

TRANSACTIONS OF SOCIETY OF ACTUARIES  
1965 VOL. 17 PT. 1 NO. 47 AB

BOOK REVIEWS AND NOTICES\*

R. J. Myers, *Social Insurance and Allied Government Programs*, pp. vi, 258, Richard D. Irwin, Inc., Homewood, Ill., 1965.

The author of this timely work needs no introduction to readers of these *Transactions* or predecessor journals. Since 1939, when the first of his expositions of the Social Security Act and its amendments appeared in the *Record* (*RAIA*, XXVIII, 22), he has been the faithful interpreter of social security proposals and legislation.

In discussing that early paper (*RAIA*, XXVIII, 358) on "Cost Estimates for the Old-Age Insurance System of the Social Security Act," this reviewer stated that Mr. Myers knew whereof he spoke, having been with the Committee on Economic Security, which made the original studies for the Act, and with the Social Security Board (predecessor of the Social Security Administration in the Department of Health, Education, and Welfare, of which Myers is Chief Actuary) since its inception. Sixteen years later, in commenting on Myers' account of the 1954 Amendments (*TSA*, VII, 450), your reviewer further observed:

In this paper Mr. Myers has done his usual competent job of bringing us up-to-date on what transpires in the field of Social Security legislation, more particularly as it relates to the Federal Old-Age and Survivors Insurance plan. He speaks with the authority of one who has been closely associated with the thinking and discussion from which policy and legislation in this area are forged. He has served well as a valued consultant in most, if not all, the significant discussions that have shaped that system since its inception in 1935. This society is indeed fortunate in having him available to keep us historically and factually oriented in this most important area.

Today, some ten years later, it remains the Society's good fortune that he continues to perform this interpretative function.

Your reviewer understands that the Society has adopted this work as a social security textbook for its Fellowship examinations, in the expectation that it will fill a long-standing need among actuarial students for such a text. It is important, therefore, to consider how successful it promises to be in fulfilling this role.

As already indicated, the author's qualifications for the job leave virtually nothing to be desired. His book is the crystallization of over 30 years of study and experience, in which he has been the mentor, not alone of actuarial students, but of advisory bodies and congressional committees charged with the formulation of social security policy and legislation, and even of the Senate itself in the course of crucial debate. Students, whether or not they seek Fellowship in this Society, should indeed feel privileged to get their initiation into the arcana of

\* Books and other publications noted with an asterisk (\*) may be borrowed from the library of the Society of Actuaries under the rules stated in the *Year Book*.

social security straight from the horse's mouth, as it were, through this comprehensive and well-articulated presentation, instead of from a scattered array of largely disjointed sources. This is not, of course, to say that these latter will not remain valuable and illuminating background material for the student from a variety of standpoints, notably the philosophical.

Myers has written much on social security and related topics, chiefly in official publications and actuarial journals, and much of what is outlined in this book he has probably treated elsewhere in greater detail. However, these writings are not always readily accessible, and it is good, even aside from examinations, to have in one place a condensation of their author's thinking and research. Incidentally, he has travelled extensively in connection with his work, exchanging information and ideas with social security experts in many lands, so that when he describes, all too briefly, a number of foreign systems, he is usually speaking from firsthand knowledge. One could wish, in fact, that in his treatment of the foreign field he could have been more expansive in giving us the benefit of his personal investigations.

As Society members well know, Myers has been prominent in the activities of the International Social Security Association with headquarters in Geneva, being Vice-President of their Permanent Committee of Actuaries and Statisticians; and also in organizing a body closely associated with them, the Inter-American Association of Social Security Actuaries and Statisticians, of which he is President.

Myers' aim, as stated in his preface, is to give "a thorough factual description of the various social insurance and allied programs now operating in the United States" with emphasis on "general principles" and on "social insurance" rather than "public assistance." This is as it should be, since "general principles" are very much a part of any actual situation and since social insurance in the United States has been Myers' special area of concern from the beginning. He is especially effective in expounding the financial basis of the OASDI system (chap. v), and the methodology for actuarial cost estimates, particularly the long-range ones for that system (chap. viii). Though he does not, of course, do so, he could well take to himself a large measure of the credit when he tells us (p. 83) that "each time legislative activity has occurred, Congress—particularly the legislative committees concerned—has carefully considered the cost aspects of the proposed changes. The enacted provisions have been financed fully, according to the best actuarial cost estimates available," for the estimates have generally borne his name, and it was he who generally influenced the committees to recognize and heed their import.

The making of long-range cost estimates is a complex and intricate process, calling for much demographic, statistical, and actuarial acumen (note the principal elements and factors listed on pp. 114-15). Next to retracing in major detail, at least, the steps of an actual computation<sup>1</sup> (an exacting and time-consuming

<sup>1</sup> This your reviewer has done, once in exhaustive detail in 1945 for the House Ways and Means Committee (see pp. 184-256 of "Issues in Social Security," listed in Myers' seven-page Bibliography), and twice in major essentials for the 1957 and 1964 Advisory Councils, respectively.

ing procedure, but the only way your reviewer knows of fully appreciating the magnitude of the task), a perusal of Myers' chapters is perhaps as good a way as any of acquiring a feeling for what is involved.

More generally, your reviewer believes that this book will meet a need that has been the more sorely felt as social security has continued to evolve and ramify, the need on the part of those who seek a firm understanding of the true nature of this complicated matrix of institutions for an authoritatively factual yet philosophically penetrating account of its development and present status. He knows of no one who in this area possesses such understanding in fuller measure than Myers, and is therefore better able to impart it to others. Since this book reflects a large measure of that understanding, it is, he feels, a fitting medium to render that service, and will so remain, whatever inadequacies or even defects may subsequently appear. That none will seems too much to hope, if only because social security, with its far-reaching social, economic and political implications, is subject to continual change, and each new legislative or administrative departure will call for some, perhaps much, updating of the story. It is to be hoped that, when the need for such updating is indicated, it can be effected without undue delay, either by supplementation from Myers' own pen or by a new edition of the book as the situation may warrant. Bigger, if not better, "medicare" is currently in the works, so that chapter vii (Health Benefits Proposals) is already behind in the procession. It is your reviewer's understanding that Myers plans to prepare an addendum to the book to describe the significant amendments that were enacted in July, 1965.

When an author deals with matters undergoing current development in thought and practice, he must find it hard that he has to set himself a cutoff date if he is ever to appear in print; that at some point he must practice self-denial and forego the satisfaction of discussing developments that he knows or feels are impending and may greatly affect the future of his subject. And his situation must seem all the harder if he is himself deeply involved in these developments. Such, I suspect, must have been Myers' predicament when his continuous and intensive involvement in the work of the 1964 Advisory Council on Social Security apparently debarred him from even alluding to its activities, let alone anticipating its findings (publication of Myers' book just about coincided with that of the Council's Report). Surely the book's value would have been enhanced if its author could have incorporated some of the Council's thinking, particularly in the area of "Hospital Insurance for Older People and the Disabled" (Part II), including the brief but telling dissenting statements of Mr. R. A. Hohaus (Appendix A). Lacking this, it would seem that the next best thing for the ambitious reader would be to familiarize himself with both book and report.

It would of course be a relatively easy, if gratuitous, exercise to discover other features that might have added to the book's completeness, thereby perhaps "improving" it. Thus, if it is to meet fully the role of an official textbook for a society of which our Canadian colleagues are an integral part (a role which Myers apparently did not envisage when he laid down his blueprint), it might seem desirable that fuller treatment be accorded their country in any later edition. Not only would this help to erase what some might consider a slight,

OAA FEDERAL MATCHING FORMULAS  
(SINCE OCTOBER, 1960)

MONTHS FOR WHICH EFFECTIVE	RANGE IN DOLLARS OF:		VALUE IN DOLLARS OF:	
	<i>A</i>	<i>A<sub>m</sub></i>	<i>fA</i>	
States Other than Puerto Rico, Virgin Islands, and Guam				
Oct. 1960 to June 1961	Up to 30 30 to 65 65 to 65 + <i>A<sub>m</sub></i>	Up to 12 " " " "	4/5 <i>A</i> 24 + <i>P</i> ( <i>A</i> - 30) 24 + <i>P</i> × 35	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or <i>P<sub>m</sub></i> ( <i>A</i> - 65) if greater
July 1961 to Sept. 1961	Up to 30 30 to 65 65 to 65 + <i>A<sub>m</sub></i>	Up to 15 " " " "	4/5 <i>A</i> 24 + <i>P</i> ( <i>A</i> - 30) 24 + <i>P</i> × 35	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or <i>P<sub>m</sub></i> ( <i>A</i> - 65) if greater
Oct. 1961 to Sept. 1962	Up to 31 31 to 66 66 to 66 + <i>A<sub>m</sub></i>	Up to 15 " " " "	4/5 <i>A</i> 24.8 + <i>P</i> ( <i>A</i> - 31) 24.8 + <i>P</i> × 35	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or <i>P<sub>m</sub></i> ( <i>A</i> - 66) if greater
Oct. 1962 to date	Up to 35 35 to 70 70 to 70 + <i>A<sub>m</sub></i>	Up to 15 " " " "	29/35 <i>A</i> 29 + <i>P</i> ( <i>A</i> - 35) 29 + <i>P</i> × 35	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or <i>P<sub>m</sub></i> ( <i>A</i> - 70) if greater
Puerto Rico, Virgin Islands, and Guam				
Oct. 1960 to June 1961	Up to 35 35 to 35 + <i>A<sub>m</sub></i>	Up to 6 " " " "	1/2 <i>A</i> 17.5	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or .5 ( <i>A</i> - 35) if greater
July 1961 to Sept. 1961	Up to 35 35 to 35 + <i>A<sub>m</sub></i>	Up to 7.5 " " " "	1/2 <i>A</i> 17.5	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or .5 ( <i>A</i> - 35) if greater
Oct. 1961 to Sept. 1962	Up to 35.5 35.5 to 35.5 + <i>A<sub>m</sub></i>	Up to 7.5 " " " "	1/2 <i>A</i> 17.75	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or .5 ( <i>A</i> - 35.5) if greater
Oct. 1962 to date	Up to 37.5 37.5 to 37.5 + <i>A<sub>m</sub></i>	Up to 7.5 " " " "	1/2 <i>A</i> 18.75	+ .15 <i>A<sub>m</sub></i> + .15 <i>A<sub>m</sub></i> or .5 ( <i>A</i> - 37.5) if greater

NOTES: *A* = total average monthly payment (in dollars) for all eligible recipients up to the maximums indicated; \* *A<sub>m</sub>* = part of *A* (if any) that represents vendor payments for medical care up to the maximums indicated; † *fA* = part of *A* provided by the federal government; *P* = federal matching proportion, ranging from .5 to .65, applicable to excess of *A* over a fixed level; *P<sub>m</sub>* = federal medical matching proportion, ranging from .5 to .8, applicable to excess of *A* over a higher fixed level.

\* Now 70 + *A<sub>m</sub>* for states other than Puerto Rico, Virgin Islands, and Guam, and 37.5 + *A<sub>m</sub>* for the last three.

† Any vendor payments that exceed these maximums (now \$15 for states other than Puerto Rico, Virgin Islands, and Guam, and \$7.50 for the last three) would of course be subject to regular matching as part of *A*.

all the worse for being unintended, but would afford an opportunity for interesting comparisons between the different practices and philosophies of our two countries. On second thought, however, being neither a Canadian nor too close to Canadian developments, Myers may have been wise to leave fuller presentation of the Canadian story to someone meeting these requirements.

Again, partial as your reviewer is to charts and tabulations to facilitate comparisons, e.g., temporal ones as between the original law and later amendments, or regional ones as between states or provinces, he would have welcomed greater use of this device. Thus, in following the development of OASDI in the book, he found it helpful to have at hand an excellent chart put out by the Social Security Administration under Myers' name and entitled "Old-Age, Survivors, and Disability Insurance Provisions: Legislative History, 1935-61." The presence of such a chart in the book would, he feels, have helped others too, and he offers this as a suggestion for the next edition.

Your reviewer would also like to put into the record the table on page 98 in the hope that it will help clarify the federal matching formula for Old-Age Assistance, the account of which on pages 16-20 he found somewhat difficult to follow.

In surveying this table one might well wonder why so much tinkering with the formula within a brief two-year period. Suffice it to say that "sweetening" the federal share, as well as the full-assistance payment, is a temptation which many legislators find irresistible.

Then, too, doubts may arise as to the suitability for the purpose in hand of a type of matching formula which involves splitting a statewide average payment into two portions, with a smaller matching proportion applicable to the upper than to the lower portion. With such a formula it can be shown that, so long as a state retains the power to assess need as it sees fit, it could quite legally "exploit," as it were, the federal open-ended generosity. By the simple expedient of putting more low-payment recipients on its rolls, thereby reducing the over-all average payment to recipients, it could reduce its own outlay (per 1,000, say, of aged population), while at the same time not only making good the deficiency but even adding to the total outlay (also per 1,000 of aged population) at federal expense. This, however, is a story apparently outside the scope of Myers' stated purpose not to go into "an analysis of underlying policy issues." So too, no doubt, would be the question whether the use of matching proportions that vary inversely with state per capita incomes really sets up any valid distinctions between states that would promote even rough justice between them for the purpose in hand. That Myers has apparently ruled out such issues by implication, which is his privilege as an author, does not of course signify that they are irrelevant to, and may not vitally concern, his subject.

G. W. K. GRANGE

*The Status of the Social Security Program and Recommendations for Its Improvement*, Report of the Advisory Council on Social Security, pp. ix, 115, Washington, D.C., 1965.

This review is organized into five sections plus an Addendum as follows:

- A. The Advisory Council—Background, Purpose, and Composition.
  - B. The Findings and Proposals on Financing Cash Benefits.
  - C. The Recommendations with Respect to Changes in the Existing Cash-Benefit System.
  - D. The Recommendations with Respect to a New Hospitalization Program.
  - E. Reviewer's Personal Comments on the Report.
- Addendum—Council Recommendations *vs.* House Provisions of Original Mills Bill, H.R. 6675, *vs.* Final Provisions of Act Effective July 30, 1965.

A. *The Advisory Council—Background, Purpose, and Composition*

Section 116 of the Social Security Act Amendments of 1956 provided (with certain changes in 1960) for successive Advisory Councils to be set up and to report on the status of the trust funds for the cash-benefit programs, Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). These reports were to be submitted on the first of January, 1959, 1965, 1968, and each fifth year thereafter.

Each Council is newly appointed by the Department of Health, Education, and Welfare (HEW), with the Report itself being submitted by the Council to the Board of Trustees of the OASI and DI trust funds. The first Council reported at the beginning of 1959, with observations and recommendations on matters, in accordance with the statute, rather directly focused on the financing aspects of the two cash-benefit programs.<sup>2</sup> The second Council, however, had its focus widened (applying to this Council only) by a special amendment in 1960 to supplement the subject of "financing," with its findings and recommendations: "with respect to extensions of the coverage of the old-age, survivors, and disability insurance program, the adequacy of benefits under the program, and all other aspects of *the program*" (italics supplied).

On opening the present Report we see not only findings and recommendations on "financing" but also for changes in existing cash-benefit provisions; then we find definite proposals for a new program of service-type benefits to cover hospitalization for the aged. The latter might well be viewed as a subject not comprehended by the above excerpt from the statute, unless it is through a liberal extrapolation of the term "the program" in the last phrase of the excerpt.

The statutory composition of each Council, whose 12 "outside" members were appointed by HEW, is for equal representation of (1) employers and (2) employees, respectively, with representatives, also of (3) self-employed, and (4) the public. The makeup of the second Council was, in the above order, 3:3:1:5, with the Commissioner of Social Security as Chairman. Of the five public members, four were connected with universities. It is interesting that each of the three members "for employees" came from large offices of organized labor (e.g., AFL-CIO) while none of the three members "for employers" came from an office of any employer-oriented organization (e.g., U.S. Chamber of Commerce).

It is pertinent here to point out that the Council's recommendations in the

<sup>2</sup> Reviewed by Mr. Ray M. Peterson, *TSA*, XI (1959), 286.

Report are made without any qualification and without any minority views except two statements by Mr. R. A. Hohaus, as discussed later in this review.

B. *The Findings and Proposals on Financing Cash Benefits*<sup>3</sup>

1. *Financing the present cash benefits.*—This subject is, by the statute, the sole focus for Advisory Councils if not otherwise enlarged by Congress. The Report of the first Council, presented January 1, 1959, found the program then current to be soundly financed. The Report of the second Council finds the present program to be soundly financed but suggests, however, shifting over 0.15 per cent of taxable payroll from the tax rates now scheduled for OASI to augment the scheduled tax rates for DI (e.g., a shift in the order of \$250 million for the year 1966). It is claimed that this re-allocation would result in a “close” actuarial balance for each of these programs. Furthermore, the Council proposes that scheduled increases in contribution rates should take effect more gradually, or be halted altogether from time to time until fiscally necessary to resume. The purpose of these actions would be either to prevent steadily increasing redundancies in the funds or to modify unexpected sudden redundancies. In essence, it seems that the Council favors running closer to a pay-as-you-go status than Congress had heretofore planned.

The Council suggests correcting, however, one area where not even “pay-as-you-go” costs have been paid to the trust funds (instead, a sort of an “owe-as-you-go” status has grown up). This lies in Congress’ neglect to reimburse OASI and DI trust funds for past benefit payments (and those ahead) attributable to non-contributory wage credits for the military, from 9/16/40 to 12/31/56. (Prior to 8/31/50, reimbursement *was* made, and since 12/31/56, regular employee-employer payroll taxes have applied.) But no reimbursement has occurred for any benefit payments after 8/31/50 based on wage credits for the military before 1957. Thus the trust funds, since 1950, have been using monies of regularly contributing employees and employers, for “military” benefits which are properly the obligation of the federal government. The Council proposes that reimbursement should begin to be made to the trust funds, forthwith, of the cumulative benefits paid from 8/31/50 to date and for the future benefits arising.<sup>4</sup>

<sup>3</sup> In the Foreword of the Report, reference is made to a subcommittee of the Council which conducted a review of the practices followed in preparing the actuarial estimates for the program. This subcommittee was aided by two insurance company actuaries and an actuary from organized labor, as well as by the actuarial staff of the Social Security Administration.

<sup>4</sup> I agree with the Council that the government should “catch up” on this “debt” to the OASI and DI trust funds and then “keep current.” This “military item” takes too much space for the Addendum at the end of this review, but it is interesting that, in both the original Mills Bill and the final Act as passed, there is a 50-year (*sic*) schedule to year 2015 (i) for amortizing past “debts” for these 15 years of cumulative benefit pay-outs (8/31/50–8/31/65) and (ii) for amalgamating into it similar future payments. The logic of this 50-year spread is not obvious, nor described; e.g., the an-

2. *Financing the proposed cash benefits.*—The proposed benefit changes under the OASDI programs will be listed later. Most of them involve increased dollar benefits, which the Council would finance, in lesser part, by somewhat higher tax rates, on the average, than at present; but, in greater part, they would be financed by raising the taxable pay ceiling from the present \$4,800 a year to \$6,000 in 1966 and \$7,200 in 1968.<sup>5</sup> Some members argued that the second step should go to \$10,000. This financing principle of taxing an ever larger bracket of earnings is pointed to as a means of keeping the *rate* of tax down, but of producing a higher *dollar* amount to pay for the increased benefits. Such a principle is intended to implement a method which apportions costs between the lower-paid and the higher-paid groups, to quote the Council, "in the most desirable way."

3. *Tax rates for proposed cash benefits.*—The report furnishes a proposed schedule of future tax rates applying to the increased pay ceilings of the preceding paragraph.<sup>6</sup> In line with the purpose described in paragraph 1 above, these percentage rates (without mixing in the self-employed) are lower than in present law during 1968–70, then higher. This latter difference is particularly noticeable for 1976 and after; e.g., the present tax rate for 1976 (\$4,800 pay ceiling) is 4.625 per cent (each, employee and employer) while the proposed rate is 5.3 per cent (\$7,200 pay ceiling). The additional tax rate for the proposed hospitalization program is described later.

### C. *The Recommendations with Respect to Changes in the Existing Cash-Benefit System*

It is impossible within space limitations to discuss all the Report's recommendations, large and small, under this heading. The three main changes affecting benefits are briefly described below and eleven others merely listed.

1. *General increase in monthly benefits.*—The Council proposes increased OASDI benefits which are stated to be some 15 per cent higher, on the average, than those by the present law. A basic component would effect a 7 per cent increase across the board for all types of beneficiaries. The other component of some 8 per cent benefit increase, on the average, is more deviously constructed. For some reason, the Report does not set out the usual type of formula, per se, for the proposed benefits; however, the narrative description is that the bottom pay bracket would be widened from a top of \$110 for the heavier benefit weighting as at present, to \$155 for the proposed benefits. The upper pay bracket, taking

nual receipts might come out less than actual disbursements for a number of years in the near future and, in any event, why the long delay in meeting a liability that had its inception in a bygone period?

<sup>5</sup> Such a staggered "double jump" in pay ceiling would be an unprecedented device in amending the Act. For a similar device used in H.R. 6675, see Addendum—Table 1, item (a), col. (3); but note from col. (4) thereof that said "double jump" is not scheduled in the final Act.

<sup>6</sup> This schedule, combined with the proposed hospitalization contributions, is given in item 10 of following Section E.



a lesser benefit weighting, would also be widened so that, instead of encompassing \$290 of pay, as now (i.e., \$400-\$110) it would encompass \$445 of pay (i.e., \$600-\$155).<sup>7</sup> Existing beneficiaries would receive the increases indicated above, according to their applicable previous average wage.<sup>8</sup>

2. *Maximum family benefits—new principle.*—The aggregation of monthly benefits payable in respect of a retired worker and his family has been subject to a flat dollar maximum of \$254 since 1958. The Council proposes a change to a “floating maximum” that would be a function of each worker’s average earnings. Consequently, they endorse a 1964 proposal which would put another “bent formula” into the law. Each family maximum would be computed as (i) 80 per cent of that part of average earnings which does not exceed two-thirds of the maximum average earnings of the Act, plus, if applicable, (ii) 40 per cent of that part of earnings which falls in the other one-third of such maximum.

3. *Maximum lump-sum death benefit.*—The lump-sum benefit at the worker’s death has been three times his then computed primary benefit, with a flat dollar maximum of \$255. The Council’s proposal would retain the present “3-times” rule but would determine the dollar ceiling for the lump-sum death benefit by the same “floating maximum” rule as described in paragraph 2 above for family benefits, still another administrative job under a “bent formula.” The insurance company actuaries—especially for “industrial” business, no doubt keep an eye on this governmental payment at death, recalling, for one thing, the old (1940) Temporary National Economic Committee’s (TNEC) staff proposal that a basic flat amount of death benefit be paid by the government for all deaths (unrelated to the Social Security Act).

4. *Other benefit or coverage changes.*—The Council’s Report contains eleven other areas of OASI and DI where changes are proposed, in addition to the three already described above. The best I can do under the circumstances is to copy the headings for the eleven points from a list given in the Report. Each of these headings is followed by an abbreviated or paraphrased statement adapted from the longer summaries given in the Report.

*Children over 18 attending school.*—Benefits should be payable until age 22 if attending school.

*Disabled widows.*—If she was disabled before (i) her husband’s death or (ii) youngest child is 18, she should get widow’s benefits regardless of her age.

*Definition of child.*—A child should be paid benefits without regard to state inheritance laws if dependent on the father.

*Young disabled workers.*—Young workers should have shorter work requirements for disability than older (a proposed rule is given).

*Rehabilitation of disability beneficiaries.*—Social security should pay the costs of such services provided for these beneficiaries by state rehabilitation agencies.

*Insured status.*—No major changes to recommend in the present requirements of covered work for eligibility.

<sup>7</sup> For benefit examples and derived formula, see following Section E.

<sup>8</sup> I had to obtain this from other sources, since no clear formula or description of just what was being proposed for those already retired is given in the Report.

*Retirement test.*—The provision preventing benefits along with substantial earnings—the retirement test—is essential and should be retained.

*Doctors of medicine.*—Doctors should be covered as self-employed, and interns as employees.

*Tips.*—Tips, as reported, should be counted for benefit and contribution purposes.

*Federal employees.*—If not protected under civil service retirement system when they retire, become disabled, or die, federal employment should be counted for OASDI purposes.

*State and local government employees.*—Coverage should be expanded to more of these employees by “pushing” optional coverage for present groups and making it compulsory for new employees.

#### D. *The Recommendations with Respect to a New Hospitalization Program*

As noted in Section A above, decision was made somewhere along the line that the Act’s special “mandate” for this particular Council be construed to include consideration of the applicability of the contributory social security vehicle to some form of program providing medical or hospitalization benefits. The result of such consideration was a “vote” of 11 to 1 in favor of a contributory scheme for hospital care, and subsequent follow-up services, in respect of (i) practically the whole population age 65 and over and (ii) under 65, the category of disabled beneficiaries receiving DI cash benefits at any time.

The resulting recommendations for a hospitalization program—as to its coverage, its specifications for services to be provided, and its envisioned financing principles—can only be sketched briefly at this point. The following list indicates the chief elements in the Council’s recommendations for a new hospitalization (HI) program.<sup>9</sup>

1. *Inpatient hospital benefits.*—To cover the number of days sufficient for inpatient services spanning the full stay of almost all beneficiaries (60-day maximum per spell suggested).
2. *Outpatient hospital diagnostic services.*—To meet the costs of these services.
3. *Deductibles.*—Hospitalized beneficiaries of paragraph 1 above, should pay a deductible of one-half day’s cost (\$20 at the program’s beginning). Outpatients of paragraph 2 above should pay a like amount for each 30 days of services provided.
4. *Services in extended care facilities.*—To cover a minimum number of days of high-quality care after leaving the primary hospital, in a hospital-connected facility (not a nursing home).
5. *Organized home nursing services.*—Coverage should pay for these services up to 200 or 300 visits per year (240 were assumed for the cost estimates).
6. *Payments on the basis of reasonable cost.*—Protection should be specified in terms of services covered, not in terms of fixed dollars; payments to be made directly to source of services provided.
7. *Hospital staff review of utilization.*—Participating hospitals required to review the services utilized through professional staff committees.
8. *Administration.*—By same federal agencies that are administrators of present

<sup>9</sup> See Addendum—Tables 2 and 3, which show the many differences between the Council’s proposal and the subsequent legislative action, especially the “voluntary program” of Table 3 (not proposed or discussed at all in the Council’s Report).

OASI and DI cash benefits. Private and state agencies, to extent of their effectiveness, may be used.

9. *The basis of eligibility for benefits.*—Covers present and future aged (65 plus) and the disabled beneficiaries of the DI cash-benefit program; also, those 65 and over not now, or in next few years, eligible under the present OASI program would be covered for full HI service benefits.
10. *Financing.*—By a special earmarked tax for the HI trust fund of 0.4 per cent of annual covered earnings from each, employees and their employers (0.5 per cent by self-employed); and also 0.15 per cent of annual covered earnings would go from federal revenues to a new trust fund towards costs (i) for aged category of paragraph 9 above who are ineligible for cash benefits and (ii) for those (65 plus) who are eligible for cash benefits currently, under the OASI and RRA programs. A separate HI trust fund would be created for this new program (in addition to the present OASI and DI trust funds).

Under the hospitalization program outlined in the above list, the Council (with but a single dissent) felt that a government HI plan as a partner to the OASI and DI programs, would have the following advantages: it would be flexible to accommodate evolution of health care progress; it would allow freedom of choice of health care facilities; it would not interfere with private medical practices or with the independence of private hospitals; it would assure (under the contribution rates proposed) a soundly financed system; and it would serve as a foundation for supplementary private health insurance. The dissent from the hospitalization proposals by Mr. Hohaus makes a forceful argument against the mixing of "cash benefits" and "service benefits," a matter on which I give personal comments in item 9 of Section E which follows. Mr. Hohaus feels that considerable further study and education on the potentialities of such a "mix" should precede any program adopted. He also expresses the opinion that insufficient recognition is given in the Report to the rapid growth, scope, and potentials of private voluntary health insurance plans for the aged.

#### E. *Reviewer's Personal Comments on the Report*

Up to this point, my review has presented brief factual reporting of the background, content, and recommendations of the second Council's Report. Changing hats—from reporter to critic—I will now set down such personal observations, questions, and criticisms as came up along the way. These personal comments are necessarily set out in capsule form by reason of space limits.

#### CASH-BENEFIT CHANGES

1. *Pay ceilings.*—The discussion in the present Report, of raising the ceiling (now \$4,800) of covered wages for tax and benefit determinations, points, with great stress, to a statistic that the \$3,000 original ceiling in 1935 embraced 95 per cent of the then total annual earnings among those who would be covered by the program. Today the Report says it would take \$14,500 as a pay ceiling to "restore" the above 95 per cent relationship; some members would favor approaching such a ceiling forthwith. However, the Report's recommendation "settles"

*just now* for \$7,200 (1968) which, it seems to deplore, "restores" only the 85 per cent statistic of 1950 relative to the then new \$3,600 pay ceiling.

The preceding historical orientation to 95 per cent (or any other high percentage) as the desirable portion of the total pay of covered workers to be embraced by a given pay ceiling seems a criterion open to question. Have not pay increases for workers similarly situated (i.e., by age, seniority, and class of work) been the resultant of two vectors—(i) inflation forces and (ii) productivity increments? If the component of increase in pay arising from (ii) is available to buy "wants" instead of "needs," is it properly includible in computations to establish new pay ceilings for determining benefits designed to provide "needs"? Consider, for example, that the Consumers Price Index (CPI) rose from 1 in 1951 to 1.2 by the end of 1964. The top benefit by the 1950 amendments was \$80 but is now \$127 (since 1958), a relationship which is nearly 40 percentage points ahead of the 20 per cent rise in CPI. Then go on to note, as may be seen in the table in accompanying point 3 below, the proposed top benefit of \$186; if it took effect immediately (but there is a certain lag), this benefit, relative to the \$80 at the start of the period, would be some 110 points ahead of the 1964 CPI relative to the 1951 CPI.

Perhaps the above reasons for my claim of an over-escalation of pay ceilings can be overthrown by rebuttals from economists. If so, I trust their argument would be based on grounds other than merely those of "social purpose." In any event, it is noteworthy that the Report neither contains discussions of this matter nor otherwise provides inducement for wider thought on this important point. While the Council, as a whole, would appear to agree on a "restoration" of the 1950 relationship, one group of members would have preferred a sedulous adherence to the aim of restoring a depression-period "statistic" (one which grows older and less meaningful each year).

2. *Average wage devices.*—The above concept of cleaving to the past was not the criterion followed by the Council for its other proposed changes. Nor has such criterion been used much over the years. Many completely new changes were made in the amendments of 1939 and other new ones have been successively adopted ever since. An important new principle was the amendment in 1950 for "new starts," affecting eligibility and average wage (and there have been some other new starts since then, for special categories). The 1950 new starts must have rendered obsolete, for most purposes, the mass of carefully compiled records of covered wages, of nearly 15 years' work up to 1951. The purpose of including this latter comment is to assuage, in part, my long-time feeling that the wage-relation provisions for OASI benefits were made too complex at the start.

While there seems to be no proposal by the Council for a general "new start," per se, an allied proposal would boost the applicable average wage and benefit for males by another means. In the 1954 amendments, provision to "drop-out" the 4 years of lowest wages produced the first means of increasing the average wage since the "new start" effect of 1950. In 1956, the drop-out was extended to 5 years, a further upward effect on average wage. An 8-year drop-out as to

retirement at age 65 is now proposed for both sexes, on the grounds that in 1956 females, for retirement determinations at age 62, gained that right, in effect, for general use.

The history of the "new starts" and the "drop-outs," including the present proposal to extend the latter, suggests as conceivable that it might not be too long before the benefit is determined on, say, a "highest 5-year average." Aside from the serious cost implications, this would seem to yield economic by-products in further simplifications of Baltimore's wage records.<sup>10</sup>

3. *Benefit formula.*—The existing benefit formula is 58.85 per cent of the first \$110 of average monthly pay plus 21.4 per cent of pay between \$110 and \$400.

ILLUSTRATIVE PRIMARY INSURANCE AMOUNTS—OASI AND DI

Average Monthly Wage (1)	Present Law (2)	Council's Proposal (3)	Dollar Increase (3) Over (2) (4)	Percentage* by Which (3) Exceeds (2) (5)
\$ 67.....	\$ 40 (min.)	\$ 43 (min.)	\$ 3	7.5%
100.....	59	63	4	6.8
110.....	65	70	5	7.7
124.....	68	73	5	7.4
155.....	74	91	17†	23.x†
200.....	84	101	17	20.x
300.....	105	122	17	16.x
400.....	127	144	17	13.x
500.....	127	165	38	30.x
600.....	127	186	59	46.x

\* Decimals omitted where "x" appears.

† There are gradations in the results between this and the preceding \$5 or 7.4 per cent, respectively.

As noted earlier in Section C, 1, the proposed benefit increase would be some 15 per cent, on the average, with about half of this (7 per cent), applying across the board. The 8 per cent balance of the "average" 15 per cent increase is less simple and, as noted earlier, the formula, per se, is not set forth. Illustrative benefit results are given, however, which are reproduced in columns 1, 2, and 3 above. Columns 4 and 5 are mine and disclose a peculiar set of relationships which, on first glance at least, seem rather anomolous or inequitable.

From a few clues in the text of the Report, and by trials for reproducing the above column 3, it appears to me that the benefit formula may be expressed as a 3-stage affair, as follows:

- a) Pay lies below \$124: Proposal is present formula (58.85 per cent first \$110, plus 21.4 per cent excess), with result increased by 7 per cent.

<sup>10</sup> It is of interest to note that the Council's Report contains a paragraph in which it is recommended that a complete re-examination of the Act be conducted by government experts, with particular objectives for simplification throughout (even letting a few chips fall where they may). The recommendation is worthy but the probability of much success is close to zero, I feel.

- b) Pay lies at \$124 to \$155: Proposal is 58.85 per cent of pay.  
 c) Pay lies at \$155 to \$600 (1968): Proposal is 58.85 per cent on first \$155 plus 21.4 per cent on excess.

Relative to the above, I reiterate that the Report neither (i) presents the clear-cut benefit formula, per se, nor (ii) clarifies the Council's intentions as to benefit adjustments for existing beneficiaries (e.g., the benefit table on page 61 of the Report refers to, in its heading, "Retired Worker Who Comes on the Benefit Rolls," thus implying [incorrectly] that the table's benefit examples apply only to "future" beneficiaries). Through other sources than the Report, I became aware that increases for present beneficiaries would be determined under the above weighted formula, using the "average wage" previously established when the existing benefit was computed. Other readers, also, must have been confused on this point.

Considering (i) the escalation of pay ceilings (described above in item 1 of this Section E), (ii) the proposed 8-year drop-out (covered in item 2 above), and (iii) the new benefit formula just set forth, it is obvious that, in combination, they would produce considerably greater cash benefits than previously. It is of particular interest to note the extent of benefit increases in the area where the average monthly wage (helped by proposals [i] and [ii] above) exceeds \$400 (i.e., the last two lines of the above table). For those two lines we naturally find the greatest dollar and percentage increases, as evident in columns 4 and 5, respectively. Bear in mind, the effect of the proposed 8-year drop-out over the nearer future, whereby, for example, the \$600 people can replace 8 years of lesser ceilings of \$300, \$350, or \$400 with a \$600 amount for each passing year. The proposed benefit liberalizations would result in the older workers currently at these higher-pay levels receiving the greatest "windfall" or subsidy, as a result of the changes. Their period of time for paying taxes would be relatively short before retirement, and would be at the lower end of the proposed tax schedule. This all seems to support the Biblical dictum, "to him that hath . . ."<sup>11</sup>

4. *Disability comments.*—The benefits proposed by the Council and the other changes outlined earlier in Section C apply in most instances to both the OASI program and the disability (DI) program. In 1956, an amendment providing monthly cash payments upon disablement superseded the "disability freeze," the latter being sort of a "premium waiver" type of arrangement. The definition of eligible disability was quite strictly drawn at that time and has continued on that basis to date; furthermore, the DI benefit start is subject to over 6-months waiting period. The Council does not propose any change in definition or waiting period but *does* endorse a project for studies of past disability denials to be carried out. As noted elsewhere, the status of the separate DI trust fund stands below the point of so-called "actuarial balance" (a shift from OASI taxes to augment DI taxes over the future has been suggested, as mentioned earlier).

<sup>11</sup> For further interesting points concerning the "subsidy" matter referred to in this paragraph, see Peterson, *op. cit.*

The reason for the existing "out of balance" of DI is stated in the actuary's appendix to be caused by fewer recoveries from disability than counted on, rather than by higher inception rates of disability. I have examined the proportion that disability retirement awards bear to total retirement awards and, except for the two or three years of getting the new DI started after 1956, DI awards each year have been quite stable, at around 16 per cent or 17 per cent of the year's total retirement awards.

5. *Extending coverage.*—The well-known categories still not covered are medical doctors, federal employees without pensions under the Civil Service Commission,<sup>12</sup> certain state and local employees who (or whose employers) have continued to option out, and that part of remuneration of waiters, maids, etc., represented by tips. The proposal, of course, is to close these gaps in respect of nonretired persons, as tightly and as fast as possible. It is interesting that there is no reference to the exclusion from coverage of Members of Congress and of other elective positions; one wonders why this discrimination?

#### PROPOSED HOSPITAL PROGRAM

6. *Disclaimer and opponent.*—In giving my personal comments on this topic, I must clearly disclaim being expert or highly knowledgeable in the health benefit field. In the role of a nonexpert, however, I side with those opposed to injecting mandatory benefits of a "service" character into the maw of federal administration. After reading the minority statement on this proposal presented by Mr. Hohaus, and those of other authorities who cite the available and growing private programs for health care of the aged, plus the fact that the report does not give documentation (or case histories) of where hospital attention has been needed but denied to impecunious persons, I find myself of a mind with Mr. Hohaus on this matter.

Admitting, then, a lack of sophistication in this field, I will still venture a few personal observations concerning certain points in this area of the report.

7. *Rationale for program.*—The Council's introduction for this part of their Report sets the stage (in 10 printed pages) by developing the reasons for federal hospitalization insurance for the aged (HI) and why such a program should become a third partner to the OASI and DI programs. Space allows me only one comment on the aforesaid 10 pages of stage-setting. This has to do with the Council's viewpoint (readily inferred not only from this HI part of the Report but from the nature of various opinions throughout the whole Report) that the "rainy day" concept of individual thrift is receding into the past, if not already dimmed out. For instance, the Report implies that there seems no hope of making local health agencies function more adequately; that there is a basic unfairness in expecting children and relatives to contribute care for their aged; that a "short fall" and narrowness apply to private insurance arrangements; and that there is a ubiquitous tacit acceptance of constant inflation ahead. Also, getting

<sup>12</sup> Employees covered for such pensions will be excluded but are already deemed to have rather comparable coverage.

back to where I started, short shrift is given to finding help from personal savings by individuals. For example, note the astonishing statistic that some \$750 billion of life insurance now stands mainly for distribution to widows at their husbands' death; no help seems to be recognized here for aged widows' hospital costs. In short, the aforesaid stage-setting in the Report is not convincing to me that mandatory federal hospital coverage thus payable, inter alia, to all the "haves," would be an efficient way of utilizing payroll money that might better be directed to other purposes (e.g., solely focused on the "have not"), with the rest controlled by those who earned it.

8. *Regulations—hospitals; doctors.*—One recommendation in the Report is that the President appoint a commission of health and hospital experts which would aim at enhancing the effectiveness of health care in our hospitals. The findings of such a commission, it is stated, would be of long-range importance under the HI program. While I suppose the objective has merit and might warrant still another "President's committee" being formed, it does strike me that this recommendation implies some qualification of the Council's assurances, found elsewhere in the Report, that the new plan "will in no way interfere . . . with the independence of our voluntary hospital system."

Also, in the HI part of the Report, the Council proposes that hospital staffs be required to set up committees for reviewing utilization of services and certification procedures to police the use of such services. Here, again, some "Doubting Thomas" may compare this idea of mandatory review of patients' stay and condition with the statement elsewhere in the Report saying that the proposed HI "will in no way interfere with the private practice of medicine."

9. *Cash versus service benefits.*—The hospitalization plan would furnish "service benefits" to all over age 65 and to younger disability (DI) beneficiaries. OASI and DI now provide "cash benefits" only and exclude quite a number of aged who did not qualify for coverage. Except (i) for the caveats in Mr. Hohaus' first minority statement and (ii) for the emphasis which I think I read "between the lines" in Mr. Myers' Appendix, the Report, which deals with both types of benefits, fails to give the readers a discussion of the fundamental differences between the "cash" and the "service" types. This strikes me as a surprising omission. We have had "cash" benefits operating for over 25 years, whereunder the benefits, costs, and conditions for payment have been susceptible of fairly close determination, affording reasonably firm advance costs and planning. When we come to "service" types, however, we are suddenly faced with perplexities in the much less measurable elements and in the far less stable outlook.<sup>13</sup>

<sup>13</sup> The uncertainties as to the degree of "use" to be made of the facilities for furnishing the service benefits and as to the "open end" future costs for such benefits (costs not solely a function of "use") are points being clearly exemplified in recent and current difficulties of various Blue Cross programs around the country. For example, at this writing, the New York program is applying for still another increase in contribution rates, and this action inter alia, is causing the program to become a subject of New York State and City political embroilment.



Even if one's fears were allayed by the "assuredly sound financing" proclaimed in the Report as to its rates of contribution, it seems that the Council should have gone into a rather full discussion of the underlying dichotomies inherent in these respective benefit types. Comments on the cost estimates are offered later in this review.

## COSTS—OASI; DI; HI

10. *Proposed tax rates.*—The Council's level rates of tax on payroll for the new hospitalization (HI) trust fund were set forth in item 10 in Section D. The proposed schedule of future *total* payroll taxes is shown in the accompanying tabulation, with those exclusive of HI given in parentheses, i.e., for "cash benefits" only.

PERIOD (1)	EMPLOYEE AND EMPLOYER, EACH		SELF-EMPLOYED	
	Present Law* (2)	Proposed † (3)	Present Law* (4)	Proposed † (5)
1966-67.....	4.125%	4.7% (4.3)	6.2%	6.3% (5.8)
1968-70.....	4.625	4.7 (4.3)	6.9	6.3 (5.8)
1971-75.....	4.625	5.1 (4.7)	6.9	6.5 (6.0)
1976 and on.....	4.625	5.7 (5.3)	6.9	6.8 (6.3)

\* \$4,800 ceiling.

† \$6,000 ceiling 1966-67, \$7,200 thereafter. Cols. 3 and 5 do not include the proposed government contribution for HI, at 0.15 per cent of payroll.

Referring to the parenthetical rates above, for the "cash benefits" part, the self-employed would reap a distinct tax advantage by column 5, not only relative to their present rates in column 4 but, more importantly, in the column 5 rates proposed being much closer to those for regular employees, column 3, than under present law in column 4 versus column 2. While the Council offers a rationale (*too long for discussion here*) for this rate shift, I do not find it very convincing; I feel that many self-employed would enjoy, under the proposal, cost subsidy from the regular payroll taxes.

In that part of the Council's Report which deals with proposed improvements in "cash benefits," a table is given showing the itemized transition from the status of "actuarial balance" under the present OASI and DI trust funds, over to the envisioned status for the "improved" OASI and DI programs. This table is based on the "intermediate cost assumptions" and uses, for obtaining level-cost percentages, the Council's "75-year rule" instead of "perpetuity." (For a comment on end results, see item 17 below.) Various fund projections for the OASI, DI, and HI proposals are furnished in the Appendix prepared by Robert J. Myers in his customary thorough manner. Finally, I should mention here (see, again, item 17 below) that an important caveat on the proposed costs is pre-

mented in a second separate statement by Mr. Hohaus appended to the main Report.

11. *Individual equity*.—The successive reports issued over the years by the social security actuary have clearly explained that financial support for a system not based on traditional actuarial reserves must rely on the employee-employer payroll taxes of initial and future younger employees in order to meet the basic claims of early and future older groups. The social security actuary has, at times, examined the question of whether the present value of the young worker's *own* contribution exceeded the present value of his total prospective benefits. Based on these examinations, he believes that, on the average, this has not been the case to date. Also, Mr. Ray Peterson and others have pointed up this criterion in certain past writings. The reason for alluding to the question here is to express surprise that no discussion whatever of this matter of "individual equity" appears in the present Report, even in general terms.

12. *Actuary's procedures and cost estimates*.—As mentioned in paragraph 10 above, the Report contains the Appendix, with projections and leveled costs, by Mr. Myers. It is obvious that the Council relied heavily on Mr. Myers for almost all of the assumptions entering the various cost computations; for example, the Report's text emphasizes the dependence of cost estimates on a foundation of appropriate actuarial assumptions. As noted earlier, the Council preferred embracing a "75-year" period of projections and leveled cost measurements rather than the "perpetuity rule" which Mr. Myers (and, before him, Mr. W. R. Williamson) had been prone to follow. However, the choice between "75 years" and "perpetuity" involves relatively small values (in the order of 3 or 4 percentage points between level-cost results by one basis as against the other). The Report refers to certain basic assumptions for HI cost estimates as those which the Council directed the actuary to use. In the area of hospitalization, extended care, nursing, etc., it is not uncommon for an actuary—usually not an expert in practical operational experience in these fields—to welcome suggestions from others concerning such things as the past history and "expected" future development of the components of hospital costs and of the intricacies as to levels of remuneration, cash and kind, among hospital and allied personnel. I understand that the Council furnished Mr. Myers with certain information and data relative to these points for use in his HI cost studies and suggested the assumptions that he adopt for future rise in hospital expense; otherwise, Mr. Myers relied largely on his own decisions for the actuarial assumptions over the balance of the Report's cost areas. The actuarial costs based on these suggestions of the Council for the HI assumptions may have purposely resulted in figures which left little conservative margin.<sup>14</sup> It was by using the Council's suggestions that the HI contributions, from the actuary's figures for their Report, resulted in a "fix" at 0.90 per cent of payroll for the equivalent level value of these contributions (implicitly linked to such increased pay ceilings as may be needed in the future).

<sup>14</sup> The House Ways and Means Committee later, when considering H.R. 6675, proposed to Mr. Myers the use of HI assumptions quite a bit more conservative than those used for the estimates in the Advisory Council's Report.

13. *Greatest trusteeship ever.*—Concerning the Council's designation of the OASI and DI financing medium as constituting the "greatest financial trusteeship in history," this federal fiduciary is the steward, presently, for some \$21 billion of trust funds (\$19 for OASI and \$2 for DI). If it is fair to view the private pension funds of the country as a composite trusteeship composed of insurance companies and trust companies, their stewardship extends to present trust funds of some \$70 billion. Hence this combination of private fiduciaries might challenge the above "superlative" title conferred on the federal trusteeship by the Council. Furthermore, the private type of trusteeship must involve a much wider range of decisional responsibilities and the exercise of more diverse investment acumen since the private plans' portfolios run the whole gamut of investment types while the social security trust funds trade in federal obligations only. In this connection, it is pertinent to note that the Council recommends replacing the present *semi-annual* meetings of the federal trustees by *annual* meetings hereafter. Under either of these infrequencies, the private sector of pension-fund stewardship would, by its different requirements, disintegrate as to its necessary functions.

14. *Hospitalization contributions.*—Turning more directly to financing for the recommended HI "service benefits," the Council's proposed contribution rates, previously noted, would be at 0.4 per cent on pay up to the applicable wage ceiling as set from time to time, such rate being paid by each employee and employer (0.5 per cent, by self-employed). In addition, the government would contribute to the new HI trust fund, 0.15 per cent of such pay (for 50 years) to meet the cost of furnishing the same service benefits to persons now (or soon) ages 65 and over, who are not OASI beneficiaries through lack of meeting requirements. The total by this rate basis comes to 0.95 per cent, or to an average rate of 0.90 per cent including adjustment for lower rate with respect to the self-employed. The actuary's Appendix estimates the new trust fund would receive some \$2.8 billions of HI contributions in 1968 under the then \$7,200 ceiling, which contributions would increase, assuming the same wage ceiling to about \$4.5 billions in the year 2000, when the fund would have some \$19 billions.

The HI costs in the Report and its Appendix are labeled "intermediate cost estimates," but I find no other HI cost results by either "high" or "low" assumptions. From other discussions in the Report of HI costs, one infers that the Council feels the above rates (total average 0.90 per cent) have ample margin to hold indefinitely into the future. In effect, however, as discussed in item 15 below, there is a very fundamental and important assumption under which these initial HI tax rates are envisioned as "expandable" to accommodate "high cost" experience if it results.

15. *Contribution elasticity.*—In several of its statements on the HI cost elements, the Report indicates that the initial tax rates would apply to increased pay ceilings found necessary for the purpose in the future. On this point, Mr. Myers, in his Appendix, explains this in a clearer and more definite manner. He states the basic hypothesis for his HI cost projection as one which envisions that likely increases in expenses to be encountered by hospitals and related facilities in furnishing these "service benefits" (especially the expense for pay

increases of personnel involved in these services) will have to be met, at the Council's level rates, by successive increases in pay ceilings. Each such increase in ceiling will create a new segment of payroll for the HI tax rate but with no concurrent increase in HI services (just the opposite result to that under a "cash benefit" program).

Why is there this imperative need for elasticity to maintain the Council's rate of tax under the HI program (without enlargement of HI services), and where does its maintenance lead us? I do not know the answer to the first part of this question. As for the second part, the Report contemplates that any induced increase in pay ceiling for HI needs, would also apply automatically for OASI and DI. It seems to me, then, that when the pay ceiling is raised (extending to all three programs) for the sole purpose of obtaining more HI contributions, it would be a case of "the tail wagging the dog." The Council's HI level average contribution rate of 0.90 per cent is only about 8 per cent of the total actuarial level cost for all three programs (\$7,200 ceiling) combined. The nexus, under the Council's plan, of identical pay ceilings for each program, means that the "8 per cent HI area," would be dictating the pay ceiling for the "92 per cent area." I feel this would be an anomalous, even dangerous, situation. The "92 per cent area" of OASI and DI would either (i) need to force up its benefit formula to absorb the extra payroll "windfall" or, alternatively, (ii) need to reduce the then scheduled OASI and DI tax rates so they would not be redundant for a basically unchanged benefit formula. Under (i), the younger employees would, in effect, increase their subsidy to cover that part of the older employees' benefits generated by the new increment of pay. Under (ii), I suppose everyone would seem to benefit, but part of the aforesaid new subsidy would still take effect.

16. *Independence of trusts?*—The Report describes the proposed HI trust fund as a separate entity to stand on its own feet under the alimantation from the earmarked HI payroll contributions. This was the principle enunciated for the DI trust fund when it was enacted in 1956. While I do not argue against the recommendation, mentioned earlier, to allocate (or perhaps to reschedule) a portion of the presently scheduled OASI contributions over to the DI fund, for the purpose of bringing the latter into closer "actuarial balance," the proposed transfer *does* indicate a certain degree of nonindependence of the OASI and DI trust funds. With the addition of a third trust fund for the HI service benefits, a "three-way parlay" might take place at some future date.<sup>15</sup> Conceivably, such a move would not be confined merely to re-allocating the then future contributions but might involve "retroactivity" through one trust fund obtaining immediate help from the existing assets of another trust fund built up over the past. A precedent, of a sort, comes to mind: under 1959 amendments to the Railroad Retirement and Unemployment Insurance Acts, authorization was given for an unlimited amount of borrowing from one fund, the "railroad retirement account," by the other fund, the "railroad unemployment insurance account."

<sup>15</sup> Or a "four-way parlay" under either the original H.R. 6675 or the subsequent final Act (see Addendum—Tables).

At present, and for some years past, the latter owes the former over \$300 million, with no assurance of repayment.

17. *Cost caveat by Mr. Hohaus.*—Reference has been made earlier to Mr. Hohaus' second minority statement. He brings into focus a point, not discussed in the Report proper, concerning the physical and psychological implications of the increase over the present costs resulting from new costs for the Council's proposals; and the question is what will be the impact of the new costs on the economic status of the country? He points out that under the present OASI and DI programs, with a \$4,800 ceiling, the payroll burden as a level-cost percentage is in the magnitude of 9.09 per cent (using the proposed 75-year rule). In contrast, the Council's proposal, including an average HI tax of 0.90 per cent, would constitute a payroll burden of 11.03 per cent as a level cost. Not only is this an increase of 1.94 percentage points numerically, but it relates to pay up to \$7,200 a year instead of up to the present \$4,800. Thus, for example, the effect in respect of a \$7,200 employee would be a cost increase of 1.94 per cent on his first \$4,800 of annual pay plus 11.03 per cent on the \$2,400 difference in pay between \$4,800 and \$7,200. When one considers "what we now have" in the 9.09 per cent rate and what is proposed in the 11.03 per cent rate, and expresses the difference in terms of dollars, he finds an "awful lot of money" is involved. For example, using the estimated covered payrolls for 1968 (by \$4,800 and \$7,200 ceilings, respectively), the result is an actuarial increase in payroll levy, using level-cost percentage measurements, of over \$10 billions for 1968, which would increase with future pay increases within the respective two ceilings considered. I agree with Mr. Hohaus that such magnitudes of cost increase need public awareness and discussion, and pose, in his words, "important questions as to priority in the distribution of our economic resources."

18. *OASI benefits and income taxes.*—In his review<sup>16</sup> for TSA covering the Report of the first Advisory Council, Mr. Peterson posed an interesting point but did not develop it, feeling that it has been omitted because of being deemed beyond the purview of that Council's terms of reference. The matter is also omitted in the present Report, for the topics of which the Council was given a much wider purview than before. In any event, for either Report, the subject seems to me to be a completely logical item for review and discussion.

The point has to do with the income tax aspects of social security benefits to the recipients at time of pay-out. In our U.S. system, they have been tax-free from the start. In the various countrywide debates on so-called "medicare" programs, it has been pointed out that all the well-to-do people among the aged would get these governmental service benefits without income tax, though they have the wherewithal to meet the costs themselves even out of "taxed money." Of course, the present income tax law grants deductions from income, anyway, of health expenses for those over 65,<sup>17</sup> so the point just mentioned is not a very

<sup>16</sup> *Op. cit.*

<sup>17</sup> However, after 1966, age 65 will no longer be the point for granting full health expense deductions; H.R. 6675, both in its original version and in the final Act, uses the same rule for all ages. (See Addendum—Table 3, N.B. below the footnote.)

telling argument as far as taxes go. Thus, while the tax part of the argument hardly fits the HI benefits (or the DI benefits) for the well-to-do, it does seem to me that the inclusion of OASI benefits as "income" for an individual's tax return would tend to reduce the "take home" amount of monthly benefit not needed by the well-to-do aged. Of course, to be fair about this, either the employee's own OASI contributions during his active period should be tax deductible or the taxable post-65 amount would be confined to, perhaps, the "employer's" 50 per cent part of the OASI benefit or other rough estimate for this purpose.

This point could take on added significance under the larger OASI benefits at near top, or top, pay ceiling now proposed (\$7,200); viz., \$186/mo. (or \$280/mo. including wife). Under the envisioned future progression in pay ceilings, the point would be successively accentuated. It used to be that the retirement benefits of OASI were characterized, and had been for years, as a "floor of protection." Lately, one hears this term less frequently; for example, it may be quite significant that neither it, nor a synonym, is found in the present Report. Especially in respect of the proposed higher and higher OASI benefits (see item 15 above), it would have been of refreshing interest to find some examination of the income tax relationships in the Council's Report.<sup>18</sup>

19. *Overcategorical.*—In writing its Report, the Council seems to have been inclined to give us a number of quite categorical statements. For example, they unqualifiedly assert that by their particular choice of brackets for benefit weightings and by their proposed pay ceilings, the relative costs of the program will be apportioned "in the most desirable way." (Others might feel other choices were equally or more "desirable.") Or, again, concerning the financial soundness of the proposed program, there is the definite statement: "... the Council has undertaken to assure that the financing will be sufficient to meet all benefits and administrative costs as they fall due." Concerning this latter quotation, one finds that the "assurance" just cited is based on the "intermediate cost estimates." Would the statement be so definite if a glance, at least, had been given the "high cost estimates"? The purpose, as I understand it, of the social security actuary—dating back to the start—presenting a *range* of costs, is to disclose to Congress and the public, conceivable extremes.

Of course, in this type of Report, the Council could hardly be expected to qualify its statements continually, with "ifs" and "buts"; it does seem, however, that for a number of important statements, the authors could have avoided an impression of such certitude.

20. *Simplification of provisions.*—While the Council's Report contains many proposals which would further complicate parts of the program, a few would simplify some of the records. Also, as noted in the footnote for item 2 earlier, one side-recommendation is for social security experts to study ways and means to bring about over-all simplification. It seems to me that this aim is so impor-

<sup>18</sup> In Canada, and I believe in the U.K., employee contributions to the social security schemes are free of tax, while benefit disbursements are subject to inclusion for tax purposes.

tant that Congress might well stimulate this area for study as part of the next Council's terms of reference.<sup>19</sup>

21. *Laborious task for Council.*—This reviewer had the benefit of attending a February, 1965, meeting in New York at which Mr. Hohaus presented a short address describing the work of the Council. He related that in preparing for and developing its Report, the Council bracketed about a year and one-half during which frequent meetings were scheduled (the proportion of the membership attending these meetings was unusually high, he stated). He applauded the dedication shown for the task and the time taken for reviewing masses of material. In commenting earlier in this review, on certain points where I take a somewhat critical view, I am not unmindful of the above dedication and hard work of the Council.

22. *Appointment of Council members.*—As outlined at the start, in my Section A, the members of successive Councils are to be appointed by the Secretary of the Department of Health, Education, and Welfare. I believe a fair question to raise is whether this medium for appointments is the best one for obtaining membership with a diversity of views and background. It seems to me that the present Report, with only one minority statement, carries too high a degree of unanimity on a subject which is so broad, so thorny, and so naturally argumentative as social security. A greater spread of differing conclusions would seem to make the Council's Reports more thought-provoking than Reports in which so many members appear to be pretty much in agreement. I have not thought much on alternatives to the present statutory directive for HEW to do the appointing of members, but possibly, the Bureau of the Budget, or a team-up of the Departments of Commerce and Labor, might function to this wider purpose.

#### ADDENDUM

Mention was made earlier that, while this review was being written, the House Ways and Means Committee (Mr. Wilbur Mills, Chairman) had reported out H.R. 6675 proposing OASI and DI changes and new programs comprising basic "Hospital Insurance Benefits for the Aged" (HI), as Part A, and voluntary "Supplementary Health Insurance Benefits for the Aged," as Part B. House passage of said Bill (unchanged) occurred 4/8/65, and after numerous revisions in the Senate and by the Conference Committee, the final Act was signed on 7/30/65. These legislative activities took place after the foregoing text was completed.

A brief comparison between the recommendations of the Advisory Council and the provisions of the Mills Bill, H.R. 6675, which passed the House 4/8/65, and, again, with the provision of the final Act signed 7/30/65; would be an interesting supplement to the foregoing review of the former's Report. Consequently, I have prepared such a comparison and it now follows as an Addendum in Tables 1, 2, and 3.

<sup>19</sup> While the present Council endorsed HEW's public information activities, there is no reference in the Report to a study thereof, nor of the literature disseminated. I have heard criticisms that some items border on "misrepresentation." This phase of the program, too, might well be placed on the agenda of future Councils.

**ADDENDUM—TABLE 1—CHECK LIST OF COL. (2), ADVISORY COUNCIL'S RECOMMENDATIONS VS. COL. (3), PROVISIONS OF THE 3/24/65 MILLS BILL, H.R. 6675 (PASSED HOUSE 4/8/65), AND VS. COL. (4), FINAL PROVISIONS AFTER TRANSITION FROM HOUSE TO SENATE ACTIONS AND ON TO THE COMPROMISES OF THE CONFERENCE COMMITTEE AND FINAL ENACTMENT (SIGNED 7/30/65)  
CHANGES IN CASH-BENEFIT PROGRAMS—OASI AND DI**

Item (1)	Advisory Council (2)	3/24/65 Mills Bill, H.R. 6675 (3)	Final Act, as Signed 7/30/65 (4)
(a) Increased pay ceilings.....	\$6,000, 1966-67; \$7,200, 1968 and on	\$5,600, 1966-70; \$6,600, 1971 and on	\$6,600, 1966 and on
(b) Benefit formula on ceiling pay; i.e., \$7,200, col. (2); \$6,600, (3) and (4)....	58.85% on 1st \$155, and 21.4% on next \$445; but at least 7% over present formula	107% of (58.85% on 1st \$110, and 21.4% on next \$290), plus 21.4% next \$150*	Same as col. (3); including *
(c) Worker's maximum benefit.....	\$186 per month (using \$7,200 ceiling)	\$168 per month (using \$6,600 ceiling)	Same as col. (3)
(d) Family maximum benefit.....	\$400 per month (using \$7,200 ceiling)	\$368 per month (using \$6,600 ceiling)	Same as col. (3)
(e) Maximum lump-sum death benefit....	\$400 payment at death (\$7,200 ceiling)	\$255 at death; same as present maximum	Same as col. (3)
(f) "Drop-out" for average wage.....	8 years (May use years after 1950)	5 years, males; 8 years, females; as at present (May use years after 1950)	Same as col. (3)
(g) Definition of disability.....	Same as present strict "long-term total" basis, with present, in effect, 7-mo. wait	After 6 months, whether disability is "temporary total" or "long-term total"	After 7 mo. if disability lasts, or expected to last, 12 mo. (see [i] [ii])
(h) OASDI tax rates, on each† (excludes self-employed rates).....	4.3% for 1966; up to 5.3% by 1976	4.0% for 1966; up to 4.8% by 1973	3.85%, 1966; up to 4.85%, 1973 and on
(i) Retirement test‡.....	Present \$1:\$2 offset for pay from \$1,200-\$1,700; \$1:\$1 offset above \$1,700	\$1:\$2 offset for pay from \$1,200-\$2,400; \$1:\$1 offset above \$2,400	\$1:\$2 offset for pay \$1,500-\$2,700; \$1:\$1 offset above \$2,700
(j) Increase for beneficiary rolls.....	Formula of (b) above on the previously determined average wage	7% across-the-board (\$4/mo. PIA minimum)	Same as col. (3)
(k) Re future Advisory Councils.....	Urges such Councils @ 5-yr. dates, to review both provisions and financing of "cash benefits" above and of "service benefits," col. (2), Tables 2 and 3 (No other comments in Report)	Future Councils directed to study <i>all</i> aspects of the cash and service benefits; also, somewhat different membership "mix"; § next report due 1/1/70	Same as col. (3); including §
(l) Certain miscellaneous provisions.....	No proposals relative to items (i) and (ii) in col. (1)	Re (i), col. (1), widow 60 may elect her age 62 benefit reduced by 5/9% per mo. prior to 62. Re (ii), no provision	Re (i), same as col. (3) Re (ii), if disability benefit of (g) plus any workmen's compensation amount exceeds 80% "average monthly earnings," offset to (g) possible
(i) Widows' election age 60			
(ii) Workmen's compensation offset			

\* Or, simplified, \$44.08, plus 22.9% on first \$400 pay plus 21.4% on next \$150 pay (not refined to exact steps used); applies for both cols. (3) and (4).

† The rates in both cols. (2) and (3) include 0.375% of payroll as contributions to the separate DI trust fund, but in col. (4), Final Act, inclusion is 0.350%.

‡ On Council's basis of keeping present rule, this means that for full amount of husband-wife benefits based on \$7,200 ceiling, year's earnings after retirement (before age 72) need to reach \$4,798 before the OASI benefit would be suspended completely. Or by col. (3), Mills Bill's ceiling of \$6,600, about \$4,824

year's earnings before complete suspension. Or by col. (4), Final Act's ceiling of \$6,600, about \$5,124 top earnings before complete suspension.

§ "Employer" members would represent employer *organizations*, and "employee" members would represent employee *organizations*. (Cf. composition of Council described in penultimate paragraph of Sec. A of the foregoing review.)

|| A special definition of average earnings is used; also adjustment periodically for changes in "national average earnings"; it is full "Family" for (g) that counts.



ADDENDUM—TABLE 2—CHECK LIST OF COL. (2), ADVISORY COUNCIL'S RECOMMENDATIONS VS. COL. (3), PROVISIONS OF THE 3/24/65 MILLS BILL, H.R. 6675 (PASSED HOUSE 4/8/65) AND VS. COL. (4), FINAL PROVISIONS AFTER TRANSITION FROM HOUSE TO SENATE ACTIONS AND ON TO THE COMPROMISES OF THE CONFERENCE COMMITTEE AND FINAL ENACTMENT (SIGNED 7/30/65)  
 NEW PROGRAMS OF SERVICE BENEFITS\*—PART A. COMPULSORY BASIC HOSPITAL PLAN; COVERAGE, BENEFITS, AND TAX OR CONTRIBUTION RATES

Item (1)	Advisory Council (2)	3/24/65 Mill Bills, H.R. 6675 (3)	Final Act, as Signed 7/30/65 (4)
(1) Coverage.....	OASI and RRA beneficiaries over 65; all others over 65 for few years' transition period; and DI beneficiaries under 65	OASI beneficiaries over 65, same as to RRA beneficiaries over 65; practically all others age 65 prior to 1968	Same as col. (3) except for very minor changes
(2) Basic hospital benefits.....	Hospital services up to 60 days as inpatient (including certain hospital physicians' procedural services)	Hospital services in U.S. up to 60 days as inpatient (No physicians' services as in col. [2] covered)	Same as col. (3), but (i) up to 90 days and (ii) psychiatric hospital services included (with 190 days lifetime limit)
(3) Outpatient diagnostics.....	Hospital diagnostic services	Hospital diagnostic services, 20 day study	Same as col. (3), but see (4) below re col. (4) vs. col. (3)
(4) Deductibles and coinsurance....	Patient pays 1st \$20 for (2) above; and \$20 for (3) above. No deductibles for (5) or (6) below	Patient pays 1st \$40 per spell for (2) above and \$20 for (3) above. No deductibles for (5) or (6) below	Same \$40/\$20 as col. (3). Coinsurance changes added: (i) met by inpatient of (2), @ \$10/day, 61-90; (ii) by outpatient of (3) for 20% of costs; and (iii) for extended care of (5) below, @ \$5/day after 20th day (None for [6] below)
(5) Extended-care benefits (in qualified facilities).....	Services in hospital-connected extended-care facilities for a post-hospital period of 30 days, plus 2 days for each day that (2) above was less than 60 days	Services for post-hospital period of 20 days, plus 2 days for each day (to 40) that (2) above was under 60 days (i.e., maximum 100 days per spell)	Services for post-hospital period of 100 days (w/o "2 for 1" rule of col. [3] but subject to coinsurance of [iii] in [4] above)
(6) Home health services (with approval of M.D., and by qualified personnel).....	Visits at home after, or in lieu of, services of (2), (3), and (5) above; visits up to 200 or 300 a year proposed	Visits at home after 3 days of services of (2) or (5) above; visits up to 100 for year after discharge	Same as col. (3)
(7) HI tax rate, on each, employee and employer (federal rate is a combined total).....	Earmarked rate of 0.4% of covered payroll (0.5% self-employed) to go to separate HI fund; also 0.15% rate to said trust fund from federal general revenue (for 50 years) for costs of the already retired and of "all others" in (1) above (These are "fixed" rates; i.e., they do not change over future years; however, they <i>do</i> apply to future pay ceilings)	Earmarked rates (same for self-employed) ranging from 0.35% (1966) to 0.80% (1987) go to separate HI fund. (If pay ceiling rises over \$6,600 of item [a] of Table 1, hereof, these rates could be reduced, as stated in the Committee's Report.) The costs for "all others" of (1) above to be met from general revenue, apparently on "pay-as-you-go" basis	Same tax rates, same type of HI fund, and same basis for meeting the costs of the category "all others," as in col. (3). However, no statement corresponding to that in parentheses in col. (3) is found in either Senate Finance Committee or Conference Committee Reports

\* The five-year recurring Advisory Councils of item (k) on Table 1, with broader directives than heretofore, would include studies of the assumed applicable Part A program (i.e., under col. [2], [3], or [4] above), as to both its provisions and financing. A second Council, with different functions, is envisioned under either col. (3) or col. (4), to be set up as a continuing body, with 4-year membership rota-

tion, appointed by the Secretary (HEW) to advise him on general administrative policy and regulations under the applicable "health" program; this body would be designated the "Health Insurance Benefits Advisory Council."

**ADDENDUM—TABLE 3—CHECK LIST OF COL. (2), ADVISORY COUNCIL'S RECOMMENDATIONS VS. COL. (3), PROVISIONS OF THE 3/24/65 MILLS BILL, H.R. 6675 (PASSED HOUSE 4/8/65) AND VS. COL. (4), FINAL PROVISIONS AFTER TRANSITION FROM HOUSE TO SENATE ACTIONS AND ON TO THE COMPROMISES OF THE CONFERENCE COMMITTEE AND FINAL ENACTMENT (SIGNED 7/30/65)  
NEW PROGRAMS OF SERVICE BENEFITS\*—PART B. VOLUNTARY SUPPLEMENTARY MEDICAL INSURANCE; COVERAGE, BENEFITS, AND PREMIUM OR CONTRIBUTION RATES**

Item (Table 2 nos. cont'd) (1)	Advisory Council (2)	3/24/65 Mills Bill, H.R. 6675 (3)	Final Act, as Signed 7/30/65 (4)
(8) Coverage.....		All U.S. residents over 65 who elect to enroll, or in respect of whom a state elects enrollment of certain old-age categories receiving State Assistance payments	Same as col. (3)
(9) Benefits.....		Physicians' services and a variety of medical and other services not covered under the "Compulsory Basic Hospital Plan" of Part A on Table 2, col. (3)	Same as col. (3), except at end thereof, reference should be "col. (4)"
(10) Deductibles and coinsurance.....		Covered person pays 1st \$50 of (9) above, for each calendar year in which such services provided. He would also meet 20% of costs for such services beyond the above \$50 yearly deductible	Same as col. (3); provided that diagnostic deductible paid for Part A (item [4], col. [4] of Table 2) offsets, <i>pro tanto</i> , the deductible of this Part B; e.g., \$50 in effect is \$30, as person's payment for item (9) above
(11) Contributions.....	Program corresponding to that of the heading for Part B above was not proposed in the Advisory Council's Report	Initial "premium" of \$3.00 monthly (no increase before 1968) payable by enrollees as deductions from their current over-65 OASI and Railroad Act benefits, or by various other methods as to the noncurrent-beneficiary enrollees. Federal contributions from general revenue would match the aggregate premiums of enrollees†	Same as col. (3), provided applicable enrollee's premium is likewise deducted from his annuity under a retirement system of the Federal Civil Service Commission (Note † of col. [3] carries to this col. [4] also)
(12) Funding and administration.....		The total premiums and Federal contributions would go to a new separate fund, "Supplementary Health Insurance Benefits Trust Fund." All benefits are payable from said fund; however, House Committee's Report suggests that "the benefits . . . should be administered by private sector," i.e., through contracts with qualified "carriers" for undertaking various <i>administrative</i> functions	Same as col. (3), except that in the Final Act, name of the separate fund is "Supplementary Medical Insurance Trust Fund." It should be stated, also, for col. (4) that the Senate Committee concurred in the House suggestion noted in second sentence in col. (3)

\* With respect to note \* of Table 2, the future Advisory Councils mentioned there apply to this Part B also (excluding reference to col. [2]).

† This provision for contributions from the general revenue of the Federal government for providing a 50% portion of the costs, on a scheduled basis, as a permanent "source of supply" for a phase of the contributory social security system, injects a *second* new principle (the first is to provide "service benefits" in Act vs. only "cash benefits" heretofore). Since "general revenue" comes largely from *progressive* taxation, the federal contribution for this Part B *voluntary* program breaks away from the traditional concept of uniform employee-employer-payroll taxes as the permanent source of funds for the *contributory* system.

*N.B. Income Tax.*—Medical deduction for personal income taxes not a topic of Council's Report, but is for Mills Bill and Final Act; this N.B. briefly outlines: *A. Present Law.*—Deduct medical expense, (1) all, if over age 65, subject to (3); (2) under 65, only excess over 3% (1% drugs) of "adj. gross income"; and (3) maximum deduction, \$5,000 to \$40,000, depending on age and circumstances. *B. H.R. 6675.*—As in present law of A, except (i) 3% (1% rule extends to all ages; (ii) 50% of "health" insurance premiums (including those of [11], col. [3] above) as special deduction, up to \$250; and (iii) dollar limits in A (3) made uniform both by age and disability status. *C. Final Act.*—Adopts changes of B (i) above. As for "premium" element in B (ii), the \$250 top is cut to \$150. All dollar limits of A (3) and B (iii) above are *wholly* deleted. These provisions of C take effect for tax years starting after 1966.

Finally, I would like to express my gratitude to several of our Society members who are more expert than I in the subject matter and formulation of the Council's Report for this review. As a consequence of seeking their advice, I received several corrections and various comments from them on the first draft of my review. Those referred to above, on whose time I thus imposed, are, alphabetically, G. W. K. Grange, R. A. Hohaus, R. J. Myers, R. M. Peterson, and M. Spiegelman. The willingness of these men to co-operate with me, even on points which generated disputes between us and on a few other of their ideas which, on balance, I chose to disregard, is, indeed, greatly appreciated.

DORRANCE C. BRONSON

M. C. Bernstein, *The Future of Private Pensions*, pp. xiii, 385, Free Press of Glencoe, New York, 1964.

The remarkable growth of private pensions during the last fifteen years and an increasing concern in many quarters as to income maintenance for a growing number of oldsters have stimulated critical appraisals of private pensions. There have been professional writers who seek only sensational headlines and also thoughtful observers who, after intensive research, have attempted to come up with some constructive ideas. Mr. Bernstein's book is an honest effort in the latter category, although his recital of the shortcomings of private pensions, as he sees them, could well provide grist for the mills of the sensation-seekers and of those who have little sympathy for the development of private programs.

In the words of the author, "This is not a book of prophecy. It is a book of exploration. . . . A basic purpose of this book is to provide fairly concrete suggestions for institutional arrangements to enable employees to carry all or some of their pension credits with them." The major theme is an all-out endorsement of the deferred wage principle of pensions. Ideally, Bernstein is advocating, in effect, a nationwide counterpart to TIAA-CREF. The author warns that: "those with the greatest stake in preserving the private plan system must know that the pressures in favor of vesting also operate as pressures in favor of liberalization of OASDI and that only improved private plans can prevent OASDI from taking over the whole job." It is interesting to note that, in a later publication, he sees some practical limitations as to the magnitude of benefits that may be provided under OASDI unless there is substantial financial support from general revenues.<sup>20</sup>

The book is in five parts. Part One, "The Setting," gives a brief description of private pension plans; Part Two, "Hazards to Pension Eligibility," comprises a thorough study of how pension benefits may not be realized due to termination of employment and discontinuance of plans; Part Three, "Evaluation," appraises the adequacy of plan benefits; Part Four, "Improving Plans," includes recommendations as to how private plans may be bettered by (i) modifying

<sup>20</sup> *New Republic*, January 9, 1965.

federal tax statutes, (ii) adoption of flexible retirement ages, (iii) improving vesting provisions, and (iv), the main thrust of the book, making provision, through a clearing house, for transfer of pension credits and for pension benefits for those not covered by a plan at retirement; and Part Five, "The Alternatives," consists of a brief summary chapter, "The Future," two appendixes of tables and 50 pages of notes indicating the extensive research of the author.

The first 90 per cent of the book sets the stage for the main attraction found in chapter x of Part Five entitled "Transferable Credits and Clearing House Devices." Although this 90 per cent contains much of interest to private pension practitioners, many other readers the author may wish to reach will find it too lengthy and repetitious of some material readily accessible elsewhere. There is also a sketchy, inadequate and even inaccurate treatment of some subjects.

Before commenting on the initial 90 per cent of the book, it seems appropriate to review Bernstein's main proposal. The author criticizes present vesting arrangements under which a person moving from one plan to another acquires interests in several different plans on the "cold-storage" basis. The shortcomings he sees are the "possibility of small, perhaps minuscule benefits, the incompatibility of benefit provisions, disproportionately high administrative costs, attrition of fixed benefits by inflation, withdrawal of contributions, their lack of utility for the disabled, and the non-participation of vested deferred benefits in plan improvements."

Assuming that vested interests are more extensively and liberally provided, he would collect the "bits and pieces of employees' vested pension credits into one more adequate benefit, a benefit based upon contributions which have earnings and growth up to the date in retirement." The value of a vested pension credit would be established as a sum of money and this sum would be translated into pension credits of the kind found in the plan of the new employer. A clearing house would be established to facilitate these transfers and, if the new employer had no plan or the person did not become re-employed, to serve as the operator of a master plan in which an interest would be provided by the transfer value. Such master plan would also be available for "small employers" for whom a plan of their own is considered too expensive and for which there is a high probability of going out of business. Mr. Bernstein, relying on the 1957 study sponsored by the Institute of Actuaries and the Faculty of Actuaries,<sup>21</sup> is confident that actuaries would have little difficulty in placing a satisfactory monetary value upon pension credits. However, there is no evidence that he sought the views of actuaries of the United States as to plans in this country. Instead of the vested benefit being in the form of a fixed dollar amount of deferred annuity as it now is on the "cold-storage" basis, Bernstein relies on the sum of money transferred enjoying the full investment experience of the new plan, including the appreciation of security values, and thus enabling the employer to make improvements in the plan with respect to the pension credits acquired by transfer. He assumes, apparently, that the valuation of the pension credit would be on the same basis

<sup>21</sup> F. H. Spratling, F. W. Bacon, and A. E. Bromfield, "Preservation of Pension Rights," *Journal of the Institute of Actuaries*, LXXXIII (1957), 173.

as pension reserves are being established under the plan, thus involving actuarial assumptions that have some margin, particularly in the interest assumption. But in determining a sum to be paid out, it is not unreasonable to value the pension credit on the basis of the *most probable* experience assumptions. This is done now in some plans with a lump-sum option available at retirement. For "final salary" plans, vested benefits are usually in terms of "final salary" at *termination of employment* although the plan valuation may have used a salary scale that contemplated a much higher pension base.

Actuaries will recognize many other problems in establishing satisfactory values. A plan may have disability benefits, widows' benefits, special death benefits, flexible retirement ages, liberal early retirement factors, and other features—all or some of which may have been provided for in the reserves being built. How would these be reflected in transfer values? Where accrued benefits have not been fully funded, an obvious problem exists. On the "cold-storage" basis, there *is* an opportunity to share in future funding of prior service credits where this is incomplete. Also, if the last employer that a person is with and to which all his pension credits have been transferred has a plan in a weaker funding position than the predecessors, the employee's pension security is thereby weakened.

Bernstein's proposal could result in discrimination in favor of a terminating employee by making cash available for his accrued pension credit but requiring continuing employees to endure the risks of fund inadequacies that may arise in the future. He reminds us that today ex-employees with vested benefits do not share in plan improvements made after they terminate service. Persons who have retired directly from the service of the employer frequently do have that advantage—usually in the form of a cost-of-living adjustment. As to a system of transfer values, the cash demands on a fund could require such a state of liquidity as to impair the investment returns unless such cash outflow were offset by cash that new employees brought with them. Note this conclusion of the 1960 *Study of Vesting and Transferability of Pension Rights of the New York Department of Labor*:

The use of transfer values to carry over the pension credits of an existing employee to the plan of his new employer (assuming that his new employer had a pension plan) was without exception rejected by the people interviewed. The objection was in every case that the diversity of actuarial practice with respect to valuation of plans would make the valuation of withdrawal credits in one plan unreal in terms of the valuation procedures used in the other and that all sorts of malpractices in the matter of valuation would thereby be encouraged [pp. 24–25].

The author does, indeed, quote a part of this statement but he brushes it aside by saying that it and other similar views "were premature opinions about an amorphous proposition, whereas the major details of a scheme can be crucial."

What are the "major details" of Bernstein's proposal? A pension clearing house, he notes, could perform four functions: (i) maintain records of "cold-storage" vested credits; (ii) facilitate actual transfer of credits from one plan to

another; (iii) receive transfer values for separated employees who do not enter a new plan; and (iv) provide basic coverage for small groups of employees.

As to record-keeping, he fails to recognize the facilities of insurance companies now being used and which could be increasingly utilized. The fact that "some management and bank officials oppose vesting in the belief that it entails too great a record-keeping burden" would hardly seem to justify the creation of a central register! Indeed, this reviewer believes that an effective measure to firm up vested benefits would be to require, as a condition of continued qualification of a plan, that a terminating employee be furnished a form of certificate by the plan administrators that tells him clearly of any vested right under the plan, together with any limitations as to its ultimate availability. There hardly seems to be any compelling need for a clearing house that serves only a record-keeper of "cold-storage" benefits.

The other three functions, that is, (ii), (iii), and (iv), have as an underlying objective, as Bernstein sees it, a desired assurance that a worker's pension accumulation is always in a viable fund that provides, where transferred to another plan, the opportunity to share in future plan improvements or, where a part of the central fund, the opportunity to enjoy fully the benefit of future investment gains. In the case of transfer to another plan, the actuary would have a challenging problem to determine just what benefits are being "bought" under the new plan, particularly if the plan has an array of disability, widows', early retirement, or special death benefits.

Bernstein fails to make clear the nature of the benefits to be provided by the clearing house central plan. *Only two pages* of the book are devoted to "How a Clearing House Providing Employee Group Coverage Would Work," yet the realization of his objectives depends upon a satisfactory determination of the "major details" as to the nature of the benefits and the character of the commitments of the clearing house fund to employees. He starts with a sum of money paid to the central fund. Then there are references to "adherence to private insurance principles," "individual's savings," "group plan coverage," "credit each employee with whatever credits his transferred value will purchase," "guarantee a fixed dollar amount at retirement in accordance with regular insurance practice," "the plan could operate on a unit purchase basis in which the value of the units would vary according to the value and earnings of the fund's investment," etc., but nothing comes in focus. There is no specific suggestion as to the provision of disability, death, or survivor benefits, although earlier in the book, he encourages the expectation that such benefits could be provided.

To achieve a low cost of operation, the arrangement for the clearing house central plan should be simple. Any system that contemplated the distribution of "excess" earnings in the form of additional benefits, both before and after retirement (as he suggests) would be complicated and involve difficult questions of equity. Perhaps the only feasible type of institution that could come closest to providing the kind of benefits contemplated would be an organization, similar to CREF-TIAA, that is essentially a life insurance company. This would raise questions, of course, as to whether it would be created by federal or state charter and what the nature of government supervision would be.

In contrast to his discussion of the kinds of benefits to be provided (two pages), he devotes seventeen pages to "Clearing House Ownership and Operation—Alternative Methods." He explores critically and thoroughly, but without defining its real character, "a clearing house . . . established and operated: (a) wholly by private institutions already operating in the pension field, (b) wholly as an agency of the federal government, or (c) by some combination of private and public (federal government) institutions." He recognizes many of the problems such as public controls, investment activities, concentration of investment power and voting power (in the case of equity investments), etc. This is a useful analysis that leaves this reader with the impression that it would be extremely difficult, if not impossible, to overcome the problems in a way that would not place too much economic power in one monopolistic organization and have a profoundly undesirable effect upon life insurance companies. There is bound to be great concern if the federal government comes to have any significant active role in the operation of private plan provisions.

If the clearing house were to perform an adequate service by accumulating vested pension interests for millions of workers, it is bound to be a huge institution. If it is not enormous, then it will fail to serve the ends that Bernstein seeks. Private pension funds under the present pattern of operation have been projected as growing from \$75 billion in 1964 to \$225 billion by 1980. If Bernstein's objectives are materially realized, additional pension accumulations would be developed for vested benefits for millions of workers and for benefits for employees of thousands of small employers. Total payrolls of those covered by OASDI were about \$300 billion in 1963. Since an adequately funded private plan with reasonably generous benefits supplementing OASDI will generate funds amounting to 1½ to 2 years' payroll, we can envision total funds by 1980, including the projected \$225 billion, of hundreds of billions with a substantial part held by a clearing house fund. This would give rise to some vital broad economic issues. A fundamental question is, in providing income maintenance for the oldsters in the future, how much should be covered by income redistribution (e.g., via OASDI) and how much should or can be provided by establishing claims on future productivity through pension savings. We may also wonder whether sufficient equity investments will be available to permit the vast majority of workers who would have pension accumulations, as Bernstein would have it, to share in the "growth of the economy."

Even though one might disagree with Bernstein's proposals, and question their feasibility or desirability, the issue of "portable pensions" may be expected to be an increasingly active subject of public discussion and appraisal. The President's Committee on Private Pensions (later fully identified) urges that the matter be given serious study. The life insurance industry may be moved to examine the creation of a strictly private institution established by the companies (and even banks) that have a big stake in the private pension field. Special federal legislation for exemption from anti-trust laws would be necessary. Such an institution, with the powers of a life insurance company, could provide such services as there may be a need and demand for. Bernstein's book may help to clarify just what the real needs are and may even aid in creating the demand.

Turning now to the 90 per cent of the book that represents a stage setting, Part One, "The Setting," is comprised of chapter i, "Private Pensions: Prospective Problems," and chapter ii, "Plan Purposes and Characteristics." The book would have been improved by the omission of these chapters, since they add little; in fact, chapter ii reveals a surprising lack of knowledge and understanding of some of the technical aspects of plans. In any event, the ground covered in an inadequate and even inaccurate way is far better presented by many other reliable sources. Perhaps one clue to this weakness may be found in the range of persons whose views and suggestions he sought. The Preface states: "I was fortunate to receive the views and suggestions of a large and varied group." The names of 58 persons are then listed who may be classified as follows:

Classification	Number
Government . . . . .	18
Academic . . . . .	10
Labor . . . . .	9
Consultants (non-actuaries) . . . . .	6
Consulting actuaries . . . . .	5
Banks . . . . .	3
Government actuaries . . . . .	2
Employer . . . . .	1
Insurance company actuary . . . . .	1
Insurance company lawyer . . . . .	1
Foreign actuary (insurance company) . . . . .	1
Foreign actuary (government) . . . . .	1
Total . . . . .	58

Is this a satisfactory representative cross-section of private pension sophisticates?

In the following quotations, where we find no recognition of individual responsibility, Bernstein's social philosophy shows through. (*Italics added by the reviewer.*)

All of us have a stake—probably many stakes—in insuring that the elderly live with decency and dignity, and preferably, that they achieve their *ample standard of living as a matter of right* and not charity [p. 15].

Probably few would expect retirees to have a more adequate standard than they were able to earn for themselves before retirement, although an argument could be made that after the main race is run *society should provide all human beings with no less than the basic amenities of life* [p. 141].

If we are to put most of the elderly out to grass, they should have grass—not stones. And, as self-sufficiency declines, the need for attendance or institutional care grows. Many more elderly survive than in the past. *We owe it to them and ourselves that they live, not merely exist* [p. 166].

This reviewer has numerous corrections and comments, critical and otherwise, to offer with respect to the first 90 per cent of the book. The following is a somewhat lengthy but incomplete list.



## Chapter i, "Private Pensions: Prospective Problems"

Page 4. The "modern pension movement" began with group annuity activity in the late twenties and early thirties, not "during World War II."

Page 6. With the author's later recognition of existing vesting provisions, it is surprising to note this incorrect statement:

Single-employer plans . . . limit retirement benefits to those still employed by the same employer when they reach a specified age, usually 65.

It is repeated on page 21 in this form:

Without exception, single-employer plans require current employment by the employer with the plan at retirement.

## Chapter ii, "Plan Purposes and Characteristics"

Pages 16-17. The paragraphs describing insured plans are woefully inadequate, use incorrect terminology, fail to recognize the thousands of plans covered by individual policies, incorrectly state that "some, but not most" group plans (contracts) provide for dividends (the vast majority do), state that group annuity rates are renegotiated (they are changed unilaterally), and omit mention of the guarantee of annuity rates for deposit administration contracts. A quick review by an insurance company actuary could have readily corrected this. Also, on page 184 it is incorrectly stated that for plans using individual policies, "For the most part such plans are non-participating, i.e., premiums are fixed without provision for dividends that might result from favorable investment or risk experience." Practically all such policies are participating.

Pages 16-19. On these pages we find, classified as "types" of plans, a conglomerate made up of insured plans, noninsured plans, multiemployer and union-administered funds, unilateral and bargained plans, contributory and non-contributory plans, and profit-sharing plans.

Page 24. Although the realization of a vested benefit, as he states, will usually depend upon application therefor, in the case of trustee and deposit administration arrangements, he fails to note that such application is unnecessary in the case of group deferred annuity benefits—the insurance company seeks out the payee.

Page 29. The "steel" benefit formula is carelessly written as follows:

1% of the earnings for the last 120 months of employment is multiplied by years of continuous service to compute the monthly benefit.

It should read, of course, "1% of the *average monthly* earnings. . ."

Page 31. Bernstein's lack of familiarity with actuarial matters is revealed in his discussion of early retirement benefits.

Speaking of actuarial reductions, he writes:

This is done because the early retiree is expected to draw benefits for more years than a normal retiree and an effort is made to equalize, on the average, the total value of the benefits received.

The benefit is also reduced, of course, because it begins sooner with a shortened period for accumulation of funds.

He also writes:

*Applying a full actuarially computed reduction may not be wholly justified since early retirees often are less healthy than "normal" retirees and hence will not on the average live to the same ages. Investigation of mortality among early retirees seems desirable, for this group may be shortchanged inadvertently by current practice.*

Upon inquiry, he would have learned that the intercompany group annuity mortality study does maintain a record of the mortality of early retirees and that the factors used are designed to protect the pension fund against the adverse selection arising from lives in poor health starting to collect benefits sooner than they would otherwise, i.e., some would have died before normal age without collecting any benefits.

Page 33. As to joint and survivor options, he states:

Usually the insured must make his option before his retirement date—often years before. In addition, it may be conditioned upon his good health.

No data are available which describe the number of employees actually choosing a joint and survivor arrangement.

The advance notice of election and good health requirement are alternative requirements, not, as he implies, dual requirements. It is probable that insurance companies could have furnished information as to the proportion of employees making such elections.

Page 35. This statement indicates careless editing:

The Amalgamated Clothing Workers plans require 20 years of cumulative service and employment under the plan during the 10 years immediately preceding retirement. [Italics added.]

Pages 39–40. The author speaks of the use of "life insurance mortality tables" in valuing pension benefits. A sensitive insurance company actuary would have preferred a more descriptive term that does not imply the use of the same tables for pensions as are used for life insurance.

Page 41. Actuaries may be intrigued by this statement:

Of course, many actuaries have great experience and excellent judgment—but they are (and must be) artists, not scientists, when they fashion, select, and adapt actuarial tables.

Page 47. Referring to the Welfare and Pension Plan Disclosure Act, he observes:

However, the Act does not prescribe proper plan practices or provisions to enhance the effectiveness of plans other than the protection afforded against criminal conduct.

Who should be the omnipotent and omniscient one to say what are "proper plan practices and provisions"?

### Chapter iii, "Turnover and Tenure"

This chapter is a thoughtful study of the worker's failure to acquire pension rights through termination of employment before qualifying for any vesting provisions. Although Bernstein found that it would be very difficult to determine "the percentage of all employees under plans who would enjoy benefits," with the acknowledged assistance of Abraham Niessen, presumably in developing the tables in this chapter and in Appendices A and B, he does effectively remind us that a very large proportion of the 25,000,000 or so employees reported as "covered" by private plans will, in fact, realize no benefits or benefits derived from only a fraction of their working career. In observing that those who die before retirement "typically receive little or no benefits from pension plans," he fails to give credit for the billions of dollars of group life insurance covering workers.

### Chapter iv, "Plan Terminations, Mergers, Sales, and Shutdowns"

The author provides a summary of this well-written chapter; there are no similar summaries for the other chapters, except for chapter vii. He summarizes:

In sum, constant changes in employer location, organization, and ownership, which are so characteristic of our economy, constitute an indeterminate but substantial threat to continuity of employment and therefore to pension expectations which are based primarily upon single employer plans. Contractual and judicially fashioned job transfer rights for employees would mitigate their impact to a limited extent. However, more basic changes in pension arrangements probably are required if they are to be able to overcome the limitations of single-employer plans when subject to the strains of such exigencies [p. 113].

It may be noted that, in connection with a current major transfer of a manufacturing operation for the government by one large industrial company to another, substantial sums are being provided by the government in order to protect the accrued pension rights of great masses of employees who are being transferred to another employer.

In discussing a plant closing (p. 95), Bernstein makes the following statement:

While I have not been able to ascertain how many achieved vested credits under the plan's various vesting formulas, it is clear that very large numbers did so. According to union sources, funds were sufficient to meet the benefit claims represented by the vested credits.

This reviewer cannot restrain himself from observing that this group was covered by a group annuity contract with his company!

### Chapter v, "Employee Pension Rights When Plants Shut Down"

In chapters iv and v, Bernstein, as a lawyer, is at his best in discussing the legal aspects of pension rights and the attitude of the courts. After analyzing several shutdown cases, he observes:

Recognition of employer contributions to pension plans as a form of employee compensation is absent from the shutdown cases discussed in this chapter. Had the courts taken notice of the realities of collective bargaining and industrial practice on the subject, and the complex of statutes, regulations, and decisions which are based upon the notion that *employer contributions to pension plans are a form of compensation*, they might have given consideration to a theory of recovery based on the principle of restitution [p. 121]. [Italics added.]

Bernstein fails to recognize that while pension contributions may be bargained for in lieu of a wage increase, such contributions are made with respect to a *group of employees* and not with respect to each individual. The union has knowingly foregone a wage increase recognizing that the pension contributions with respect to the group, at least in the initial years, will go mainly to benefit those in retirement or approaching retirement and that if the agreement terminates for any reason, there cannot be sums available for the younger members of the group. The cents-per-hour contract is a somewhat artificial translation of contributions into an amount identified with respect to each individual but the contribution is not made *for him*, only for the group as a whole. This fact should be borne in mind when Bernstein seeks to draw an analogy between accrued pension credits and vacation and severance pay rights as the latter are clearly identified with individuals.

Actuaries will be particularly interested in his legal analysis of the situation where there is a mass separation of employees upon plant shutdown. He writes:

In sum, although employees may be chargeable with the risks of turnover which they and the employer could reasonably anticipate, it seems unreasonable to expect them to bear the full risk of turnover where it exceeds actual or reasonable expectations, the very expectations under which the employer bases its funding. . . . If employees lose their pension expectations to a degree not contemplated by them, by the plan, or by the employer, and if the employer, benefited by their partial performance, recaptures contributions or premium payments beyond its reasonable expectations, it seems reasonable to say that the employer is unjustly enriched [p. 129].

He then raises the alarming possibility that a court might award specific benefits to separated employees based upon an actuary's precise determination of the difference between "normal turnover" and "abnormal or excessive turnover." In the alternative, imagine a jury or judge passing upon the reasonableness of actuarial assumptions! The solution, as Bernstein recommends, is "for the parties to provide specifically for the treatment to be accorded employees separated in unusually large numbers because of plant and unit shutdown and mergers" (p. 137).

#### Chapter vi, "Adequacy of Plans"

In this chapter the author seeks to appraise the adequacy of income for the elderly from all sources. An attempt to cover such a large field must inevitably result, as it does, in a sketchy, incomplete, and inadequate treatment to say nothing of much stale and out-of-date data (e.g., he states that "In 1959 there was \$316 billion of life insurance in force in the United States").

Page 145. Speaking of social security, he states that "benefits are due to those who have paid payroll taxes and on behalf of whom employers paid equal taxes." Under the law, all that is necessary is to have a wage record of covered employment. We also read this understatement of the book describing the social security system: "the program is not based upon strictly private insurance principles."

Page 148. The maximum primary social security amount is  $31\frac{1}{2}$  per cent of maximum wage base (\$4,800) and not 28 per cent as stated.

Page 154. The nontaxability of OASDI benefits is based on an IRS ruling that they are "property acquired by gift" (I.T. 3447) and not because the "employee payroll tax contributions are paid from income already taxed."

Pages 172 and 187. Although on page 172 he seems to recognize the pay-as-you-go or assessment system of financing OASDI, he makes this surprising, completely erroneous statement on page 187:

The OASDI system provides a form of savings that combines, to a great extent, the security of individual savings with the larger earnings and inaccessibility of group savings.

Page 175. His arithmetic is inexplicably faulty in this statement:

One dollar invested when an employee is 45 years old, at earnings of  $4\frac{1}{2}$ % compounded, will amount to \$32.78 at age 65. But if invested when the worker is 25 (40 years of earnings instead of 20) it will total \$145.09—almost five times as much.

The correct statement is one dollar *a year*—also the accumulation of a dollar a year for 40 years is \$107.03, not \$145.09. Thus total payments of \$20 accumulate to \$31.37 and total payments of \$40 accumulate to \$107.03. Also, one dollar improved at  $4\frac{1}{2}$  per cent for 20 years is \$2.41; one dollar for 40 years is \$5.82. This is hardly "five times as much!" Following his figures, he states, speaking of the fruitfulness of compound interest: "Unfortunately this is not fully understood." His figures are no help!

Page 177. This categorical statement is made: "Our private pension system is a class, not a mass, system." Considering the millions of workers covered by collectively bargained plans that continue to grow in number, the idea of a class system seems quite inappropriate unless a class is subjectively identified as simply comprised of those who happen to be covered.

Pages 182–83. In discussing the scarcity of widows' benefits under private plans, he fails to give sufficient credit to the tremendous volume of individual and group life insurance in force—a volume that is increasing steadily. Speaking of the "life insurance method" of providing widows' benefits, he states that it "has the advantage of requiring shorter term commitments and financing, but does not provide tax-free earnings on employer contributions." Since group life insurance is usually on a term basis, the investment element is, of course, quite minor, thus minimizing the matter of "tax-free earnings."

Page 184. Bernstein reveals lack of knowledge of the insurance business in making the following statement:

Insurance companies reserve the right to terminate group plans when their membership drops below a certain number (often 50 "lives") or some percentage of eligibles (frequently 75%) because in small groups the "averages"—based on very large populations—on which actuaries rely are or little of no use.

Insurance companies, of course, uniquely provide a risk-bearing service. This right to terminate is mainly concerned with expense considerations.

Page 191. Speaking of the private system and the OASDI system, Bernstein states: "the two systems can stimulate and experiment for each other—and provide a yardstick of performance." Overlooked is the fact that the OASDI system is a rigid compulsory program which, compared with private plans, has a completely different method of financing with different objectives. The private system provides a valuable opportunity for great diversification and the *choice* as to alternative benefits and cash compensation.

#### Chapter vii, "Taxation"

In the appraisal of the federal tax treatment of qualified plans, the author makes a number of valid criticisms. In a summary (p. 223) he states:

In this area of taxation, a thorough restudy of policy and provisions seems in order. Now that the private pension movement is approaching maturity, greater stress should be placed upon adequacy of funding as a condition of deductibility. To this end, and generally to provide adequate safeguards, the Internal Revenue Service should be provided with a statutory base for promulgating regulations and rulings which now are inadequate and of questionable validity. The regulations should be less permissive in allowing impairment of past service funding. Far preferable would be a general rule prohibiting unfunding—with, however, narrow and clearly defined exceptions. . . .

The 1962 amendment to the Internal Revenue Code requiring qualified plans to provide for vesting credits upon plan termination is a step toward protecting legitimate employee interests and preventing discriminatory plan operation in plant or unit shut-down and merger situations. . . .

Perhaps most importantly, the policy of according deductibility to employer contributions but not to employee contributions should be reconsidered and reversed, because employee contributions strengthen employee benefit rights and minimize discriminations in favor of stockholders and highly compensated employees.

This reviewer has been advocating for some time two recommendations made by Bernstein, i.e., his suggestions for amending the Internal Revenue Code to prevent "unfunding" or "defunding" and for making employee contributions tax-deductible. In order, however, to prevent the loss of vested rights by cashing out, such tax-deductibility should apply only to contributions that are not withdrawable under the plan.

Page 199. This statement is made relating to the deferred taxation treatment of qualified plans:

This tax deferral is valuable to some employees, and is a principal attraction to those with substantial taxable income who expect that their income and rate of tax will decrease after retirement . . . such tax considerations in fact mean little or nothing to most wage earners and those with modest salaries.

Contrary to this statement, it is probable that the average worker, who will pay little or no income tax after retirement due to double exemptions and other tax benefits, enjoys great benefit from the tax deferral. On the other hand, many with substantial income, much from sources other than current earnings, will still be in a high tax bracket after retirement.

#### Chapter viii, "Retirement Age"

This chapter adds little to the value of the book. Ideas as to gradual retirement and flexible retirement are dealt with in a more satisfactory form in other areas of pension literature. Incidentally, the advantageous and worthy cost savings mentioned in this chapter by delayed retirement would not be realized under his proposed clearing house fund where specific dollar sums are allocated to individuals upon employment termination.

#### Chapter ix, "Vesting, Benefit Guarantees, and Multi-Employer Plans"

Pages 254-55. Bernstein effectively points out the weaknesses of proposals involving "a public guarantee or insurance program under which valid benefit claims for which plan funds were lacking would be paid." (Current bill introduced by Senator Hartke.<sup>22</sup>) He points out that the claimed analogy with Federal Deposit Insurance does not stand up; that the events which give rise to a valid claim lie within the control of the insured; that there is the "problem of providing safeguards against fraudulent or collusive arrangements under which a moribund company would establish a lush plan or modify a modest plan to make it generous, or even munificent"; and, finally, that there is the most difficult problem of how to ascertain proper premium costs—"and then to decide whether they are worth it, because the potential liabilities are enormous, especially for past service costs."

Pages 273-74. The author is fascinated by the power of compound interest in reducing pension costs, especially with respect to tax-free accumulations. In his rapt contemplation, he fails to give sufficient recognition to the fact that an employer may well consider whether funds that might otherwise be placed irrevocably in a pension fund can be more gainfully used as working capital after allowing for taxation and thus enhance the real capacity of the business to provide pensions.

In the only italicized passages in the book, Bernstein makes these statements when discussing the proposed interchange of transfer values:

*But to the extent that employees arrive with money for credits, the receiving employer is required to contribute less in order to provide any given level of benefits. Therefore the receiving employer can base his plan on a longer period during which pension credits are earned [p. 273.]*

*The more plans utilizing the clearing house and providing transferable credits, the less expensive it would be for each employer to provide a unit of coverage [p. 274].*

While it is, of course, true that the sooner funding is started to provide a "given level of benefits," the fewer the dollars of input required, there is no particular

<sup>22</sup> S. 1575, "Federal Reinsurance of Private Pensions Plans Act."

magic that a "clearing house" possesses over the operation of private plans if they were to fund and vest benefits with respect to all years of service for the vast majority of employees—and this is all a clearing house at full operation would be doing. Furthermore, whether there is a transfer system or not, an employer, by selecting one of the several different acceptable actuarial cost methods, can establish the incidence of pension costs during the working career of his employees so as to enjoy the desired degree of the benefit of interest earnings within certain practical limits.

Under private pension plans, investment earnings are truly a very important source for reducing costs. In contrast, OASDI financing has virtually no support from investment earnings. It seems a bit incongruous for the author to warn that unless private funded programs do a much better job, OASDI may take over the entire job of providing old-age income. Or is there a lurking possibility that the OASDI system will be changed drastically so as to accumulate tremendous funds and provide capital for private industries (as is now true in Sweden and perhaps Canada) with all that that kind of development would imply?

Since Bernstein's book was published, there has appeared a significant publication entitled "Public Policy and Private Pension Programs: A Report to the President on Private Employee Retirement Plans by President's Committee on Corporate Pension Funds and Other Private Retirement and Welfare Programs." Some of the ideas in Bernstein's book also appeared in this Report—indeed, it is understood that the government staff preparing this Report had advance copies of Bernstein's manuscript. It is noteworthy that the entire tone of this Report to the President is much calmer and has none of the crisis-ridden atmosphere that Bernstein pictures for private pension plans.

Bernstein's book, as indicated in this review, would have been a much better product had it been much shorter and had he devoted more effort to working out the "major details" of operation of his clearing house idea. Many readers will consider him quite visionary. While he has revealed shortcomings in private pensions, he has not sufficiently recognized the great vital role they are playing and will play in the economic and social life of our nation. Realistic efforts, by both private pension practitioners and informed and sympathetic legislators, can do much to improve these programs.

RAY M. PETERSON

A. Pedoe, *Life Insurance, Annuities & Pensions, a Canadian Text*, pp. xi, 482, University of Toronto Press, 1964.

The aim of this book is "to provide a comprehensive narrative of the history, development, status, and practice of life insurance, annuities, and pensions in Canada, while also stressing the close relationship to similar developments in the United States and, to a lesser degree, in Britain." The book achieves this aim in superlative fashion. It deals clearly and concisely with the full gamut of topics that one would expect to find in such a text. The book is "addressed to employees and officials of life insurance companies engaged in the specialized works of administration, accounting, law, medicine, finance and investment, and



sales." It will no doubt become a standard reference book in the libraries of all life insurance companies, as well as becoming required reading for university and other courses in life insurance. This scholarly text will also be very useful to members of the actuarial profession.

CECIL G. WHITE

M. Keller, *The Life Insurance Enterprise, 1885-1910*, pp. xii, 338, Harvard University Press, Cambridge, Mass., 1963.

The author is associate professor of history at the University of Pennsylvania. The work was assisted by grants from the Social Science Research Council and the Guggenheim Foundation. Six of the largest United States life insurance companies opened their files to the author, including the minutes of their boards of directors and finance committees, etc. The papers and correspondence of several of the leaders of the life insurance world at the turn of the century have been examined in company files and in the libraries of Yale, Harvard, New York State Public Libraries, and elsewhere. The "notes" cover over thirty-five closely printed pages with references to other bibliographies of works on insurance. The work certainly indicates much industry on the part of the author.

As would be expected, the main object of the work is to comment on the Armstrong-Hughes investigation of 1905 in which the Equitable, the New York Life, and the Mutual of New York were the main targets. The subtitle of the book, *A Study in the Limits of Corporate Power*, presumably is its justification. This is summed up in the last paragraph of the last chapter, which is headed "The End of Power," as follows:

The lesson is plain. To the traditional sum of external checks on power in a free society should be added the complex but significant factor of internal restraints: the problems and consequences inherent in the processes of institutional growth and maturity. Together, these internal and external limitations were sufficient to contain and transform even so puissant a group of American corporations as the large life insurance companies.

What is meant by "internal restraints"? On the previous page to the foregoing it is stated:

Through decades, filled with new challenges to private underwriting, the life insurance enterprise grew steadily. This was not necessarily a tribute to its efficiency and economy; government insurance might well have been more widespread and less costly. Nevertheless, the vitality of private insurance companies in the middle of the Twentieth Century was as striking a fact as their relative immunity from Federal taxation or regulation.

The author's casual statement regarding "government insurance" without any supporting evidence is out of place in a book purporting to be a serious analysis of an important period of economic development. His statement regarding "relative immunity from Federal taxation or regulation" is incorrect and even misleading. Regulation is a "state" responsibility in practice, and that in the United States is considered as searching as in any country in the world. As

for taxation, the total amount paid by the United States life insurance companies in taxes, licenses, or fees in 1963 exceeded one billion dollars, of which \$656 millions represented federal income taxes and \$321 millions the premium taxes paid to the states. These figures are given in the *Life Insurance Fact Book* which is referred to by the author as a statistical source but apparently not examined.

Professor Keller refers repeatedly and in some detail to the close association of the insurance commissioners with the state government political machines of the period 1885-1910. He could have stressed the unfortunate position of the managements of prominent life insurance companies when faced with this combination. On page 209 he states:

The Prudential computed that over 700 bills affecting life insurance companies were introduced between 1901 and 1905; over 750 proposed enactments threatened the New York Life's interests between 1898 and 1905.

It was, Keller makes it clear, a form of blackmail. It is unfortunate that he does not stress that the Armstrong-Hughes investigation was the culmination of *laissez faire* in economic development in the United States, and the legislation which followed it in 1906, when viewed in this light, was one of the most important legislative enactments in United States economic history. It was revolutionary in the restrictions it imposed on the life insurance companies operating in the state of New York, too much so, and some of these were later modified. The New York insurance laws became a model for other states to follow and were a landmark in the history of life insurance.

The author may not be aware of the outstanding position in the world held by the United States life insurance industry. It is not just a matter of size. In the last forty years almost every major development in commercial life insurance, annuities, and pensions in the world has originated in the United States.

The present reviewer, writing recently of the 1905 investigation, referred to it as the Armstrong-Hughes investigation. Although Senator Armstrong was the Chairman of the Committee, the counsel who directed the greater part of the inquiry, who wrote the subsequent report and drafted the ensuing legislation was Charles Evans Hughes, later Chief Justice of the Supreme Court of the United States. On page 250 Keller writes:

William W. Armstrong, the Rochester senator who headed the examination was a follower of that city's Republican leader, George W. Aldridge, a cog in the Odell machine. A New York Life lobbyist tersely summed up the set of relationships: "Odell owns Aldridge . . . who bosses Armstrong absolutely . . ."

This confirms the reviewer in his modification of the name usually given to the investigation. Chapter 15 opens with a sentence worth quoting: "The legislative investigation is the morality play of American society."

A study of the Armstrong-Hughes investigation in its relation to the economic and financial development of the United States still has to be written. One may hope that in such a work the "Peeping Tom" role, however fascinating

(as the present text indicates), will be played down; muckraking may titillate but leads nowhere.

One should never forget that there were numbers of officials of life insurance companies in the United States, even in the New York of 1885-1910, who realized the special nature of the business they were engaged in and were proud of the service they rendered the public but who found themselves helpless in the political morass which enveloped them. The achievements of the great life insurance companies of the United States in the last sixty years indicate that the foundations were sound even before 1905.

ARTHUR PEDOE

W. T. L. Barnard, "Some Changes in Actuarial Methods Arising from the Use of a Small Computer in a Medium-sized Office," *Journal of the Institute of Actuaries*, Vol. XCI (1965).

The Wesleyan & General Assurance Society of Birmingham, England, installed a card-oriented IBM 1401 equipped with 4K core storage and the multiply-divide device in 1961. The Society has approximately 100,000 Ordinary policies, 2,000,000 Industrial policies and 150,000 Fire and Casualty policies in force. The computer is used for a wide range of functions in all three branches, but the paper is limited to those applications which are actuarial in nature.

Most of the IBM 1401 programs involve a short run with a printed output. In other words, the "functional," rather than "consolidated functions," approach is used. It was not deemed necessary to consider magnetic tape for storage as the office does not put policyowners' addresses on documents.

The most important change brought about in the Ordinary Branch as a result of the introduction of the computer is that, with few exceptions, all the information required for premium accounting, bonus (paid-up addition) calculations, valuation, and mortality statistics is condensed into a single 80-column punched card for each policy. A second detail card is required if there is a term rider.

Policy detail cards in the Ordinary Branch are kept in two files, one file containing about 40,000 cards for monthly instalment policies and the other containing about 60,000 cards for other modes of premium payment. These files are maintained in district and agency order for convenience in preparing renewal lists and other reports by agency. The two files of policy detail cards are the sole source of data for data processing and are updated on a daily basis. This system makes for economy in file maintenance and ensures that the valuation corresponds exactly with the in-force cards.

The valuation of policies in the Ordinary Branch is on an individual, or seriatim, basis under the 1401 system. All policies are valued by the net premium method. As the net premium is not carried in the detail card, it is necessary to generate this premium in the valuation program. Also, in order to fulfill the British valuation requirements, it is necessary to calculate the value of future

benefits and future premiums separately. In other words, the values of  $P$  = net premium;  $A$  = present value of future benefits; and  $Pa$  = present value of future premiums are needed. Each of these values can be expressed as a function of  $N_x$  and the discount rate,  $d$ , so that only one column of commutation functions needs to be stored.

The main valuation program accumulates and prints the required answers for all whole-life and endowment policies, both with and without profits, at the rate of approximately 20,000 contracts per hour. Exception cards are punched, reproducing the policy detail cards, for term policies and term riders. These are valued separately by means of supplementary valuation routines on the 1401.

In the Industrial Branch no detailed policy card file is maintained. Cards are punched only for "ins" and "outs." During the year summary cards are made in respect to each type of movement (new business, revivals, lapses, maturities, and deaths). These summary cards are then merged with "brought forward" summary cards, and by one pass through the computer, at the end of the year, up-to-date summary cards are produced.

The valuation in the Industrial Branch is on a group basis. There are about 10,000 groups, and a summary card is maintained for each group. The net premium is carried in the summary card to simplify the valuation program. There are a number of valuation programs, one for each group of tables (e.g., one for whole-life, one for endowment, etc.). The valuation programs take less than an hour to run.

Surrender values and paid-up policy values are also calculated by means of the 1401. For Industrial Branch business, continuous functions are used. In order to avoid storing both  $\bar{N}_x$  and  $D_x$ , it was necessary to find a simple relationship between them. The formula used was

$$D_x = \frac{1}{8} (11\bar{N}_x - 18\bar{N}_{x+1} + 9\bar{N}_{x+2} - 2\bar{N}_{x+3}).$$

A central difference formula is not convenient in this case, as the author explains, because  $D_1$  may be required and "satisfactory" values of  $\bar{N}_0$  and  $\bar{N}_{-1}$  are not available. In England, it is to be noted, the usual practice is to issue Industrial Branch policies as of age *next* birthday, so the lowest age in the Industrial mortality table is age 1.

Another actuarial application which is discussed in detail is the calculation of "exposed to risk" for the continuous mortality investigation of Ordinary Branch policies sponsored by the Institute and Faculty of Actuaries and for the Society's own internal mortality investigations.

As Barnard points out, the normal "census" method of calculating the exposed to risk requires a substantial amount of sorting, scheduling, and arithmetic. With a computer, on the other hand, the cards may be processed in random order at the rate of about 40,000 cards per hour. The 1401 program will analyze each card individually and determine the amount of exposure contributed at each age, adding this to the amount already in storage. Separate registers are assigned for the accumulation of exposures,  $E_x$ , and deaths,  $\theta_x$ , at each age. These may be on a select basis if sufficient storage space is available.

After all exposures and deaths have been classified by the computer, and while the  $E_x$  and  $\theta_x$  totals are still in storage, the exposed to risk program is replaced by another program, which calculates the expected deaths and prints the results. The main program may be followed by several such programs, each program calculating the expected deaths using a different value of  $q_x$ .

Several other actuarial applications are mentioned briefly, such as the calculation of (1) death strain and tabular cost; (2) office premium rates; (3) mortgage repayment (amortization) schedules; (4) valuation of a private pension fund; and (5) emerging costs.

All the programs described in the paper, taken over the year, occupy well under 5 per cent of the total production time of the computer, the author reports. Program testing, on the other hand, occupies more than 15 per cent of total computer time. More than 200 programs are in regular use. Still the computer is not yet fully used on a one-shift basis.

As to future changes in actuarial methods that may arise from the use of a small computer in a life office, the author foresees the day when the valuation and statistical departments may be unnecessary and "the departments which make premium quotations, quote surrender values and terms for alteration of contracts may well find that nearly all their work is taken over by the computer."

In the author's view, this may have a far-reaching effect on the training program for actuarial students. "As a result of these changes," he predicts, "one of the normal training grounds for the actuarial student may no longer be available. However, in its place a new department will grow, namely, that of systems analysis and computer programming. Nearly every job in the office will be dealt with in detail in this department. The actuarial student in this department will have the opportunity to learn the methods and practices of the whole of the office."

In conclusion, Barnard states, "It is very difficult to assess the saving, if any, due to the computer in monetary terms. Many savings can be shown, on paper, to be realizable. However, it is another matter to realize them." Nonetheless, he says, "There is no doubt in our minds that [the computer] has been worth while, particularly if we ask ourselves how we would now manage without it."

This paper is of unusual interest and is well worth study by actuaries in smaller-sized companies.

KERMIT LANG

#### SELECT CURRENT BIBLIOGRAPHY

In compiling this list, the Committee on Review has digested only those papers which appear to be of direct interest to members of the Society of Actuaries; in doing so, the Committee offers no opinion on the views which the various articles express. The digested articles will be listed under the following subject matter classifications: 1—"Actuarial and Other Mathematics, Statistics, Graduation"; 2—"Life Insurance and Annuities"; 3—"Health Insurance"; 4—"Social Security"; 5—"Other Topics."

The review section of the *Journal of the Institute of Actuaries* contains digests in English of articles appearing in foreign actuarial journals.

#### ACTUARIAL AND OTHER MATHEMATICS, STATISTICS, GRADUATION

W. O. Menge and C. H. Fischer, *The Mathematics of Life Insurance*, pp. ix, 191, Macmillan Co., New York, 1965.

Although this book is referred to as a revision of *An Introduction to the Mathematics of Life Insurance* prepared by Dr. Menge and the late Professor James W. Glover in 1935, the earlier material has been extensively rewritten and many new problems have been added. Its purpose remains as a text for elementary courses on the subject in colleges and universities.

#### LIFE INSURANCE AND ANNUITIES

F. Bayo, *Joint-Life Immediate Annuities Based on the United States Life Tables for White Persons, 1959-61*, Actuarial Note No. 14, pp. 16, Social Security Administration, Washington, D.C., March, 1965.

Tables at interest rates of 0 per cent and  $2\frac{1}{2}$  per cent to 5 per cent by increments of  $\frac{1}{2}$  per cent are presented in this note. The values are cross-tabulated for a white male aged from 25 to 75 and a white female from 16 years younger to 8 years older than the male. Single-year intervals are used for the male, while 2-year intervals are used for the female. An interpolation formula is suggested for obtaining the annuities for female ages not shown. Tables of  $P$ 's are also given so that, for the calculation of deferred annuities, the only additional information the user needs from the outside is the discount factor for the period of deferment.

S. J. Cutler (editor), *International Symposium on End Results of Cancer Therapy*, pp. x, 446, National Cancer Institute Monograph 15, Bethesda, Md., October, 1964.

The Symposium was held in Norway, September 16-20, 1963. The monograph contains comparisons "of treatment methods and survival rates, for a specified form of cancer, in the six countries that contributed data." There is also a discussion of diagnostic problems and therapeutic techniques. The appendixes contain a section with a discussion of problems in obtaining comparability in the data, another section dealing with the computation of survival rates for cancer cases and the survival rate relative to that for a comparable group in the general population, and, finally, a section with a set of standardized survival rates for each form of cancer discussed at the Symposium.

\**Annals of Life Insurance Medicine*, Vol. 2, pp. 217, Springer-Verlag, New York, 1964.

The purpose of this publication has already been cited.<sup>23</sup> The present volume contains 13 chapters, most of which are concerned with various phases of the cardiovascular-renal conditions. Several of the contributions were published in other sources. Among the original contributions are chapters, "The Underwriting of Blood Pressure Abnormalities," by Tanner, Marx, and Ulrich; "The Prognosis of Chronic Nephritis," by Sarre; and "Anti-Hypertensive Therapy and Its Effect on Risk Evaluation," by Ungerleider.

J. M. Belth, *Participating Life Insurance Sold by Stock Companies*, pp. xx, 214, Richard D. Irwin, Inc., Homewood, Ill., 1965.

<sup>23</sup> See *TSA*, XV, 619.

In separate chapters the author describes the development of participating life insurance in the United States, the reasons for the sale of participating life insurance by some stock companies, and the importance of participating life insurance sold by stock companies. In another chapter the author attempts to analyze the "prices" of participating life insurance sold by stock companies. The author proceeds with chapters on the separation of accounts and on government regulation with emphasis on Canada, New York State, Illinois, Wisconsin, and New Jersey. The two final chapters deal with general considerations and a conclusion.

#### HEALTH INSURANCE

U.S. National Center for Health Statistics, *Development and Maintenance of a National Inventory of Hospitals and Institutions*, pp. 25, Washington, D.C., February, 1965.

An account is given of the development of an inventory on the number and types of establishments listed, the number of beds, and the number of persons employed. The hospitals included are all those "with 6 or more beds, as well as all resident institutions, except for nursing or personal care homes with less than 3 beds." The institutions included "are establishments which are in business to provide medical, nursing, personal, or custodial care to groups of unrelated individuals who have no usual plan of residence elsewhere." The inventory will be kept current by additions and deletions. The listing will constitute a Master Facility Inventory (MFI), which will be used for the selection of representative samples for studies of the resident or patient population. A procedure is described for classifying nursing homes and homes for the aged on the basis of the service provided and the availability of nursing personnel.

U.S. National Center for Health Statistics, *Selected Dental Findings in Adults by Age, Race, and Sex, United States—1960-1962*, pp. 35, Washington, D.C., February, 1965.

The data are derived from observations on 6,672 persons aged 18-79 years selected as a sample of the civilian noninstitutional population for the first cycle of the Health Examination Survey. The report describes the dental examination procedure, the variability in the findings of the five dental examiners, and the bias due to non-response. The proportions of persons edentulous rose from 1 per cent at ages 18-24 years to 45.0 per cent for males and 52.9 per cent for females at ages 65-74 years. The figures were generally higher for the white population than for Negroes throughout the adult years. The Negroes also showed to advantage with regard to the average number of decayed, missing, and filled teeth, and also with regard to the prevalence of destructive periodontal disease.

U.S. National Health Survey, *Illness, Disability, and Hospitalization among Veterans, United States, July 1957-June 1961*, pp. 44, Washington, D.C., March, 1965.

A "veteran is defined as the man who has served in the Armed Forces of the United States during a war (including the Korean conflict). Men who have served in the U.S. Armed Forces during peacetime only are included in the nonveteran category. Current members of the Armed Forces and persons in institutions other than short-stay hospitals are also excluded from the data. Therefore, veterans in nursing homes or other institutions are not represented in either the health characteristics or in the population data upon which rates are based." All data in the report relate to men only. The following data are derived from the report.

CONDITION	AGES 20-44		AGES 45-64		AGES 65 AND OVER	
	Veterans	Non-veterans	Veterans	Non-veterans	Veterans	Non-veterans
Per cent with						
One or more chronic conditions . . .	45.2	41.8	59.6	58.2	79.4	76.1
One or more bed days . . . . .	8.9	7.7	13.7	11.9	17.9	15.6
Rate per 1,000 with						
Arthritis and rheumatism . . . . .	21.7	14.7	91.1	81.0	209.4	149.2
Asthma-hay fever . . . . .	43.7	49.7	51.2	50.1	70.3	51.5
Heart conditions . . . . .	10.0	13.5	69.6	57.3	165.7	144.9
Peptic ulcer . . . . .	19.6	18.8	50.3	39.2	122.9	111.8
Hearing impairments . . . . .	35.7	27.0	43.7	41.7	46.9	29.2
High blood pressure . . . . .	13.7	13.3	39.4	39.5	79.2	72.2
Hernia . . . . .	11.0	12.9	30.4	33.4	80.0	83.3
Visual impairments . . . . .	7.9	12.7	21.5	23.6	74.4	88.7
Diabetes . . . . .	4.1	4.9	18.4	20.1	37.2	33.7
Chronic bronchitis . . . . .	5.8	4.3	16.1	10.4	30.7	17.1
Paralysis . . . . .	2.9	4.7	9.1	9.1	18.6	24.5
Number of hospital discharges per 1,000 men per year . . . . .	78.7	74.0	122.1	117.0	184.3	153.3
Average length of hospital stay in days . . . . .	10.5	9.1	15.1	11.2	22.1	13.9

U.S. National Health Survey, *Acute Conditions, Incidence and Associated Disability, United States, July 1963—June 1964*, pp. 51, Washington, D.C., April, 1965.

"An acute condition is defined as a condition which has lasted less than 3 months and which has involved either medical attendance or restricted activities. . . . However, it excludes certain conditions which are always classified as chronic." Incidence rates according to age and sex for geographic areas are shown in the following table.

AGE (YEARS) AND SEX	NUMBER OF ACUTE CONDITIONS PER 100 PERSONS PER YEAR							
	All Areas	All Standard Metropolitan Statistical Areas	Nonmetropolitan Standard Statistical Areas		North-east	North-Central	South	West
			Nonfarm	Farm				
<b>Males</b>								
All ages . . . . .	200.0	203.2	202.0	161.5	182.4	199.7	192.4	242.2
Under 5 . . . . .	367.9	376.0	367.9	279.3	379.5	330.4	379.6	397.4
5-14 . . . . .	273.5	295.8	252.7	170.5	295.6	272.9	222.6	339.5
15-24 . . . . .	190.7	196.9	192.8	125.1	155.2	200.7	192.4	224.6
25-44 . . . . .	152.2	142.8	179.2	129.0	119.0	162.0	139.2	210.3
45-64 . . . . .	127.9	126.1	123.1	162.6	109.3	128.0	139.5	138.7
65 and over . . . . .	102.9	95.3	107.3	136.4	86.4	104.9	107.3	117.8
<b>Females</b>								
All ages . . . . .	216.4	220.8	214.6	178.6	201.2	217.9	204.4	261.6
Under 5 . . . . .	366.4	392.5	337.2	231.6	393.0	381.5	341.5	349.2
5-14 . . . . .	269.7	279.5	263.5	208.1	291.7	253.3	231.8	340.0
15-24 . . . . .	222.0	215.4	239.3	196.2	167.9	238.1	212.6	298.2
25-44 . . . . .	197.4	204.5	188.5	152.4	178.8	194.0	185.7	252.6
45-64 . . . . .	150.7	145.9	158.2	167.0	137.7	151.6	149.0	176.3
65 and over . . . . .	124.3	126.2	123.0	.....	89.6	141.4	137.4	129.2

U.S. National Center for Health Statistics, *Health Insurance; Type of Insuring Organization and Multiple Coverage, United States—July 1962—June 1963*, pp. 46, Washington, D.C., April, 1965.



The data for this report were collected in a probability sample of the civilian non-institutional population of the United States. The estimate is that during the survey period, 128,703,000 persons held hospital insurance coverage and 119,413,000 held surgical insurance coverage; for males, the numbers were 62,856,000 and 58,490,000, respectively. Their per cent distribution according to plan was as follows:

Type of Coverage; Sex	Total Covered	Blue Plan Only	Blue Plan and Other	Other	Unknown Type
Hospital coverage					
Male.....	100.0	37.9	6.5	48.1	7.5
Female.....	100.0	39.4	6.7	46.9	7.1
Surgical coverage					
Male.....	100.0	37.4	4.8	50.6	7.2
Female.....	100.0	38.7	5.2	49.2	6.8

The proportion covered by Blue Plans only varies little with age under age 55 years but tends to rise somewhat thereafter. The "Other" category was not subdivided because of difficulties in making accurate classifications. The proportion with coverage under two or more plans was 10.1 per cent for hospital insurance and 8.2 per cent for surgical insurance.

U.S. National Center for Health Statistics, *Chronic Conditions and Activity Limitations, United States, July 1961—June 1963*, pp. 38, Washington, D.C., May, 1965.

The National Health Survey considers a condition described by a respondent as chronic if it is one included in either a check list of chronic conditions or a check list of impairments, or if it was first noticed by the respondent more than three months before the week of the interview. On this basis, 44 per cent of the general population had one or more chronic conditions during the survey period, the proportion rising from 20 per cent under age 17 years to 81 per cent at ages 65 and over. However, 32 per cent reported no limitation of activity because of a chronic condition; the proportions were 18 per cent at ages under 17 years; 39 per cent at ages 17–44 years; 44 per cent at ages 45–64 years; and 32 per cent at ages 65 and over. Among males at ages 45–64 years reporting some limitation of activity, 20.7 per cent ascribed it to a heart condition, 13.7 per cent to arthritis and rheumatism, 6.8 per cent to mental and nervous conditions, and 9.7 per cent to impairments of the back or spine, excepting paralysis.

U.S. National Center for Health Statistics, *An Index of Health: Mathematical Models*, pp. 19, Washington, D.C., May, 1965.

"Health status is measured in terms of three variables described in the models. Frequency of illness is considered first and a probability function describing the distribution of illness episodes during a year is derived. . . . Distribution of illness is then described under the assumption that frequency and duration of illness episodes are independent random variables. . . . A third model is developed to describe the monthly distribution of mortality over the one-year interval." For its purpose the report defines an illness "as a continuous state of ill health over a period of time regardless of the number of diagnoses. . . ." Then "For the age group  $x$  let  $\bar{N}_x$  be the observed average number of illnesses per person and  $\bar{T}^*$  be the average duration of an illness in a year." Also, ". . . the average time lost due to death for an individual of age group  $x$  is one-half the age-specific death rate. . . . The average duration of ill health is the sum of the

average length of time that an individual is ill and the time lost to death,  $\bar{N}_x \bar{T}_x^* + \frac{1}{2} m_x$ ". The complement of the above,  $H_x$ , is defined as the mean duration of health. The sample variance of  $H_x$  is derived.

U.S. National Health Survey, *Weight, Height, and Selected Body Dimensions of Adults, United States, 1960-1962*, pp. 44, Washington, D.C., June, 1965.

The authors of this report are Drs. Howard W. Stoudt, Albert Damon, and Ross McFarland, of the Harvard School of Public Health, and Miss Jean Roberts, of the National Center for Health Statistics. The basic data are physical measurements on 6,672 adults at ages 18-79 years, these constituting a nation-wide probability sample. Measuring techniques and the reliability of the measurements are described. The averages, medians (50 percentile), and certain other percentiles of weights and heights according to age and sex are shown in the accompanying table.

CHARACTERISTIC	AGE (YEARS)							
	18-79	18-24	25-34	35-44	45-54	55-64	65-74	75-79
	Weight (pounds)							
Males:								
Average .....	168	160	171	172	172	166	160	150
70 percentile .....	181	171	185	184	185	180	172	161
50 percentile .....	166	157	169	171	171	165	161	146
30 percentile .....	152	145	154	158	156	151	146	137
Females:								
Average .....	142	129	136	144	147	152	146	138
70 percentile .....	152	137	143	153	158	165	160	155
50 percentile .....	137	126	130	137	143	146	145	137
30 percentile .....	125	117	120	125	130	134	132	119
	Height* (inches)							
Males:								
Average .....	68.2	68.7	69.1	68.5	68.2	67.4	66.9	65.9
70 percentile .....	69.7	70.1	70.5	70.0	69.5	68.8	68.3	67.0
50 percentile .....	68.3	68.6	69.0	68.6	68.3	67.6	66.8	66.2
30 percentile .....	66.8	67.1	67.7	67.3	66.9	66.0	65.5	64.2
Females:								
Average .....	63.0	63.8	63.7	63.5	62.9	62.4	61.5	61.1
70 percentile .....	64.4	65.0	64.9	64.7	64.1	63.6	62.8	62.8
50 percentile .....	62.9	63.9	63.7	63.4	62.8	62.3	61.6	61.8
30 percentile .....	61.8	62.3	62.4	62.2	61.7	61.3	60.2	60.1

\* Without shoes.

Data are not presented to show the distribution of weight in relation to height. The report contains the following comments:

"Comparison with data obtained in the 1959 study made by the Society of Actuaries on weights of some 290,000 men insured by 26 large life insurance companies in the United States and Canada between 1935 and 1954 is difficult because no adequate basis is available to use in compensating for highly variable clothing weights and different measuring techniques. For example, some examinees weighed with, and some without coats and shoes, and some weights were measured, while others were reported by the examinee."

"Heights, with an estimated correction for shoes, from the 1959 Society of Actuaries study were consistently shorter than present findings for adult men by amounts varying according to age, but averaging over 0.4 inch. More precise estimates of differences in height between these two studies are difficult to obtain because of certain features inherent in the collection and presentation of the data on the insured population."

#### SOCIAL SECURITY

R. J. Myers, *Actuarial Cost Estimates for Hospital Insurance Act of 1965 and Social Security Amendments of 1965*, Actuarial Study No. 59, pp. 54, Division of the Actuary, Social Security Administration, Washington, D.C., January, 1965.

This study discusses the data, assumptions, and procedures used in preparing the cost estimates for the Hospital Insurance Act of 1965 and the Social Security Amendments of 1965, H.R. 1. The study also presents the results of the cost estimates and discusses some of the problems involved.

The study is a revision and expansion of *Actuarial Cost Estimates for Hospital Insurance Bill*, Actuarial Study No. 57,<sup>24</sup> which dealt with the King-Anderson Bill. Cost estimates are included for the cash-benefits portion of the Old-Age, Survivors, and Disability Insurance System under H.R. 1.

Assumptions and methodology are similar to those used in Actuarial Study No. 57. A primary difference is that, whereas average daily hospital costs and earnings rates were formerly assumed to remain at 1961 levels, long-range estimates in this study are based on the assumption that earnings rates remain at 1963 levels and average daily hospital costs are assumed to rise 2.7 per cent per year from 1963 to 1970, 1.35 per cent per year from 1971 to 1975, and that thereafter there will be a decline of  $\frac{1}{2}$  per cent per year. This assumption is based on the recommendation of the Advisory Council on Social Security.<sup>25</sup>

Another difference in assumptions is that cost estimates are based on the period ending in the year 2040 rather than the perpetuity basis formerly used. Further details on the cost assumptions made are contained in *The Status of the Social Security Program and Recommendations for Its Improvement*, Report of the Advisory Council on Social Security, 1965.

The cost of the HI benefits is estimated in this study to be 0.84 per cent of taxable earnings.

Figures are also given for the cost of the different types of benefits, for the future year-by-year progress of the OASI, DI, and HI Trust Funds, for the cost estimates for the "blanketing-in" of persons aged 65 and over who are not insured under OASDI, and for the savings under certain public assistance programs (OAA and MAA) as a result of the benefits provided under the bill.

R. J. Myers and J. M. Ceccarelli, *Age Characteristics of Child's Insurance Beneficiaries under OASDI*, Actuarial Note No. 15, pp. 3, Social Security Administration, Washington, D.C., March, 1965.

This note gives, by single years of age to 18, the total number of children in the United States, the number of children in current-payment status under the OASDI system, and the ratio of the child beneficiaries to the total population, as of the end of 1962. An accompanying chart shows that when these ratios are plotted, a remarkably

<sup>24</sup> Digested in *TSA*, XVI, 121.

<sup>25</sup> Reviewed in this issue of *TSA*.

smooth curve results. Comments are also made on the effect on the number of "child" beneficiaries if the OASDI benefits would be payable for an additional 4 years (up to exact age 22).

M. C. Hart, *Additional Interest Earnings of OASDI Trust Funds Resulting from Changed Interest Rate Provided in 1960 Amendments*, Actuarial Note No. 16, pp. 6, Social Security Administration, Washington, D.C., February, 1965.

This note analyzes the effect on interest earnings of the OASDI Trust Funds of the change effective in October, 1960, in the method of determining the interest rate on special issues to the funds. The change increased interest earnings by about \$62 million in the period from October 1960 to June 1964.

R. J. Myers, *Distribution of OASDI Contributions within a Calendar Year, Particularly When a Change in Financing Is Made*, Actuarial Note No. 17, pp. 2, Social Security Administration, Washington, D.C., March, 1965.

This note analyzes the distribution of OASDI contributions between the first and last 6 months of the year, showing the effect of an increase in the tax rate compared to the effect of a change in the earnings base.

R. J. Myers, *Disability Incidence Rates under OASDI System for Disability Onsets Occurring in 1956-61*, Actuarial Note No. 18, pp. 7, Social Security Administration, Washington, D.C., April, 1965.

This note presents disability incidence rates by age at onset and sex for the period 1956-61, under the Old-Age, Survivors, and Disability Insurance program, making comparisons for each calendar year of onset. Since the Disability Insurance program is in its early stages, it also discusses the current and future problems and trends that arise in the determination of these disability incidence rates.

G. H. Trafton, "Employment and Earnings of Self-employed Workers under Social Security," pp. 30, *Research Report No. 5*, Division of Research and Statistics, Social Security Administration, Washington, D.C., April, 1964.

This report describes and tabulates the characteristics of self-employed persons covered by the OASDI system, based on statistics compiled by the Social Security Administration from a 1 per cent sample covering the period between 1951 and 1960. The majority of agricultural, business, and professional self-employed (except doctors) are covered under the program, comprising about 10 per cent of all covered workers.

Information about the distribution of the self-employed by earnings, age, sex, and industry is contained in the text and 16 tables. Results of the study show that in any year about 20 per cent of the self-employed also work as wage earners and that alternating between the two categories is quite frequent. Compared to wage earners in OASDI covered employment, fewer women are self-employed, and self-employed tend to continue working at older ages. The over-all average earnings of persons completely or partly self-employed are higher than for wage earners.

The report also contains a short summary of the provisions of the Social Security Act applicable to self-employment.

L. D. Haber *et al.*, "The Disabled Worker under OASDI," pp. xiii, 368, *Research Report No. 6*, Division of Research and Statistics, Social Security Administration, Washington, D.C., October, 1964.

This report, based on data developed during a survey of disabled workers in October–November 1960, presents such characteristics as age, sex, race, marital status, education, nature of disability, previous employment, and sources and amount of income, together with some discussion of the effect of disability on family relationships, living arrangements, and medical expenditures.

The results are presented separately for OASDI cash beneficiaries, aged 50–64, and for workers under age 50 who were allowed a “disability freeze” protecting their rights to a cash benefit upon later eligibility.

Partly intended as a pilot study for a more comprehensive national survey, its findings may not be current because of the extension, in November, 1960, of cash benefits to disabled workers under age 50, who may previously have had less incentive to apply for the “freeze.” The data may not be representative nationally because the survey was confined to the eight largest metropolitan areas and because a higher response rate may have been secured from hospitalized individuals who were contacted through the institutions.

A. C. Robb, “The Impact of State Pensions on Public Service Superannuation Schemes,” *Journal of the Institute of Actuaries*, Vol. XCI (1965).

This is the second paper on public service superannuation plans presented to the Institute by the author. He discusses the extensive revisions that followed the introduction of the National Insurance graduated pension plan and points out that no marked developments of principle have occurred since the system of benefits was introduced in 1948–49 for the civil service and national health service employees and extended in 1954 to local government employees. A heterogeneous group of employees is included in these pension plans because civil service clerks and officers, teachers, as well as police and firemen, are all covered. The paper mentions that there has been a steady improvement in vesting rights, but this has been generally limited to migration within the public sector.

The major portion of this paper relates to a consideration of hypothetical future changes resulting in an expansion of the National Insurance plan and the effect this would have on the public service superannuation plans. Because of the principle followed in the coordination of the National Insurance and public service plans, the expansion of the state pension should result in a corresponding contraction in the level of benefits under the public service plans. The author suggests various principles that should be followed in the hypothetical adjustment and outlines suggested benefits that would be reasonable to reflect the changes.

The author makes a point that, because of gradual increases in the National Insurance benefits over the years since 1948, the original intention of avoiding duplication of benefits has not been achieved. In fact he concludes that, unless proper modifications of the type he proposes are made in the public service plans, the total retirement income from both sources will tend to become excessive in relation to final pay.

#### OTHER TOPICS

R. D. Buzzell, *Mathematical Models and Marketing Management*, pp. xv, 281, Harvard Business School, Boston, Mass., 1964.

The heart of this book is an account of the application of model building to five different marketing problems in different organizations. The problems were to (1) select advertising media to maximize sales; (2) set price of product to maximize profit; (3) select form of marketing organization to maximize profit; (4) measure quantitatively,

and study the mechanism of, the effect of advertising on sales; (5) study the effect of company advertising on recruitment of college students.

The account of the application of model building to specific problems is preceded by explanatory material on models and is followed by an evaluation and conclusions regarding their use. The author appears to believe that models serve a useful purpose in the analysis of marketing problems but that there is much room for their development and improvement.

W. Alderson and P. E. Green, *Planning and Problem Solving in Marketing*, pp. x, 661, Richard D. Irwin, Inc., Homewood, Ill., 1964.

This book consists of a short introduction followed by sections of approximately equal length on the evaluation of alternative plans and on methods of developing marketing plans.

The section on evaluation describes the nature of model-building, alternative theories of decision-making (with emphasis on Bayesian theory), decision trees, and value theory. These techniques are illustrated by application to market-position analysis, new-product development, and pricing, promotional, sales channel, and control decisions.

The section on methods of developing marketing plans discusses the ways in which the various kinds of structures and sequences comprising a marketing plan may be developed so that it can be evaluated as described in the preceding section. Plans for marketing campaigns, facilities, organizations, and systems are considered.

H. M. Markowitz, *Portfolio Selection—Efficient Diversification of Investments*, pp. x, 344, John Wiley & Sons, Inc., New York, 1959.

This volume is in four parts. The first two are introductory and explain the concept of the return on an investment and the statistical concepts of mean, variance, and covariance. The third part assumes that from past performance, or by judgment, the mean and variance of the return on investment are known for each of the securities that may enter into a portfolio and that the covariance of the return is known for each pair of securities. A minor modification permits consideration of only negative deviations from the mean return. A method is then presented for determining the relative amounts of each security required to attain a portfolio with either a minimum variance of return on investment for a given mean return or a maximum mean return for a given variance of return. There are an infinite number of such portfolios, each termed efficient, that vary with either the mean return on investment or with the variance of return.

The book concludes with a section on the rational selection of that particular efficient portfolio that best meets the particular investor's needs. This is done by an application of value theory, which concerns the relative values placed by an investor on different degrees of certainty and rates of return.