

**FORTY YEARS OF ACTUARIAL RESPONSIBILITIES
IN THE UNITED STATES SOCIAL
SECURITY PROGRAM**

ROBERT J. MYERS

THE social security program in the United States (by which term is meant, as in common usage, Old-Age, Survivors, and Disability Insurance [OASDI] and Medicare) has been in operation for almost four decades and has grown to a position of great significance in the economic, social, and political life of the nation. This is indicated clearly by such statistical evidence as the fact that in 1974 the total income from payroll taxes, premium payments by covered persons, government contributions, and interest on invested assets was \$78 billion, the total outgo for benefit payments and administrative expenses was \$74 billion, and the trust fund balances at the end of the year totaled \$57 billion. Another relevant measure of the magnitude of the OASDI program is that the life insurance in force under the survivor portion amounted to \$2.0 trillion at the beginning of 1974, or slightly more than the \$1.8 trillion of life insurance in force in the United States in life insurance companies.¹

Naturally—or, perhaps one should say, fortunately—the vast insurance protection furnished by the social security system has involved significant actuarial responsibilities and work over the years. This paper has the purpose of setting down the history of such actuarial responsibilities, beginning with the studies that underlay the Social Security Act of 1935.² Table 1 lists all actuaries who have ever been employed by the Social Security Administration or its predecessor agencies.³

¹ In assessing the validity of this comparison, it should be kept in mind that a considerable portion of the OASDI insurance in force is, in essence, term insurance for young survivors, whereas the private life insurance consists, to a considerable extent, of permanent insurance or level group term insurance on middle-aged and older people. For a historical comparison of OASDI life insurance in force with private life insurance in force see *Actuarial Note No. 72* (Social Security Administration, April, 1970).

² For other papers on actuarial responsibilities in the federal government see Robert J. Myers, "The First Government Actuary and His Successors," *TSA*, Vol. VI, and Dorrance C. Bronson, "The Actuary in Government Employment," *RAIA*, Vol. XXIX.

³ Individuals are classified as actuaries if they had membership in one of the recognized actuarial bodies or if they had had a paper published in the journal of one of those bodies, in each case during their employment with the SSA.

TABLE 1

ACTUARIES WHO HAVE BEEN OR ARE EMPLOYED BY THE
SOCIAL SECURITY ADMINISTRATION OR
ITS PREDECESSORS

(List Prepared as of January 1, 1975)

- *Lawrence Alpern, A.S.A., M.A.A.A.
Ernest A. Arvanitis, F.S.A., M.A.A.A.
- *Harry C. Ballantyne, A.S.A., M.A.A.A.
Herman Bartimer, F.S.A., M.A.A.A.
Charles B. Baughman, A.S.A., M.A.A.A.
- *Francisco Bayo, A.S.A., M.A.A.A.
- †Dorrance C. Bronson, F.S.A., F.F.A.A., M.A.A.A.
William H. Burling, F.S.A., F.C.A.S.
Lincoln C. Cocheu, A.S.A., M.A.A.A.
Byron Cosby, Jr., F.S.A., M.A.A.A.
Thomas K. Custis, A.S.A.
- †Jesse Feld, F.S.A., M.A.A.A.
Theodore Ferrara, A.S.A., A.C.A., M.A.A.A.
- *Milton P. Glanz, A.S.A., M.A.A.A.
Alan Goldberg, F.S.A., M.A.A.A.
Benjamin I. Gottlieb, F.S.A., M.A.A.A.
G. W. K. Grange, A.S.A.
Thomas N. E. Greville, F.S.A., M.A.A.A.
- *Ronald G. Harris, A.S.A.
Marice C. Hart
William C. Hsiao, F.S.A., M.A.A.A.
- *Gerald E. Hutchinson, M.A.A.A.
George E. Immerwahr, F.S.A., M.A.A.A.
John P. Jones, A.S.A., M.A.A.A.
Albert E. Kripke, M.A.A.A.
Jacob A. Lazerson, A.S.A., M.A.A.A.
- *Lottie R. Lisle, A.S.A., F.C.A., M.A.A.A.
John A. MacDougall, Jr., F.S.A., F.C.A., M.A.A.A.
- *Steven F. McKay, A.S.A.
- *David R. McKusick, A.S.A.
- †Harry Mehlman, A.S.A.
Russell J. Mueller, F.S.A., M.A.A.A.
Robert J. Myers, F.S.A., F.C.A.S., F.C.A., M.A.A.A.
- *Orlo R. Nichols, A.S.A.
Paul W. Nowlin, A.S.A.
- *Bertram Oppal, A.S.A., M.A.A.A.
- †Eugene A. Rasor

* On staff at present.

† Deceased.

NOTE.—Individuals are listed as F.S.A. or A.S.A. if they possessed similar status in one of the predecessor organizations of the Society of Actuaries.

TABLE 1—*Continued*

†Otto C. Richter, F.S.A., F.C.A.S.
†John B. St. John, F.S.A., F.C.A.S., M.A.A.A.
Ellis W. Scott, A.S.A., M.A.A.A.
†Edward A. Sellers, F.S.A.
Louis O. Shudde, F.S.A.
Frank Stokes, F.S.A.
Zenas M. Sykes, F.C.A.S.
Gordon R. Trapnell, F.S.A., M.A.A.A.
Charles L. Trowbridge, F.S.A., M.A.A.A.
†Weltha M. Van Eenam, A.S.A.
Walter E. Wilcox, A.S.A., M.A.A.A.
*John C. Wilkin, A.S.A.
W. Rulon Williamson, F.S.A., F.C.A.S., M.A.A.A.
Elizabeth W. Wilson, A.S.A.

COMMITTEE ON ECONOMIC SECURITY

The Committee on Economic Security (COES) was created in 1934 by President Franklin D. Roosevelt for the purpose of making studies for the development of the social security program (including also various related matters such as public assistance, unemployment insurance, and maternal and child welfare provisions).

Among the various advisory groups that were established was the Actuarial Advisory Committee, which consisted of three actuarial educators (James W. Glover of the University of Michigan, A. L. Mowbray of the University of California, and Henry L. Rietz of the University of Iowa) and a life insurance company president (M. Albert Linton).

Two actuaries were recruited on a loan basis to work full time on the staff of the COES—Otto C. Richter from the American Telephone and Telegraph Company and W. Rulon Williamson from the Travelers Insurance Company. Mr. Richter worked on the old age portion of the study, while Mr. Williamson was assigned to unemployment insurance matters. In addition, the COES employed a junior actuary, Robert J. Myers, who assisted Mr. Richter.

INITIAL OPERATIONS OF THE SOCIAL SECURITY BOARD

Following the work of the COES, and largely based on its recommendations, Congress enacted the Social Security Act in August, 1935. The Social Security Board was established by that act to administer the benefits portion of the old age benefits program, while the Treasury Department administered the corresponding tax provisions.⁴

⁴ Because of a question about the constitutionality of the program, the word "insurance" was not used initially in its description (either in the law or in public explanation).

Beginning in 1936, the Social Security Board began to build up an actuarial staff, and both Mr. Richter and Mr. Williamson were approached to return to Washington. Only Mr. Williamson accepted appointment, and he was then designated Actuarial Consultant.⁵ Although this position carried responsibilities in the areas of all programs administered by the Social Security Board (including unemployment insurance and public assistance), almost all the assigned responsibility was in connection with the old age benefits program.⁶

Organizationally, the actuarial responsibility in the Social Security Board was contained initially in the Office of the Actuary, which was separate from its Bureau of Federal Old-Age Benefits (later, following the declared constitutionality of the program and the addition of survivor benefits in the 1939 amendments, renamed the Bureau of Old-Age and Survivors Insurance). In turn, the Actuarial Division had two branches. The actuarial branch was under Dorrance C. Bronson, who also served as the next in line to Mr. Williamson (and who had come with him from the Travelers Insurance Company). The other branch was designated as the technical one and was under the leadership of Birchard E. Wyatt, a nonactuary who nevertheless had an excellent background in the insurance field (he was later to found the actuarial consulting firm, The Wyatt Company).

The actuarial work in the Treasury Department in connection with the old age benefits program was performed by Russell R. Reagh, who then held the post of Government Actuary.⁷ This responsibility arose primarily in connection with the language in the law that annual appropriations to the Old Age Reserve Account were to be in amounts "sufficient as an annual premium to provide for the payments required under this title, such amount to be determined on a reserve basis in accordance with accepted actuarial principles, and based upon such tables of mortality as the Secretary of the Treasury shall from time to time adopt, and upon an interest rate of 3 per centum per annum compounded annually." This language was legal obfuscation, for purposes of preventing a ruling of

tions). However, after the program was declared completely constitutional by the Supreme Court in 1938, the term "insurance" was used with alacrity. For further description of this matter see Robert J. Myers, "Is Social Security Really Insurance?" *Journal of the Chartered Life Underwriters*, July, 1974.

⁵ This rather peculiar title was used in order to justify the top civil service grade, because at that time the grade level normally was dependent upon the number of employees supervised.

⁶ The responsibilities in the unemployment insurance area were transferred from the Social Security Board to the Labor Department during World War II.

⁷ See footnote 2 for reference to a paper describing this position.

unconstitutionality by the courts; it was actually interpreted merely as meaning that the appropriations should be the gross tax receipts minus the administrative expenses of the system.⁸

The 1939 amendments, following the clean bill of health given to the program with respect to its constitutionality by the Supreme Court in 1938, eliminated this "window dressing" language and instead provided that the gross tax receipts would go directly into the trust fund. Thereafter, the Treasury Department no longer had a primary role in any of the actuarial work in connection with the program.

In 1938 the actuarial responsibilities were considerably restructured. Mr. Williamson continued to serve as Actuarial Consultant, with Mr. Bronson as his deputy, and the Office of the Actuary continued to be attached directly to the Social Security Board itself, with the responsibility then only for long-range actuarial work. The short-range actuarial work was assigned to an actuarial unit within the Bureau of Federal Old-Age Benefits (BFOAB), which unit was headed initially by John B. St. John and in subsequent years by George E. Immerwahr and Lawrence Alpern. In the meantime, Mr. Wyatt had left the Social Security Board to establish his consulting firm, and the work of the technical branch was assigned largely to the program planning unit of BFOAB. In 1942 the actuarial unit of BFOAB, which had been renamed the Bureau of Old-Age and Survivors Insurance (BOASI), was moved from Washington to Baltimore, where most of BOASI had moved previously in order to decentralize the federal government in view of the World War II situation.

Following the termination of World War II, Mr. Bronson left the Social Security Board to join The Wyatt Company. Then, in 1947, Mr. Williamson resigned as actuarial consultant, in part because of philosophical differences as to the character and development of the OASI program⁹ and in part to assume the presidency of The Wyatt Company following the untimely death of Mr. Wyatt. Some months later, Robert J. Myers was named to the post of Actuarial Consultant.

ACTUARIAL STRUCTURE FOLLOWING 1947

In 1948 the Social Security Board was dissolved as an independent agency and was made part of the newly created Federal Security Agency, and was then called the Social Security Administration. The Office of the

⁸ The House and Senate committee reports indicated clearly that this procedure should be followed (by showing gross tax receipts, administrative expenses, and appropriations, with the indicated numerical relationship prevailing in each and every year).

⁹ Mr. Williamson's views in this respect are well expressed in a number of discussions in the actuarial literature (see, for example, *TSA*, I, 555).

Actuary was renamed the Division of the Actuary, and its head was called the Chief Actuary (paralleling what had become the general practice in insurance companies). Then, in 1953, the Federal Security Agency was transformed into the Department of Health, Education, and Welfare. During this time, however, the functions and structure of the actuarial responsibility continued substantially unchanged.

Beginning with the legislative activity in 1949 that eventually produced the 1950 amendments, the responsibilities of the Chief Actuary were considerably broadened by his serving as the actuary for the two congressional committees dealing with social security (House Ways and Means Committee and Senate Finance Committee) when this subject was under consideration. This was a unique procedure in legislative matters, because the Chief Actuary was given an unusual amount of freedom and independence in serving in a confidential manner for what were sometimes opposing parties.¹⁰

In 1964 the Social Security Administration was reorganized so as to give further emphasis to the growing magnitude and complexity of the program. The heads of the various divisions were now designated Assistant Commissioners. The Division of the Actuary was renamed the Office of the Actuary, and its head was given a choice of titles, either to change to Assistant Commissioner or to remain as Chief Actuary; the preference for an "actuarial" title prevailed. At the same time, the significant step was taken of unifying all actuarial responsibilities in the SSA, both for the long-range work in Washington and for the short-range work in Baltimore, under the supervision of the Chief Actuary.

Accordingly, two Deputy Chief Actuaries were designated. The position for the short-range actuarial work in connection with OASDI continued to be held by Lawrence Alpern, as it is today. The other post, dealing with long-range OASDI matters, has been filled successively by T. N. E. Greville, Zenas M. Sykes, and Francisco Bayo, the present incumbent.

When the Medicare program was enacted in 1965, the actuarial responsibility was handled directly by the Chief Actuary and some of his staff. Later a third Deputy Chief Actuary, William C. Hsiao, was named to be responsible in this area, but, during his period of educational leave beginning in mid-1971 and following his resignation in 1974, the position was vacant and had not been filled by the end of 1974.

In May, 1970, Robert J. Myers resigned as Chief Actuary (for reasons set forth in a position paper published in *TSA*, XXII, D313). In February

¹⁰ For more details and a description of this matter see John F. Manley, *The Politics of Finance—the House Committee on Ways and Means* (Boston: Little, Brown & Co., 1970), pp. 339–54.

1971, C. L. Trowbridge (then senior vice-president and chief actuary of the Bankers Life Company) was appointed Chief Actuary, and he served until his resignation in June, 1973 (for a statement of the reasons therefor see *The Actuary*, January, 1973). In 1974 the Washington staff of the Office of the Actuary was moved to Baltimore. In March, 1975, it was announced that A. Haeworth Robertson (who had been Senior Actuary in the Social Security Division of the International Labor Office) would fill this position.

ACTUARIES WITH ADVISORY GROUPS

Over the years after the enactment of the Social Security Act in 1935, a number of advisory groups in connection with the program have been created, either by legislation or by administrative action. In each instance actuaries have participated significantly as members of such groups or as consultants thereto (see Table 2).

The 1937-38 Advisory Council, which was named jointly by the Senate Committee on Finance and the Social Security Board, included both Mr. Linton and Professor Mowbray. A 1945 advisory group established by the House Ways and Means Committee had G. W. K. Grange (on loan from the Metropolitan Life Insurance Company) on its staff. The Advisory Council of 1947-48, which was appointed by the Senate Committee on Finance under the authority of a Senate resolution, again included Mr. Linton.

A consultant group was created by the Secretary of HEW in 1953 to consider extension of coverage to additional categories, and this was chaired by Reinhard A. Hohaus. The Advisory Council of 1957-58, which was created by the 1956 amendments and was concerned only with financing aspects, included both Mr. Hohaus and Carl H. Fischer. Mr. Hohaus also served on the 1963-64 Advisory Council, which was the second of the series of councils authorized by the 1956 amendments and was concerned with all aspects of the program; actuarial consultants to this council were G. W. K. Grange, Mortimer Spiegelman, and Howard Young.

A special Advisory Council on Health Insurance for the Disabled was established by law and operated in 1967-68; among its members was Daniel W. Pettengill. The third regular advisory council under the Social Security Act, which functioned in 1969-71, included among its members Charles A. Siegfried; actuarial consultants to this council were Murray W. Latimer and Wendell A. Milliman. The Secretary of HEW named an advisory committee in 1970 to review the cost estimates for the Medicare and Medicaid programs; included as members were Seymour A. Fenichel

and Morton D. Miller. In 1971 William A. Halvorson was engaged as a consultant to the Office of the Actuary in connection with Medicare cost estimates.

The fourth regular advisory council under the Social Security Act, first named in 1974, also contained an actuary, J. Henry Smith; actuarial consultants to this council were Robert J. Myers, C. L. Trowbridge, and Howard Young. The Senate Finance Committee independently established a panel of actuaries and economists later in 1974 for the purpose of reviewing the financial condition of the OASDI program; the project coordinator was William C. Hsiao, and among the members of the panel were Meyer Melnikoff, Ernest J. Moorhead, and Walter Shur.

TABLE 2

ACTUARIES WHO HAVE BEEN ASSOCIATED WITH THE
SOCIAL SECURITY PROGRAM IN AN ACTUARIAL CAPACITY
BY SERVICE ON (OR WORKING FOR) AN ADVISORY COUN-
CIL OR COMMITTEE

(List Prepared as of January 1, 1975)

Seymour A. Fenichel, F.S.A., F.C.A., M.A.A.A.
 Carl H. Fischer, F.S.A., F.C.A., M.A.A.A.
 †James W. Glover, F.S.A., F.C.A.S.
 G. W. K. Grange, A.S.A.
 William A. Halvorson, F.S.A., M.A.A.A.
 Reinhard A. Hohaus, F.S.A., M.A.A.A.
 William C. Hsiao, F.S.A., M.A.A.A.
 †Clarence A. Kulp, F.C.A.S.
 Murray W. Latimer, F.C.A., F.C.A.S., M.A.A.A.
 †M. Albert Linton, F.S.A.
 Meyer Melnikoff, F.S.A., M.A.A.A.
 Morton D. Miller, F.S.A., M.A.A.A.
 Wendell A. Milliman, F.S.A., F.C.A., M.A.A.A.
 Ernest J. Moorhead, F.S.A., M.A.A.A.
 †Albert H. Mowbray, F.S.A., F.C.A.S.
 Robert J. Myers, F.S.A., F.C.A.S., F.C.A., M.A.A.A.
 Daniel W. Pettengill, F.S.A., M.A.A.A.
 †Henry L. Rietz, F.S.A.
 Walter Shur, F.S.A., M.A.A.A.
 Charles A. Siegfried, F.S.A., M.A.A.A.
 J. Henry Smith, F.S.A., M.A.A.A.
 †Mortimer Spiegelman, F.S.A., M.A.A.A.
 Charles L. Trowbridge, F.S.A., M.A.A.A.
 Howard Young, F.S.A., M.A.A.A.

† Deceased.

NOTE.—Individuals are listed as F.S.A. or A.S.A. if they possessed similar status in one of the predecessor organizations of the Society of Actuaries.

CONCLUSION

Over the years actuaries have played an important role in the development and operation of the social security program in the United States. This has been done by actuaries in the employment of the federal government and by outside actuaries providing advisory and consultative services. It is essential that actuaries continue these efforts, so that this program, which is of such great social and economic importance, will continue to operate on a sound financial basis and will serve the country well in providing a basic floor of economic security protection.

DISCUSSION OF PRECEDING PAPER

E. J. MOORHEAD:

The two rolls of honor graciously displayed in Mr. Myers' valuable historical paper might well be supplemented by a third one—actuaries who have aided our understanding of social security by writing papers and major book reviews for the *Transactions*, articles for *The Actuary*, textbooks, and study notes. Such a list surely would include Messrs. Francisco Bayo, Dorrance C. Bronson, James L. Clare, Geoffrey N. Calvert, Manuel Gelles, George W. K. Grange, Reinhard A. Hohaus, M. Albert Linton, Robert J. Myers, Abraham M. Niessen, Ray M. Peterson, Otto C. Richter, Rainard B. Robbins, Louis O. Shudde, Walter Shur, J. Henry Smith, Charles L. Trowbridge, Andrew D. Watson, W. Rulon Williamson, and Hugh H. Wolfenden. Even this list does not include Society members who have contributed papers and discussions on social insurance in Canada.

It is amusing to discover from Mr. Myers' Table 2 that throughout the forty years no actuary whose surname begins with any of the first five letters of the alphabet has ever been associated with the program in an advisory capacity, even though the Social Security Administration's own records show that 26 per cent of all card-carrying citizens have surnames within the *A-E* range. The authority for this was kindly given me by Mr. Gerald E. Hutchinson—see "What's in a Name?" *The Actuary*, March, 1974.

Undoubtedly public spirited actuaries will continue to keep up the flow of information through the publications of our profession. But there is an additional task for actuaries, one that perhaps has been treated too lightly in the past and that does not require the specialized knowledge possessed by those named in Mr. Myers' paper. That is to play a worthy part in educating the United States public about the philosophy and operation of the social security system.

Ignorance and misconception are troublesomely prevalent among our citizens. These attitudes are damaging, for two reasons especially: they erode the confidence in the system that is essential to its continued acceptance by the taxpaying population, and they motivate people to exert their influence in wrong directions when, as at present, amendments to the social security law are being considered. These misunderstandings seem to be attributable largely to the public's failure to appreciate the

necessary differences that exist between social and private security programs.

Now that both the Society and the Academy have a Committee on Social Insurance, we may expect our profession to enlarge its continuing education activities to include the people of the United States as well as its own membership. When we complain that actuaries are little known and recognized, perhaps we overlook the possibilities for deserved recognition that can come from such public service activities.

(AUTHOR'S REVIEW OF DISCUSSION)

ROBERT J. MYERS:

I would like to thank Jack Moorhead for his discussion; it provides a valuable addition to my paper. I would certainly agree that actuaries should become more interested in social security and the directions in which it is moving. Actuaries should be able to make very positive contributions to discussions of social security and can help to dispel "ignorance and misconceptions [that] are troublesomely prevalent among our citizens."