

# SOCIETY OF ACTUARIES

Article from:

# The Actuary

June 1971 – volume 5 - Issue 6



VOLUME 5, No. 6

#### LEVIATHAN?

Advisory Council on Social Security, "Reports of the 1971 Advisory Council on Social Security," Washington, D. C., March 31, 1971, 183 pp.

## by Robert J. Myers

This extensive report, required by law to be submitted by Jan. 1, 1971, was completed and released some three months late because of pending legislation in Congress. Even so, the Advisory Council did not have a firm base on which to build, because legislation was then being actively considered by the House Committee on Ways and Means.

The report is, in essence, divided into ee separate reports-dealing with Soal Security cash benefits, Medicare, and financing-and appended are dissenting statements of several Council members and four appendices. The latter include a report of the Office of the Actuary and the Report of a Panel of Actuaries and Economists who reviewed the cost estimates and the financial policy.

#### Composition of Council

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The 13 members, appointed by the Secretary of HEW, included seven representatives of the general public, three from labor, and three from business. The labor representatives were two high officials of AFL-CIO international unions and the full-time Social Security staff official of the AFL-CIO. The three business members were high-ranking executives of large corporations and, as has been the case in every past Advisory Council, included an actuary (Charles A. Siegfried).

The seven public members were heavily weighted on what might be called the liberal side. Thus, on seeing the initial constitution of the Council, one could afely have predicted in advance that its ecommendations would be for a significant expansion of the program.

The Council made a considerable number of recommendations for expanding

# Schools Offering **Actuarial Science Courses**

A subcommittee of the Public Relations Committee has just completed a survey of schools in the United States and Canada that offer specific courses in actuarial science. The resulting list is published on Page 8 of this issue of The Actuary.

The schools listed are those which, as a minimum, offer a course covering part 4 (life contingencies) of the actuarial examinations sponsored by the Society of Actuaries. Many unlisted schools offer courses covering parts 1 to 3 of these examinations. Most schools listed as offering a program for full-time students will also accept students for selected courses on a part-time basis.

Any readers who know of additional schools that offer such courses are asked to inform Russel H. Smith, Jr., Chairman of the subcommittee.

# PENSION PLANNING AND THE ENVIRONMENT

by Richard E. Ullman

James C. Hickman's "Input-Output" article in the May issue of The Actuary mentioned that pension planning is not limited to securing IRS qualification of plans. Indeed, it is not. In its broadest sense, pension planning is the job of enabling employees to retire and live in a manner reasonably close to that to which they have been accustomed. The income from the plan plus the income from Social Security must generally be sufficient to do the job. Usually, personal savings are not considered in this equation.

But neither is another factor generally considered. And I submit that this factor will be more and more important in

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### TO BE CONTINUED

Editor's Note: This is the third of a series of articles from the Committee on Continuing Education. The rule is one article to one subject to give the nonspecialist in that subject up-to-date general information and to encourage further research in the subject if the reader is so minded. Comments will be welcomed by the Committee and by the Editor. This article is condensed from a paper presented by the author to the Southeastern Actuaries Club at its June, 1971 meeting.

### Ulpian's Table

## by Walter J. Mays

The origin of life tables may be traced to the lavishness of wealthy Romans in making bequests to parties other than their heirs. To protect the heirs, the Falcidian Law (40 B.C.) provided that a testator must leave a clear fourth of the value of his estate to his heirs free from legacies (gifts) to third parties. These legacies sometimes took the form of life income, and factors corresponding to the expectation of life were established to value them for compliance with the law.

Ulpian's Table is a table of life expectancies dating from about 220 A.D. and attributed to the eminent jurist and praetorian prefect, Domitius Ulpianus. It is preserved in Justinian's Digest (Lib. XXXV, Tit.II, lxviii). The cited passage was extracted from the writings of the jurist, Aemilius Macer, a contemporary of Ulpian. Macer first presents Ulpian's Table and then states a cruder method, which he says was the one commonly employed. The latter, for convenience, may be called Macer's Table. Both tables are exhibited on page 6.

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the cash benefits program, representing about a 12% overall cost increase. A number of these recommendations merely followed what the Administration had proposed in 1969 and/or the Congress had included in the legislation enacted by each chamber in 1970, but not agreed upon by both bodies (indicated in the following listing by asterisks):

(1) Automatic adjustment of benefit amounts, the earnings or retirement test, and the taxable earnings base.\*

(2) An earnings base of \$9,000 in 1972\* and of \$12,000 in 1974.

(3) Adjustment of maximum family benefits to the same extent as primary and related benefits when general benefit increases occur.\*

(4) The maximum on the lump-sum death payment should increase from the \$255, which has prevailed since 1952, by being related to the maximum family benefit for monthly benefits.

(5) A person eligible for reduced benefits because of early retirement(both as a retired worker and as a spouse) should be allowed to choose only one immediately and take the full benefit of the other later.\*

(6) The benefit computation point for old-age benefits should be the same for men as for women (now 65 for men and 62 for women).\*

(7) The earnings test should be changed so that the annual exempt amount is \$2,000 and the "\$1 for \$2" reduction basis should apply indefinitely beyond that point.\*

(8) Widow's and widower's benefits should be at a rate of 100% of the primary benefit for those who come on the roll at or after age 65, with graded amounts down to  $82\frac{1}{2}\%$  for age 62 at claim (and with the proviso that such survivor benefit shall not exceed the benefit that the deceased worker was receiving or could have received).\*

(9) The requirement of recency of employment (namely 20 quarters of coverage out of the last 40 quarters) for disability benefits should be eliminated, so that persons long out of the labor market would be eligible if they have fully insured status. The waiting period for disability benefits should be reduced by one month, so that there would be an average period of time of about  $6\frac{1}{2}$  months (instead of the present  $7\frac{1}{2}$  months) between the date the disability occurs and the date the first check can be received.

(10) A liberalized definition of disability should be instituted for workers aged 55 and over (close to a "usual occupation" definition).

(11) The workmen's compensation offset for disability beneficiaries should be liberalized, so that the 80% limitation would be measured using the highest earnings in the last six years (instead of the average earnings in the last five years).

(12) Monthly benefits at full rates should be provided for disabled spouses and for disabled widows and widowers.

(13) Disabled children should be eligible for benefits if their disability began before age 22 (at present, this limitation is age 18.)\*

#### **Recommendations on Medicare**

The Council made its greatest recommendations for expansion of the program in the field of Medicare. In the aggregate, these recommendations would result, from a cost standpoint, in about a 62% expansion of the program. The major changes recommended were as follows:

(1) Disabled beneficiaries should be covered for both Hospital Insurance(HI) and Supplementary Medical Insurance (SMI).

(2) Prescription drugs should be covcred, with a flat cost-sharing payment of \$2 for the initial prescription and \$1 for refills.

(3) SMI should be combined with HI, and both programs should be financed from payroll taxes and a government subsidy that would eventually finance one-third of the cost (with a graded-in basis from about one-fifth initially, thus disguising the cost impact).

(4) The number of lifetime reserve days under HI should be doubled, and the coinsurance rate should be halved; a lifetime reserve of 60 days (with the same coinsurance as now applicable to the 21st to 100th regular days) should be provided for extended care facility benefits.

#### **Recommendations on Financing**

The Council made a number of significant recommendations as to the financing of the cash benefits and Medicare programs and as to the proper actuarial methodology. The principal recommodations in this area are as follows along with the reviewer's comments when not in accord:

(1) Revised investment rules for special issues to the trust funds, so that they receive more nearly equal treatment when interest rates vary.

(2) The cost estimates for the cash benefits program should be based on increasing-earnings assumptions. This reviewer believes that this would be unsound actuarial procedure—even if automatic-adjustment provisions are adopted. What it would mean, in essence, is that actuarial soundness would be wholly dependent on a perpetually continuing inflation of a certain prescribed nature and a borrowing from the next generation to pay the current generation's benefits, in the hope that inflation of wages would make this possible.

This proposed procedure for the cash benefits program is now being followed for the Hospital Insurance program and quite properly so, because the situation is just the reverse. Under the HI program, inflation can result in financing problems, and so it is prudent pi cedure to make the assumption that some inflationary trends will arise.

The actuarial cost estimates in the report are based on the long-range assumption that wages will rise in the future at twice the rate that prices will increase (namely, 4.5% vs. 2.3%). While such a 2-to-1 assumption seems reasonableeven though in recent years the ratio has been about  $1\frac{1}{4}$  to 1--it does not seem to be sufficiently fiscally prudent for these purposes. The latter assumption results in about a 17% reduction in the level-cost and this is used, in part, to finance the benefit liberalizations. This assumption is very sensitive, and even as little a change in the ratio to 12/3-to-1 would eliminate the indicated cost savings (i.e. produce the same result as a level-earnings assumption).

If automatic-adjustment provisions are incorporated in the program, some change in the actuarial cost-estimating procedure may be desirable. This reviewer believes that rising-earnings and rising-benefit assumptions should be made for a five-year future period, with level assumptions thereafter. By this procedure, reasonable forecasts can be made as to what wages and prices will do for the short term, without there being the

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danger of assuming financing gains over many decades as to the result of inflation continuing.

(3) The principal cost estimate for developing the financing should be based on the "single best" set of assumptions, rather than using an intermediate estimate that is an average of a low-cost and a high-cost estimate. This reviewer believes that it is not really possible to make a "single best" assumption for any of the cost factors involved. Nobody is that well informed, and one is merely deceiving oneself by this procedure.

(4) The HI cost estimates should be based on a 10-year valuation period (instead of 25 years). I disagree strongly with this recommendation, since it tends to hide the true costs of the program. It should be emphasized that the use of a 25-year valuation period, as compared with a 10-year period, has *no* effect on the contribution schedule developed for the next 10 years if pay-as-you-go financing is used. Exactly the same schedule will be derived for the next decade in either case, but the 25-year basis has the advantage of indicating cost trends after 10 years.

(5) The financing of all programs should be on a current-cost basis, with the trust funds being maintained at a level of about one year's outgo. It is very disappointing that no dollar figures on a projection basis are shown. Thus, the reader cannot judge for himself the validity of the contribution rates recommended, the size of the trust fund under the criteria developed, etc. Even under the optimistic actuarial techniques used by the Council, the ultimate combined employer-employee tax rate for cash benefits and HI benefits together will be about 15% (or more)-and would be 17% (or more) if there were no government subsidy.

In the opinion of this reviewer, the contribution schedules developed by the Council show rates which are too low, because they appear to be based only on the outgo as a percentage of effective taxable payroll each year and thus do not allow for the necessary increase in the trust-fund balance so that it maintains a size of one year's outgo.

(6) The combined HI-SMI program should be financed with a government contribution equal to one-third the total cost. In the first few years (under the "camel's head in the tent" approach), this proportion should be lower, beginning at one-fifth.

#### **Minority and Individual Views**

Unlike the case in previous Councils, this one resulted in many separate individual views. The labor members, joined by the late Whitney M. Young, Jr., recommended even greater expansion of the cash benefits program (15% benefit increase with a \$100 monthly minimum, more liberal definition of disability, and liberalized benefit computation methods), to be financed by the introduction of a government subsidy of onethird of the total cost; interestingly, they opposed the introduction of automatic-adjustment provisions before the benefit level is increased substantially. The business members, joined by Dwight L. Wilbur (past president of the American Medical Association), opposed the automatic-adjustment provisions. Two of the business members, again joined by Dr. Wilbur, also opposed the significant general expansion of the program recommended by the Council. It is noteworthy that the press release on the Council's report, prepared by the Department of Health, Education, and Welfare, did not contain any detail at all on the dissenting views.

#### Panel of Actuaries, Economists

This panel consisted of two economists and two actuaries (Murray W. Latimer and Wendell Milliman), with its secretary being an economist. Its recommendations as to financing and actuarial methodology were the same as those the Council finally made, except that it believed (as does this reviewer) that a 25year period should be retained for the HI cost estimates.

The panel suggests that the SMI Trust Fund should have a balance equal to the amount of incurred but unpaid liabilities, plus 5-10% of annual benefit outgo (to meet unforeseen contingencies). At present, this would mean a fund-balance of about \$900 million to \$1 billion—as against the actual balance of \$188 million at the end of 1970.

Where would the money come from to increase the fund to this level? Any substantial increase in the premium rate would be inequitable to current enrollees. This reviewer believes that the best that can be done is to have a fund-balance of about 20-25% of the annual outgo, or about half of what the panel recommended.

# HANDS ACROSS THE SEA-----PACIFIC INSURANCE CONFERENCE

#### by Wendell Milliman

The Pacific Insurance Conference is an organization formed to promote the interchange of ideas concerning life and health insurance company management and marketing between representatives of countries on the Pacific Rim. At the 1969 spring meetings of the Society, Jack Moorhead reported on the Fourth Biennial Meeting of that Conference held in Sydney, Australia in April of that year. The Fifth Pacific Insurance Conference will be held at the Sheraton Maui Hotel on the island of Maui, Hawaii during the week of Sept. 19-24, 1971.

Members of the actuarial profession, and particularly of the Society of Actuaries, are heavily involved in the Conference. Papers for the Conference have been prepared by Ardian Gill, Meno Lake, John Miller, Robert Myers, Robert Tookey and George Watson—all members of the Society—while Jack Moorhead and Walter Steffen will be moderr tors at two of the five general sessions.

## Half Day Each Session

A half day has been allocated to each general session. The opening session will provide a background on the characteristics, history and current stage of development of life and health insurance protection in the various Pacific Rim countries in private insurance companies and pension programs, and under social insurance programs. Subsequent sessions will examine in somewhat closer detail the current patterns and trends with respect to insurance products and services, their marketing, and life insurance company investments. The concluding session will look to the expected future development of the insurance business in countries participating in the Conference.

Attendance at the Conference will be limited to 125. Of this number over one half are expected from outside the United States and Canada. Anyone wishing more information concerning the Fifth Pacific Insurance Conference should write to J. B. McClintock, Chairman, Executive Committee, or Wendell Milliman, Chairman, Organizing Committee, P. O. Box 12530, Seattle, Wash. 98111.