income?

(4) What protection against inflation will the replacement program provide? Is it possible to develop replacement programs with indexing features similar to Social Security? And the cost?

(5) After the replacement program is decided upon, how much are the savings (if any) to the public entity? And to the employee?

For the Greatest Good

The Social Security system could do more by explaining simply and clearly the benefits available. Public television might be an appropriate medium. The death benefits, disability benefits, health benefits, and automatic adjustment of benefits are quite important in any individual's financial planning for the future. They are simply not found in most private pension plans.

The public plans can do more by redesigning their pension plans to coordinate with Social Security, thereby lowering present pension costs and making their pension benefits comparable to private pension plans. This requires the cooperation of many different groups.

* * * *

It has been suggested that Congress should not allow covered public groups to opt out of Social Security. Mr. Robertson, has the following comments on this suggestion.

"The Social Security Act of 1935 excluded from coverage all employment for States and localities, primarily because of the question of the constitutionality of any general levy of the employer tax on States and localities. In its report to the Committee on Ways and Means of the House of Representatives in 1939, the Social Security Board stated that 'no method has yet been devised which would overcome constitutional difficulties and also protect the old-age insurance system against adverse selection.' In 1950 legislation was adopted providing for Social Security coverage for State and local employees on an optional basis, thus permitting coverage while avoiding the mandatory imposition of taxes. If Congress should prevent groups which are presently participating from opting out, it would be a unilateral abrogation of an agreement voluntarily entered into—action which is hardly tenable, legally or otherwise. The solution to this problem is not as easy or straightforward as it may appear." □

Death

E. M. McConney