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BOOK REVIEWS AND NOTICES*

*E. J. Faulkner, *Health Insurance*, pp. xii, 636, McGraw-Hill Book Company, Inc., New York, 1960.

This book covers the whole range of health insurance plans, including not only individual and group contracts, but also service plans and governmental activities. It is, perhaps, too big an undertaking, for as the author states, "No single volume can comprehend the detail of every aspect of the burgeoning health insurance business." Although the author's 1940 book, *Accident and Health Insurance*, has been substantially revised and expanded for this new volume, much of the original text has been retained with only minor changes. The result is undue emphasis on individual accident only loss-of-time contracts; these now account for only a small part of the individual business, which, in turn, has been outstripped by group. For example, two early chapters on "Terms of the Contract" describe such contracts in considerable detail, as well as the supplementary hospital and medical benefits included in commercial loss-of-time policies but so largely superseded now by the hospital, surgical and medical expense benefits discussed in a later chapter. Likewise, a long section of this chapter is devoted to the theme of "accidental means" which is now of no more than historic interest.

The general pattern of the book is to treat successively with first individual, and then group, blanket and franchise policies, under the topics of contract provisions, sales, underwriting and claims. This results in some repetition and inconsistencies. For example, page 67 states that credit insurance is issued on a group form, page 194 qualifies this by adding that a considerable volume is under individual policies, while page 233 states that "much credit insurance is written on a blanket basis"; and it is under the last heading that the most detailed description is given, although the "model" blanket law cited would not appear to permit such coverage.

The chapter on group, blanket and franchise contracts summarizes the factors which are essential to the successful operation of group plans, how they operate, what benefits are provided, the types of groups covered, and the contractual vehicle employed. As indicated by the title of the chapter, it also summarizes the extension of mass handling techniques—blanket and franchise—to cover special risks and types of groups usually not considered appropriate for group insurance. However, it is possible that the chapter may fail to give the reader the proper perspective as to the important part played by group insurance in the over-all health insurance picture. For example, on page 198, it is stated that "Group insurance is intended to provide a floor of protection. It is minimum

* 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*.

basic coverage upon which the individual may build an adequate personal insurance program by the addition of individual contracts." While this may have been intended to refer to loss-of-time coverage only, it fails to bring out that group or Blue Cross-Blue Shield coverage provides reasonably adequate medical expense benefits for many individuals, probably better on the average than individual contracts. In general, group insurance is covered in much less detail than individual. The chapter dealing with types of insurers is largely devoted to a discussion of assessment associations, fraternal, and stock and mutual casualty companies, although as the tables on page 565 reveal, over two-thirds of all the business is now written by stock and mutual life companies.

The chapter on distribution is an example of the limited treatment of group insurance. The marketing of individual policies is covered in considerable detail, but for group there is little more than a presentation of the usual commission scales paid to the agent or broker who develops and sometimes services the case. The reference to transferred group business has not been updated—there is much more of this than would be inferred from the text and most insurers at least pay level commissions on such business.

For individual policies, the chapter on underwriting presents in considerable detail somewhat conservative underwriting of commercial policies, principally accident loss-of-time. An extreme example of this is the very broad waiver suggested for a history of lumbago. Broad coverage policies, including those on the noncancelable and guaranteed renewable basis, are now being underwritten quite liberally and with far more issued in manual occupations than is indicated. We believe that the discussion of race and nationality as underwriting factors is outmoded. Nine pages cover the elements of underwriting group health coverage, some of which are out-of-date—for example, the reference to higher premiums or lower benefits for non-Caucasian risks. The statements that "on each contract anniversary date, the underwriter has the opportunity to adjust the premium rate, the conditions of the contract and the benefits provided" and "or he may refuse to renew the contract" are not in conformance with the way group insurance is generally written. Usually, the contract is terminable by the insurer only if the minimum size and participation requirements are not met, and insurers generally do not have the unilateral right to adjust benefits. Adjustments can be negotiated only if the policyholder is willing—for example, as an alternative to accepting higher rates.

Chapters 11 and 12 by John Angle, F.S.A., cover the subjects of premium rates and reserves very well for a nontechnical book. It should be noted that misprinting "health" as "surgical" in three places in the heading of Table 11-1 may confuse readers not familiar with Schedule H. One could wish that all liability items had not been categorized as reserves; this is not correct from either the insurance or accounting point of view. The chapter on premium rates summarizes some of the highlights of the considerations involved in setting manual rates for various group health coverages, in determining dividends and experience-rating credits, and in underwriting small groups of 10 to 24 lives.

In the chapter on claims, the author covers procedures for individual policies

The subsequent chapters furnish the background data which led the author to his recommendations. Certain chapters are of particular interest. Chapter 5 discusses the organization of the Boards of Directors of the several plans, the attendance of the members of these Boards, the operating expenses of the plans, and their sales and advertising expenses.

Plan variations are described in Chapter 6, Part A, which also considers the estimated additional cost of bringing each plan in line with a proposed standard plan. This section also considers the effect on Blue Cross rates of bringing group and nongroup rates closer together. Some attention is given to conversion rights under insurance company contracts. In order to compare experience under Blue Cross and insurance company plans, the average length of stay and cost per patient were determined for a matched sample of 282 Blue Cross and 282 General Electric claims, the latter being chosen as typical of a large insurance company comprehensive plan. The resulting data indicate that average stays in the hospital under the General Electric plan are somewhat shorter than under Blue Cross plans. While this is the case for the sample as a whole, claims in the Syracuse area show a reverse relationship. The author cannot offer any explanation for these results and suggests further investigation. The data also show that the lower duration of stay under the General Electric plan more than offsets the slightly higher average daily charges, so that the average charges per patient are lower than for Blue Cross claims. It is not clear from the data whether the charges shown for Blue Cross claims are the actual charges, or are amounts paid by Blue Cross to the hospital under the reimbursement formula which would reflect the discount, if any, allowed them by hospitals.

In Chapter 6, Part B, which deals with experience rating, the author expresses a strong opposition to this course by Blue Cross plans. He feels that there is a serious question whether Blue Cross plans utilizing experience rating should be allowed the special privileges they now enjoy. Claim rates are presented for various types and sizes of groups. Chapter 7 deals at length with trends in hospital expenditures and patient-day costs. The present methods used by Blue Cross plans in reimbursing hospitals are described in Chapter 9. This includes a comparison, with discussion, of the various approaches and a proposal for an alternative method.

Hospital utilization, the topic of Chapter 10, has tables which show lengths of stay for various conditions under the several plans. Ancillary services are studied in a similar manner. A point is made of the considerable variations in experience which exist by area for identical types of disability.

In general, this study is impressive by its attention to detail and volume of data. The information dealing with methods of reimbursement, expense rates, claim rates, average lengths of stay, and hospital costs are all of interest to the actuary. The recommendations made appear sound to the extent that they would promote better, more efficient, less costly medical care. The major criticism of this study is that the author's enthusiasm for the Blue Cross approach does not seem to allow him to be objective in appraising the insurance

companies' contributions in this field. His assumption that discounts from hospitals and preferred tax status justly belong to Blue Cross and Blue Cross only may cause some readers to object strenuously. At present approximately 65% of the persons having hospital expense protection are covered by insurance companies. It seems in the public interest that Blue Cross reimbursement formulas to hospitals should not result in charges for non-Blue Cross patients being such as to subsidize Blue Cross patients.

PHILIP BRIGGS

G. N. Watson, *The Elements of Group Insurance*, pp. 156, The Institute of Chartered Life Underwriters of Canada, Toronto, 1960.

The author, in his preface, comments, "This text is written especially for the Canadian life insurance agent." Undoubtedly any agent who reads and digests the text will have a commendable knowledge of group insurance in Canada, but here is a concise résumé of group insurance principles and practices which is useful for others than agents. The author, having drawn from "notes and lectures delivered to the group sales staff and agents" of his own company, has described the general group operation in his company, with policy wording and sample forms used in billing, claims and other administration included in the appendixes. The latter, together with the index, occupy about one third of the text.

Elements of Group Insurance could be a suitable introduction to the subject for the actuarial student. The fundamental underwriting principles to be observed are followed by brief descriptions of the benefits usually found in group life and health insurance contracts. Chapters are devoted to types of groups which are encountered; the nature of the contract; premium rates, retentions and underwriting principles; the problem of insurance for retired lives; marketing methods; the role of the agent (as apart from the group specialist); and the nature of the administrative problem. Also included is an up-to-date summary of the various Canadian provincial hospital plans (except for Quebec). Recent Canadian legislation provides for taxing the employer contribution for group life insurance, when the amount exceeds \$25,000 on a single life, as income to the employee. The effect of this is discussed with an example.

The practicing group actuary will find little to advance his knowledge in such areas as rate making or experience rating, nor does the book present much in the way of additional references where a more exhaustive discussion of specific aspects of group insurance could be found. This is not surprising when it is recalled that the book was designed to enable agents to acquire an adequate knowledge of group insurance. The extracts from the policy forms of one company should prove helpful to those students who do not have access to similar forms.

I. R. TAYLOR

in considerable detail, and, in less detail, the simpler techniques for group, including the draft book type of self-administration for the larger groups. Hospital-admission plans are discussed briefly, and a certification form is shown in the Appendix along with other specimen claim forms. The chapter on regulations and taxation is excellent and up-to-date. Nearly all of the material is on developments since World War II. It includes the development of the Uniform Individual Accident and Sickness Policy Provisions Law and other model laws such as the Fair Trade Practices Act; also included are the N.A.I.C. advertising regulations and the Federal Trade Commission proceedings which led to them. The chapter quotes the 1958 New York legislation restricting non-renewal of hospital, surgical and medical expense insurance and refers to less drastic legislation in some other states.

The chapter on the history of health insurance gets off to a good start but could very well have included more about the great development of group health insurance and the rapid growth of noncancelable and guaranteed renewable insurance in recent years.

The book closes with a chapter on "Trends and Conclusions," which vigorously defends voluntary health insurance and predicts not only its survival but also its continued growth.

EDWIN L. BARTLESON
STANLEY W. GINGERY

Prepayment for Hospital Care in New York State—A Report on the Eight Blue Cross Plans Serving New York Residents, pp. xxiv, 383, submitted by the School of Public Health and Administrative Medicine, Columbia University, to Hon. Herman E. Hilleboe, Commissioner, Department of Health, and Hon. Thomas Thacher, Superintendent of Insurance, State of New York, 1960.

This study was commissioned in 1958 by the New York State Health and Insurance Departments "to assist in the formulation of sound answers to various public health and insurance questions recurrently arising in the administration of the States' laws relating to non-profit health insurance." Dr. Ray E. Trussell, then Chairman of the Columbia University School of Public Health and Administrative Medicine and presently Commissioner of Hospitals in the City of New York, directed the study, which is also signed by his associate, Frank van Dyke. The eight Blue Cross plans in New York State were studied in detail and compared with other forms of medical care insurance. This led to recommendations regarding various aspects of the plans.

Chapter 1 contains an introduction to the subject of Blue Cross plans and a list of the recommendations arising out of the study. The author develops the concept of Blue Cross as a community service organization, accorded special legal and tax status, and discusses differences from insurance company plans. He calls for recognition that the fully paid hospital service provided by Blue Cross, as opposed to indemnity payments made by insurance organizations,

causes its subscription rates to increase with the rising costs of hospital care. In his discussion of community rating versus experience rating, the author finds the principle of experience rating socially undesirable and regrets that the better risks are able to obtain lower rates from organizations which utilize this principle. This stand leads him to be critical of Blue Cross plans that indulge in this practice and to call for a return by all these plans to the community rating principle. He also makes a point of the responsibility of business and labor unions to assure the availability of health insurance to employees leaving employment.

In summary, the recommendations are as follows:

1. A Hospital Review and Planning Commission at the state level should be established. This body would establish, advise, and assist Regional Hospital Review and Planning Councils. It would also serve as an official advisory body to the State Departments of Insurance and Social Welfare on matters pertaining to hospital care and subscriber rate increases.
The Regional Councils would compile statistics, plan systems of hospital care, develop and encourage standards for hospital administration, provide technical and administrative assistance to hospitals and Blue Cross plans in the establishment and administration of reimbursement methods, and review requests for nonprofit plan rate increases.
2. The Boards of Directors of Blue Cross plans should have a well distributed representation and should consist of leaders of the community who will have the time and interest to attend meetings, work on committees, and otherwise aid the plan.
3. All Blue Cross plans should have budgets, as many now do, and prepare annual reports of their expenses and services provided.
4. All Blue Cross plans in the state should work toward a uniform plan providing 120 days' coverage.
5. Means should be found to provide home care under Blue Cross plans.
6. A number of plan changes should be adopted which would bring the various plans closer together and counter the justifiable criticism of certain provisions of these plans.
7. Experience rating should be discontinued. Group and nongroup rates should be brought closer together. Laws should be passed to assure conversion rights to employees.
8. The proposed Commission and Regional Councils should, in cooperation with other interested groups, keep a close watch on hospital costs and efficiency.
9. Hospitals should establish "utilization" committees which would keep a close watch on utilization of hospital facilities.
10. Certain principles should be recognized in developing formulas for reimbursement to hospitals for contractual benefits under Blue Cross plans. These principles are outlined.
11. Blue Cross should adopt a tougher policy toward unaccredited hospitals.
12. Proposed rate increases should be carefully reviewed and hearings held. If justified, they should be approved by the Insurance Department on the basis that the rate change will last at least one year and probably not more than two years, and will maintain the legally required reserves plus a reasonable margin at the end of each of the estimated time periods to which the rate change will apply.

*E. W. Patterson, *Legal Protection of Private Pension Expectations*, pp. xxiii, 261, Richard D. Irwin, Inc., Homewood, Illinois, 1960.

This volume is the first to appear as a direct result of a project study made under the auspices of the Pension Research Council, associated with the Wharton School of Finance and Commerce of the University of Pennsylvania. The general purpose of the study is stated as "a critical inquiry into the factual basis of benefit expectations under private pension plans." The investigations were divided into four principal areas, and a committee or task force was set up for each area. The chairman of each task force is responsible for the research and is the author of the report for his area. As author, he has the right to express his personal views on any matter, even though they may be contrary to the views of some or all members of his task force. All four chairmen are persons connected with academic institutions. Professor Patterson, Cardozo Professor Emeritus of Jurisprudence at the Columbia University School of Law, was chairman of the task force dealing with governmental regulation of private pension plans. The other three areas, to be the subject of reports yet to be published, are: standards of actuarial soundness; legal status, protection, and communication of benefit rights; and competition among agencies of administration. There will also be a master report authored by the Project Director, Professor Dan M. McGill of the Wharton School.

The early chapters represent Professor Patterson's extensive legal research on the history and status of the laws affecting pension plan benefit regulation. This comprises the major portion of the book, is mainly descriptive, and contains much new material of interest. In these chapters Professor Patterson has made a definite and worth-while contribution to the expansion of the field of pension plan knowledge. Considerable documentation of case law and source material is evident in these chapters.

Following an introductory chapter, Chapter II goes into the legal relations, rights, powers, and duties in the establishment and operation of pension plans. These are discussed mainly in reference to the terms of plan documents and their application to American case law. A detailed study was made of fifty pension plan booklets of various types of substantial U.S. corporations, chosen from various parts of the country, and from which the author concludes that variations are "standardized and limited." The chapter also discusses the roles of the different kinds of personnel involved in pension plans and their respective personal legal liabilities. As to actuaries, Professor Patterson could find no state statute requiring any qualification requirements. Following a discussion of a few "pros and cons" on the question of the desirability of their licensing, he states that, if such legislation is enacted, the qualifying examinations may be prepared and submitted to the state official by the appropriate professional actuarial societies.

In the next chapter, dealing with federal regulation, the author finds only "indirect, partial, or sporadic protection of participants, pensioners and their

beneficiaries." Under main examination here are the Internal Revenue Code, the Welfare and Pension Plans Disclosure Act of 1958, and the Labor Management Relations Act of 1947. Two areas of principal attention by the author are "actuarial soundness" and the extent of requirements on the employer to make current-service contributions to the pension fund. To the extent that the author's conclusions are critical of existing arrangements in these two areas, he has anticipated and received strong disagreement in some quarters.

The fourth chapter treats state regulation of insured plans, where four main divisions are considered to be of most importance: standard provisions of contracts, reserve requirements, investment regulation, and annual reports and examinations. After summarizing his principal considerations under each, Professor Patterson sees adequate safeguards as being already provided in those states having legislation in effect for all of these matters, and urges adoption of similar legislation by other states. As to the regulation of trustee plans, in Chapter V, the author recognizes the greater latitude allowed in the making of investments, and finds, in general, adequate supervisory controls within the jurisdictional scope of regulation. He stresses the absence of legal obligation on the employer (and the trustee) for the actuarial adequacy of contributions or the making of contributions for current or future funding.

After a chapter on various state disclosure laws of somewhat limited application, regulations of retirement systems as to actuarial adequacy, and the application of state "Blue-Sky Laws" to pension plans, there follows a chapter summarizing governmental regulations of pension plans in Canada, Denmark, France, Germany, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom. This chapter, lucid although tightly written, is an excellent summarization of and comparison between foreign and American regulation. Since this chapter also contains details on a wide diversity of national pension schemes, there is provided an unusually fine frame of reference from which to consider alternative approaches in finding answers to some of the provocative questions facing us in the American pension field.

The book closes with Professor Patterson's own conclusions as to the future of the governmental protection of private pension expectations. He lists first a summary of what he considers present "inadequacies," centering mainly on acquisition costs, standard provisions, disclosure laws, funding requirements, actuarial adequacy, and governmental powers. He then outlines what he terms "minimum" and "moderate" programs of legislation. Included in the latter are proposals to require a statement of the standard of adequacy, a minimum annual rate of funding, periodic governmental examination of all books and records of the employer and of the trustee of a negotiated fund and of the assets of a fund trustee or insurer, unless examined recently by an appropriate state or federal authority, and governmental approval of every pension plan as to required provisions of various types.

The book has been controversial, as expected. In fact, it includes a disclaimer in an appendix signed by three members of the seven-man task force assigned

to this area. Whether or not he agrees with the author's conclusions, however, every serious student of emerging American pension developments should read this well written summary of extensive and important research in a field undergoing dynamic changes.

ROBERT M. DUNCAN

"Our Developing Social Security System: The First Twenty-five Years,"
Industrial and Labor Relations Review, vol. 14, no. 1, October 1960.

The October 1960 issue of the *Industrial and Labor Relations Review* used the occasion of the twenty-fifth anniversary of the Social Security Act to present ten articles on social security in this country. It represents an effort on the part of that publication to satisfy "a long-felt desire to stimulate scholarly research and discussion in the relatively neglected field of social security." Apparently reference is made to neglect of social insurance research in our colleges and universities. Outside of academic circles there is a wealth of literature on social security. We can share the hope that the publication of this set of articles will help to stimulate meaningful research in the area desired.

The first article, by Professor Wilbur J. Cohen (now Assistant Secretary for Health, Education, and Welfare on Legislative Matters), is a tribute to his friend Professor Edwin E. Witte who had served in 1934 as executive director and "research synthesizer" for the President's Committee on Economic Security. In that position he exerted a powerful influence upon the form and contents of the Social Security Act of 1935. Professor Cohen's article reveals his admiration for his friend's personal qualities and for the significant contribution he made to the "labor and social legislation of the nation and to teaching these subjects to students he hoped would carry on the work he loved."

Three of the articles are largely factual accounts of the origin and development of three branches of social security: old-age, survivors and disability insurance; unemployment insurance; and public assistance. The first is by Alvin M. David, assistant director, Bureau of Old-Age and Survivors Insurance, Social Security Administration. In addition to well-presented factual information about OASDI there is a brief discussion of medical care for the aged, including both the federal-state grants-in-aid approach embodied in legislation in 1960, and the social insurance approach which would expand social security to include medical care insurance for the aged.

Unemployment insurance is described in the article by Associate Professor Harry Malisoff of the Department of Economics, Brooklyn College. Within the space available the presentation of the subject could not be other than general, since wide variations exist in the provisions of the state unemployment insurance laws. However, the author has handled the subject well. He calls for a reappraisal of the program in the light of emerging new conditions. He points out that by past models the labor force is strange. "It has become a complex of part-time as well as full-time workers, of dual job-holding, of irregular movements in and out of the labor force, of women who return to work when

the children have grown, of part-time students who earn qualifying wage credits, of the aged who are compulsorily retired while still ready to work. The map of today's labor market resembles that of American weather. At all times there are areas both of relative job surplus and scarcity, unevenly distributed around the land. Chronically depressed areas have been 'discovered,' and new types of unemployment match those of employment. Structural unemployment arising from declining industries has been growing in importance." Mr. Malisoff believes that the subject should become one of widespread intellectual inquiry and study. This he calls the true challenge of unemployment insurance.

Public assistance is described factually by Jules H. Berman, chief of the Division of Program Standards and Development, Bureau of Public Assistance, Social Security Administration. There is a section on the needs for improving public assistance in the future for the benefit of those not adequately provided for otherwise. The author believes that medical care is not adequately being handled under present laws. He also stresses the need for more persons who can do satisfactory social service work. Case loads are often too high for effective action in many states. An Advisory Council appointed in 1958 presented in 1960 its report on basic issues in public assistance. Among the recommendations were expansion of coverage, improvement in the level of assistance including medical care, and improvement in the quality of staff to meet the needs of recipients for social services.

Returning to the subject of income in old age, there is an article, "Social and Economic Implications of Private Pensions," by Robert Tilove, senior vice-president, Martin E. Segal and Company, Inc. It contains factual data about the development of private pensions in this country. He discusses the factors limiting their growth, and states that in 1960 they covered better than 40 percent of the wage and salary labor force outside of government and agriculture. He thinks that by 1970 the figure might range between 50 and 60 percent.

Mr. Tilove discusses the influence of vesting upon mobility. He concludes that at ages below 40 or 45 lack of vesting is not likely to play a major role in holding a man in his job, since there is still time for him to accrue a respectable pension in a new one. Even at the older ages the author believes that other considerations, family, home, community, and job seniority, are likely to be stronger restraining influences than are pension rights. This conclusion minimizes the influence of pension rights to a greater degree than do the conclusions of some other students of the subject. This reviewer believes that further research is required before firm conclusions can be reached.

The growth of pension reserve funds has been sensational. From \$2.4 billion in 1940 they had reached \$39.3 billion by the beginning of 1959. The estimate for 1965 is \$77 billion. In recent years there has been substantial investment in common stocks by pension funds (other than life insurance funds). On this account alarm has been sounded in some quarters that continuing acquisition of common stocks by pension trusts, or by the banks which manage their investment, might result in undesirable influence over corporate affairs. In 1951,

self-insured plans had 8 percent of their reserves in common stocks. By the beginning of 1960 this figure had risen to 30.5 percent. In 1959 these plans put 50 percent of their net receipts into common stocks.

Mr. Tilove, in another study,¹ went into this subject at length and reached the conclusion that the alarm is exaggerated. Without going into detail in this article he states the conclusion from his former study that by 1965 the common stock holdings of pension funds are not likely to be more than 4.5 to 6.0 percent of the total market. On the other hand, the aggregate holdings of *all* institutional investors, including mutual funds, banks and insurance companies, *will* represent a substantial percentage of stock ownership.

In discussing the investment of pension funds Mr. Tilove notes the development of variable annuities beginning in 1952 with the College Retirement Equities Fund affiliated with the Teachers Insurance and Annuity Association.

Coming to the relationship between private pensions and social security, Mr. Tilove believes that the growth of the former has not been discouraged. Above the federal plan is a wide area which private plans can and do occupy. In the case of life insurance, social security provides a floor of protection which aids materially in stimulating the creation of additional protection to provide more adequate income in old age. We may note in passing that of course there is a level of social security tax above which it could not go without discouraging the creation of additional protection through private channels.

Returning to the subject of unemployment compensation (insurance), there is an article on its financing by Richard A. Lester, professor in the Department of Economics and Sociology and faculty associate of the Industrial Relations Section, both at Princeton University. The reason for this article is the division of opinion among management, labor leaders, academic experts and government administrators as to the way unemployment insurance should be financed. The division of opinion is greater in this area than in other social insurance areas. This results from complexity of the system with its wide variations among the states and the varying impacts upon different types of employment.

Over the years unemployment insurance taxes have increased less, relatively, than have other taxes—for example, those supporting OASDI. In 1957 a survey by the Chamber of Commerce of the United States covering 1,020 firms with about 1.5 million employees showed that unemployment insurance taxes average 2.3 cents per payroll hour or 1.0 percent of payrolls. That compares with a total of 22.3 cents per hour for all types of employee insurance benefits and pensions. Thus, in the companies surveyed, unemployment insurance costs in 1957 were only about one-tenth of the total cost of employee benefits.

Mr. Lester discusses the incidence and price effects of the tax in various industries and the changes that have taken place in various states. As to the possibility of shifting the tax to the consumer, he comes to the conclusion that only about one-third of the tax is potentially shiftable. He discusses the cyclical

¹ *Pension Funds and Economic Freedom*, A Report to the Fund for the Republic, April 1959; see *TSA XI*, 1146.

aspects of the tax and the factors in cyclical fluctuations. Many feel that there is need for greater revenue to support the unemployment insurance program. However, there is wide difference of opinion as to whether the increase should be achieved by retaining the \$3,000 taxable wage base and increasing the rate of tax, or by retaining the rate and increasing the base. Mr. Lester reaches the conclusion that enlargement of the taxable wage base has significant advantages over any further spread in the scale of tax rates.

Edward D. Wickersham, chairman, Department of Management, University of Detroit, writes on "Controlling Unemployment at the Company Level." Despite some progress in this area the author concludes that the crucial questions about employment stabilization at the company level remain largely unanswered. He discusses such topics as the distribution of unemployment when it occurs in a company; the application of seniority; the compensation of the unemployed worker by means of supplemental unemployment benefits or severance pay; savings, investment and profit sharing plans; and use of other fringe benefits.

Discussing the unemployment problem in the 1960's, Mr. Wickersham points out that the increase in the number of workers will be 50 percent greater than in the 1950's. Most of the increase will be at ages under 25, the age group 25-44 will experience a relatively small increase, and more workers will be 45 and over than was the case in the 1950's. These changes, and the changes in the categories of employment, will present new problems in the area of stabilizing unemployment at the company level. The article as a whole devotes much more time to dealing with unemployment when it occurs than with practical ways by which an employer can prevent unemployment in the first place.

Elizabeth Wickenden, consultant on public social policy, National Social Welfare Assembly, presents an analysis of social security and its relation to voluntary social welfare. She describes first the various phases of our social security system and then the social welfare services provided by voluntary agencies. Voluntary welfare services have had an impact upon the developing patterns of social security. Similarly, social security has had an impact upon the voluntary services. As it has grown and extended its coverage it has relieved the voluntary agencies of much of their responsibilities. This has not been opposed by those agencies. The author states that "today it would be extremely difficult to find responsible voluntary welfare spokesmen opposing on principle expanding governmental responsibility."

Despite this trend, voluntary agencies continue to play a dynamic, expanding role in this country. It is estimated that voluntary welfare expenditures rose from \$247 million in 1930 to \$1,150 million in 1955. This is nearly a sixfold increase as contrasted with a fourfold increase in personal income during the same period.

The two concluding articles in the series are relatively short and more philosophical than the others. The first is entitled "The Role of Social Insurance in the United States" by J. Douglas Brown, dean of the faculty, Princeton University, and faculty associate of its Industrial Relations Section. From his

experience in the social security field few persons are better qualified than he to speak on this subject. In the opening sentence he says that the role of social insurance "has been and ever will be to sustain and enhance the dignity of every individual it encompasses."

The enactment of the Social Security Act in 1935 marked a significant turning point in American political philosophy. The concept of what Dr. Brown terms a "cooperative contract" between the individual and the state replaced that of an age-old paternalistic obligation. This contributed greatly to the dignity of the individual in meeting the hazards of the loss of income in old age. Along with the development of the cooperative contract concept in social insurance went the development of an analogous concept in industrial relations, the two reacting beneficially upon each other.

How far and into what areas the concept of cooperative contract between the individual and the state should be extended is a problem for the future. Dr. Brown believes that, in arriving at a solution, four other important concepts should be taken into account:

1. The need for preserving individual incentive.
2. The advantage of private corporate enterprise as opposed to public enterprise. Here the author indicates his belief that in the area of health costs under present conditions, the situation is reasonably well in hand through a combination of private and public action. This he thinks may obviate the need for social insurance of *general* coverage for many years to come.
3. The integrity of the family. The existence of old age security, for example, has permitted older people to continue their own way of life without becoming a burden on their children or being forced to live with them.
4. Social insurance should not be extended so far that it would impair the dignity and freedom of the individual.

Concluding the article, Dr. Brown expresses his conviction that social insurance is a strongly conservative force in a democracy. It enables the electorate to react to problems in a manner more influenced by reason than by emotions, since it reduces the powerful emotional forces of insecurity and dependency.

The final article, "Social Security at the Crossroads," is by Allen D. Marshall, vice president, General Dynamics Corporation, and former chairman of the Economic Security Committee, Chamber of Commerce of the United States. He shows the part business leaders had in the drafting of the original Social Security Act and in its subsequent development. Social security was the answer to the challenge produced by the change in society from a rural agricultural phase to an urban industrial phase. Its fundamental purpose is to provide a basic minimum level of security for individuals.

The author sets forth the following four general principles:

1. The program should be honestly presented and clearly understood.
2. The tax burden should be equitably distributed.
3. The protective floor should be high enough to prevent want but should

not require taxes so high as to reduce living standards or impair capacities or incentives to save.

4. Beneficiaries of the system should be able to use their social security payments as they desire.

As to being understood, Mr. Marshall points out that social security is not an insurance system, as is so universally believed. It is a welfare instrument. Public action involving compulsion is invoked to deal with a social problem. He might have quoted from recent court proceedings where the Secretary of Health, Education, and Welfare stated that no one has an enforceable contract right to benefits. It is not "insurance in the conventional sense," since Congress can alter the system at any time.

The benefits under the existing social security program are paid in cash and may be spent in any manner the recipients may choose. Mr. Marshall believes this principle should be preserved. If health insurance should be introduced into the program he fears that too much direction from government would hamper freedom of choice and lead to regimentation in the use of benefit payments. He points out the impressive growth of private health insurance and hopes that it will continue to develop so that the individual's freedom of choice may be preserved.

Mr. Marshall emphasizes the danger that through political pressures the social security system could get out of hand by attempting to provide all things to all people. By so doing it could become an instrument to destroy the incentives of the American system, and, I might add, become a threat to the freedom of the individual by making him so completely dependent upon the central government.

M. ALBERT LINTON

J. H. Richardson, *Economic and Financial Aspects of Social Security*, pp. 270, University of Toronto Press, Toronto, 1960.

This book fills a gap in the literature on social security. Its title may be misconstrued, for here is no exposition of economic or financial theories. It is a most readable, quotable and practical text by an outstanding authority and yet wit is not confused with wisdom. So much is written on the subject of social security to justify an opinion or bolster an attitude—in other words, for propaganda purposes—that one is surprised to meet a text which indicates an open mind on many of its major problems. In the Preface, the author states: "Discussion is vital at the present stage of the evolution of social security if the issues are to be clarified. . . ."

Professor Richardson's background is rather unique and this should give his views unusual importance. He is an economist and an authority on Industrial Relations who, for several years, was on the permanent diplomatic staff of the International Labour Office in Geneva; he has also had extensive professorial experience in England. He has been adviser on social security to various Central and South American governments. In recent years he has been visiting professor

at the universities of Columbia and Cornell and the University of California. Most recently he has been Cassidy Research Visiting Professor at the University of Toronto.

Although the subtitle of the book is *An International Survey*, the emphasis is mainly on the practice and developments of social security in Canada, Great Britain and the United States and less so in Australia and New Zealand. Professor Richardson has had first hand knowledge of industrial conditions and the development of the social security systems in all these countries. To illustrate his points, references are made and figures given relating to other countries also.

The importance of the book to executives in business and industry and to actuaries and others interested in recent developments in social security is that it concentrates on countries where the political and social backgrounds and standards of living are comparable. There is little interest to such in a tabular summary with equal weight given to, say, the United States and Uruguay or to Chile, China and Canada.

The title indicates that economic and financial aspects of social security are dealt with, but they are treated as but two phases of the whole subject. The chapter on "Health," dealing with health insurance, medical care and the medical professional problem, is longer than that on "Some Economic Considerations," where the influence of social security measures on the economic stability of a country is stressed. The author points out that this was a factor that made the depression of the 1930's less severe in Great Britain than in the United States or Canada. Professor Richardson states, "There is no evidence that any country has been hampered in its international trade by the costs of social security at current standards. . . . A large part of social security expenditure, probably as much as 70 or 80 percent pays for itself. . . ." This last statement is a most important one, but no justification or source of reference is given.

There is a chapter on "Proportion of Social Security Payments to National Income," but the longest chapter is entitled "Age and Retirement" and should be of interest to all those concerned with pension and retirement problems. Another chapter of particular interest to actuaries is on "Accumulation of Funds *versus* 'Pay-as-you-go' Financing." Another chapter deals with "Other Contingencies," that is, unemployment insurance, workmen's compensation, long-term disability and widows' and orphans' benefits as phases of social security.

The author's philosophy may be expressed in the following quotation, with which most actuaries would agree:

Only by compulsory contributory insurance can people be protected against their failure voluntarily to cover the risks they run whether their failure is due to carelessness, ignorance or even deliberate choice. It would seem that the state should make basic provision and that private schemes should provide supplementary benefits including benefits at higher standards than those which the state should provide.

Another important statement of interest to actuaries is that in wealthier countries and those with higher standards of living the proportion of national

income spent on social security may be less than in others because voluntary measures are highly developed. The author disagrees that in wealthier countries benefits should be greater and normal retirement should be earlier. He agrees that minimums may need to be raised, but this is still consistent with the proportion of national income spent being less.

The place of public assistance in social security plans is repeatedly referred to. Professor Richardson states that many experts in North America now prefer public assistance to the automatic payment of cash benefits—it ensures contact between social workers and beneficiaries. “If social security should have the merit of certainty, public assistance should have the merit of flexibility.”

Family allowances. The author is critical of the Canadian system which grants cash allowances for each child and without a means test. Where standards of living are high, as in Canada, “better results may be obtained by increasing the facilities for medical care where they are inadequate than by paying substantial sums as allowances for the first child in each family.”

How much can countries afford to spend on social security? According to Professor Richardson there is no accepted formula, but the proportion of the national income to be spent should be considered “in relation to the many other claims on their resources including capital for investment to increase productivity and raise standards of living.” The emphasis on productivity is most welcome—on increasing the size of the cake rather than giving all attention to how it should be divided. “Like all other claimants to limited natural resources social security must take its place in the queue.”

Canadian and United States health standards. The reviewer would take issue with the author when he makes the following statement: “. . . in Canada where health standards are among the highest in the world. . . .” If by this is meant personal expenditures on health requirements, the elaborate buildings of hospitals and expensive equipment therein, the author is undoubtedly correct. However, if he means that the organization of medical facilities, their efficiency and availability merit praise, the reviewer would disagree. The same statement and the same reservation can be made regarding the United States. A high standard of living does not necessarily accomplish this automatically.

Percentage distribution of income maintenance payments. Among the tables given in the book is one indicating the percentage distribution of income maintenance payments in the social security systems of various countries. The year taken is 1949–50 and the figures given explain much.

Country	Old Age	Family Allowances	Disability	Veterans	Mothers, Widows and Survivors	Un-employed	Other
United States.....	27.5%	.0%	6.6%	26.5%	9.3%	26.1%	3.9%
Canada.....	17.2	41.0	5.7	16.1	2.2	12.4	5.4
Great Britain.....	50.1	10.3	15.1	13.2	3.7	4.0	3.6
Australia.....	31.5	26.2	12.3	19.3	3.8	2.2	4.7
New Zealand.....	39.5	33.9	8.9	12.2	4.8	0.0	0.6

In view of what was said about Family Allowances, note the abnormal proportion of Canada's payments that these represent. Professor Richardson considers that Great Britain spends too much on old age payments and quotes Lord Beveridge: "It is dangerous to be in any way lavish to old age until adequate provision has been assured for all other vital needs, such as the prevention of disease and the adequate nutrition of the young." The author's suggestion is that the proportion spent on old age could be reduced by raising the age at which National Insurance pensions become payable in Great Britain from age 65 to 68 for men and from 60 to 63 for women. He also comments that the proportion spent on "unemployed" in the United States is "very high for a period in which business was booming." In Canada steps have been taken to tighten the supervision of claims for unemployment benefits because of the impression of widespread malpractices.

There is a good discussion of the difficult problem of the effect and incidence of social security taxes on various groups in the economy and the author emphasizes the necessity for the coordination of all programs.

The book deserves the attention of all members of the Society and even to the specialist there is much in a readily quotable form to merit a place on the bookshelf. It should serve as an excellent introduction for our students, supplemented by a brief note giving the U.S. figures for pages 91 to 93, where those relating to Canada and Great Britain only are given, and also bringing the references to the OASDI system up-to-date.

ARTHUR PEDOE

*Great Britain, Government Actuary's Department, *National Insurance Acts, 1946-1959—Report by the Government Actuary on the Second Quinquennial Review*, pp. 55, H.M. Stationery Office, London, June 1960.

This basic report, prepared in accordance with the provisions of the National Insurance Act to summarize and analyze the latest quinquennial period, contains a wealth of material on the constantly developing British program of National Insurance. The report covers all the various social benefit programs except the National Health Service, the Family Allowance Scheme, and the Industrial Injuries Scheme or, in other words, it includes unemployment, sickness income, maternity, widow, retirement, and death benefits. As a background for the actuarial analysis, a summary is presented of the existing scheme, including the graduated pensions that go into force in April 1961, and of the eight important amendments that have been made in the past six years.

The experience in the 5-year period, April 1954 to March 1959, is analyzed. In the aggregate, income exceeded outgo by 3%. Comparison of the actual experience with the estimates made at the beginning of the period (after adjustment for the effects of the various amendments) shows that actual income was 3% higher (because of a higher level of employment than assumed), while benefit outgo was 3% lower (because less unemployment benefits were paid than estimated, since the actual rate of unemployment was about 1½%, as against an average rate of 2½% in the estimates).

The report also presents future estimates for the present scheme, including the graduated pensions. The cost estimates were made in accordance with three instructions from the Government—namely, that the long-term unemployment rate would be 3% (as against the previous 4% assumption), that earnings would increase at an annual rate of 2% (but with no change in the graduated pension scheme—not even in the lower and upper limits subject to contribution), and that 2½ million persons would be contracted-out of the graduated scheme. The cost estimates are presented by the projection method, giving figures for illustrative years up to the end of this century. On the whole, the cost estimates are about the same as those in the actuarial report on the amendments that resulted in the graduated pension scheme¹ and the same general comments and criticisms continue to apply.

The future cost estimates present detailed data on number of contributors, number of beneficiaries, income and outgo, but do not do so in regard to the progress of the fund, which, of course, could readily be worked out from the foregoing data. This was not done because: “As the scheme is in future to be financed on a ‘pay-as-you-go’ basis it would be inappropriate to assume any substantial future change in the size of the Funds or in the interest yield.” The size of the fund in 1959 was £1.5 billion. It is of some interest to translate this into U.S. terms, considering not only the rate of exchange but also the population ratio between the two countries (the U.S. being about 3½ times as large) and the wage ratio (U.S. full-time male workers have a wage about 2½ times as high, under the exchange rate of \$2.80 equal to £1). On this basis, the £1.5 billion fund is equivalent to about \$38 billion, or almost twice as large as the present size of the OASDI Trust Funds.

The cost estimates show that, for the entire British scheme, in the next four decades annual income will increase by 65% and annual outgo by about 60% (mostly because of the growth of retirement pensions which represent over 75% of the total outgo at the end of the century). The outgo levels off in the years following 1990, apparently the result of the fact that the increase in the outgo for the graduated pensions is counterbalanced by the decrease—both absolutely and, even more so, relatively—in the aged population. This latter trend, which is paralleled by a similar one in the U.S., results from a smaller number of annual births in the late 1920's and 1930's as compared with earlier periods. This then raises the question about the inevitable cost effects and results after the year 2010 or 2015, when the aged population will show a very significant increase.

Further analyzing the future cost estimates, it is interesting to note that in regard to retirement pensions, the outgo for graduated pensions represents only 6% of the outgo for the flat-rate pensions in 1981, but this proportion rises to 13% in 1991, and to 21% in 2001. One is led to wonder what the ultimate ratio will be—particularly under the assumption of a rising wage level under which all workers not contracted-out would eventually be at the maximum limit.

¹ Reviewed in *TSA* XI, 297.

There is, as planned for, a quite close balance between income and outgo over the next four decades. In the first two decades, there is virtually an exact balance, but in the second two decades, income is about £1.4 billion more than outgo, so that income exceeds outgo by about 5%. The foregoing situation, however, is based on the assumption that the scheduled contribution increases in 1965, 1970, 1975, and 1980 will be made, although these are not mandatory but rather are at the option of the Ministry of Pensions and National Insurance, with the consent of the Treasury. In actuality, it would appear that according to the cost estimates, income and outgo for the 20 years following 1980 would be very closely in balance if the 1980 increase in the contribution rate is not made.

The final section of the report discusses the adequacy of the contributions. The conclusion is reached that "over a long period the contributions, with the proposed quinquennial increases, should prove adequate to support the benefits of the scheme." The difficulty of making the estimates is emphasized because of such uncertain factors as the trend of earnings and the effect of contracting-out. Since the scheme is in such close balance, it is pointed out that any increase in benefits must be accompanied by an increase in contributions. (In November 1960, the Government announced an increase of about 15% in all types of flat-rate benefits, effective in April 1961—bringing the weekly retirement pension for a single person to 57½s. and that for a married couple to 92½s.—along with a corresponding increase in the flat-rate contributions.) The cost estimates for the bill (as set forth in *National Insurance Bill, 1960, Report by the Government Actuary on the Financial Provisions of the Bill*, Cmnd. 1197, November 1960) indicate that the proposed contribution increases practically balance the increased benefit outgo. In the revised estimates for the entire system, which show relatively the same comparisons as discussed previously, there is one major change in the assumptions made by Government instruction; the number estimated to be contracted out of the graduated pension scheme is increased from 2½ million to 3 million.

The report contains a number of appendixes, which include a detailed description of the basis of the cost estimates, tables of demographic and other factors, and an analysis of the sickness experience and the permanent and total disability experience.

ROBERT J. MYERS

*Great Britain, Government Actuary's Department, *National Insurance (Industrial Injuries) Acts, 1946-1959—Report by the Government Actuary on the Second Quinquennial Review*, pp. 22, H.M. Stationery Office, July 1960.

This quinquennial actuarial report relates only to the industrial injuries (workmen's compensation) benefits under the British social insurance program. This system provides, in most instances, flat benefits that are at a higher level (about 70%) than under the general sickness and disability benefits scheme. These benefits are financed by joint contributions from the employer, the em-

ployee, and the Government. The employer contributes slightly more than the employee, while the Government contribution is 20% of the combined employer-employee contribution. Unlike the other benefits of the National Insurance scheme, those of this program are financed on a fully-funded basis.

The report first gives a brief description of the benefits and contributions provided. Then follows an analysis of the experience in the period April 1954 to March 1959, during which outgo was only about two-thirds of income. The fund at the end of the period was £205 million. When translated into U.S. terms (including adjustments for differences in population size and earnings levels), this is about \$5 billion.

Future estimates of the scheme are made through year 2001. The contribution income is shown to be in excess of the outgo in all years, generally by a margin of 15% to 20%. A balance sheet is presented for all future operations of the system, taking into account both present members and future entrants. An ultimate interest rate of $3\frac{1}{2}\%$ is used, but allowance is made for the higher earnings rate on present investments. This balance sheet indicates a surplus of £617 million, or 3 times as large as the fund on hand and almost one-third as large as the present value of all future contributions.

This latter relationship indicates that the fund is quite solvent and that the contributions are "somewhat in excess of those necessary to provide the benefits at the rates then in force." In November 1960, the Government announced a benefit increase of about 15%, effective in April 1961, to apply to all flat-rate benefits, including those for industrial injuries; because of the favorable position of the Industrial Injuries Fund, as indicated by the foregoing valuation, the flat-rate contributions for this branch were not increased—as they were for all other benefits—but rather the total contribution rate was reduced by about 12% for men and 18% for women, representing an over-all decrease of about 13%, so that the system would have a small actuarial surplus of about £70 million (*National Insurance Bill, 1960, Report by the Government Actuary on the Financial Provisions of the Bill*, Cmnd. 1197, November 1960).

ROBERT J. MYERS

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.

References to allied subjects will be found in the following publications: *Mathematical Reviews*, published by the American Mathematical Society—Subjects: Probability, statistics, econometrics, various other mathematical topics; *Monthly Labor Review*, published by the Bureau of Labor Statistics—Subjects: Cost and standards of living, employment and employment services, fringe benefits, handicapped, industrial hygiene, industrial relations, labor organization and activities, manpower, older workers

and the aged, personnel management, social security (general); *Population Index*, published by Office of Population Research, Princeton University, and Population Association of America—Subjects: Mortality, fertility, marriage, divorce, the family, various other demographic topics; *Social Security Bulletin*, published by Social Security Administration—Subjects: Retirement and old age, employment, maternal and child welfare, health and medical care, various other topics in social security; *Journal of the Institute of Actuaries*—The review section contains digests in English of articles appearing in foreign actuarial journals.

ACTUARIAL AND OTHER MATHEMATICS, STATISTICS, GRADUATION

*H. D. Brunk, *An Introduction to Mathematical Statistics*, pp. xi, 403, Ginn and Company, Boston, 1960.

This book is intended for use in either a one semester or two semester introductory course in mathematical statistics for students who have had a year of calculus. Unstarred chapters and sections form the material from which a one semester course may be assembled. Starred chapters and sections are suggested for a two semester course. The topics are considered from a modern point of view and include discussions of statistical decision theory and experimental design and analysis of variance as well as the customary material on probability, random sampling, estimation of parameters, confidence intervals, regression, testing of hypotheses, etc. Examples and problems are drawn from a wide area of applications. There are tables of the Binomial, Poisson, Normal, Chi-Square, t , and F distributions, as well as natural and common logarithms, a table of random numbers, and a table of points for Kolmogorov's statistic.

C. L. Chiang, "A Stochastic Study of the Life Table and Its Applications: I. Probability Distribution of the Biometric Functions," *Biometrics*, vol. 16, p. 618, December 1960; II. "Sample Variance of the Observed Expectation of Life and Other Biometric Functions," *Human Biology*, vol. 32, p. 221, September 1960.

In the first paper, "probability distributions of the main biometric functions are presented and formulas are derived for the corresponding mathematical expectations, variances, and covariances." The second paper emphasizes the sample variance of the observed expectation of life.

LIFE INSURANCE AND ANNUITIES

R. D. Clarke, "An Investigation into the Mortality of Impaired Lives," *Journal of the Institute of Actuaries*, vol. 87, part 2, September 1961.

This inquiry into the experience of impaired lives insured by the Prudential Assurance Company was undertaken as a pilot study preliminary to a combined study of the life offices operating in Great Britain. The investigation relates to 29 impairment classifications found among persons insured during the period July 1947 through December 1958. While the maximum exposure was $11\frac{1}{2}$ years, the average duration was relatively short, and the author considered the aggregate "normal" mortality at durations 0 to 4 during the years 1954-1956 to be an appropriate standard of comparison in computing expected deaths. The study was confined to lives with a single impairment, although both standard and substandard policies were included. Nevertheless, overweights with hypertension and underweights with tuberculosis were studied separately. In general, the volume of data did not justify detailed analysis and the results were therefore presented in broad groupings. According to the author,

"The main outcome of the results of this pilot investigation would appear to be that the mortality experience at early durations of substandard lives included in the investigation under review has not revealed any heavy adverse experience."

Survival Experience of Patients with Malignant Neoplasms, A Report Prepared by the End-Results Group for the Fourth National Cancer Conference, Minneapolis, September 13-15, 1960, pp. 119, Public Health Service, Washington, 1960.

The Introduction states: "This is a preliminary statistical report on the survival experience of 212,638 cancer patients in the United States." For specific diagnostic entities: "The data are subdivided by sex, race, period of diagnosis (before 1950, and 1950 and after), stage of disease, and treatment." An annual report scheduled for publication in 1961 will present a more detailed statistical analysis.

J. W. McConnell, C. A. Pearce, J. M. McNulty, and R. L. Aronson, *Vesting and Transferability of Pension Rights*, pp. viii, 35, Department of Labor, State of New York, April 1960.

This is a report of a special study conducted at the request of Governor Rockefeller in line with his intention, announced in his January 1959 message to the New York Legislature, to "create a representative committee to study the complexities and costs involved in early vesting of pension rights and the possible transferability of such rights for workers who change jobs." Transferability of pension rights, as used in the report, is a broad term covering (a) vesting, which gives a separated employee a partial benefit when he later reaches retirement age, (b) movement from one employer to another within a multi-employer plan without loss of pension rights, and (c) provisions for early retirement.

Some highlights of the report were abstracted by Industrial Commissioner Catherwood, Department of Labor, in his covering letter to the Governor. In brief, nearly three-fourths of the private plans in the State have either vesting or multi-employer transferability. However, as a result of severe limits of age and years of service, vesting probably benefits relatively few workers who change jobs. Notwithstanding, it is on the increase in private, especially noncontributory, pension plans. The importance of transferability in promoting mobility, relative to deterrent factors, such as seniority rights and age, is not clear. The report nevertheless concludes that, on balance, liberalization and wider adoption of vesting in private pension plans would result in a higher proportion qualifying for benefits, in higher benefits collected, and in one less barrier to the changing of jobs. Also the potential value of multi-employer pooled plans would be increased by their establishment on an area rather than an industry basis, thus permitting workers freely to change industries as well as employers and occupations.

The main obstacle to an increase in transferability is the complex and largely unexplored cost relationships, which depend in any given case on the situation and the degree of change involved. The introduction or improvement of transferability (1) tends to be favored by large employers, in spite of discouragement from agencies assisting them; (2) encounters reluctance on the part of employers in union-negotiated single employer plans, since unions tend, when more money is available, to prefer benefit increases; (3) might, in smaller firms, be encouraged by a central registry, making it easier for a retiring worker to ascertain on what pension plans he has a claim.

Subjects in this area requiring further investigation include: labor turnover by age, service, sex, size of firm, by industry and within industries; costs of vesting by

age, service, type of work force; extent of funding in plans in which assets are not allocated in advance to individual beneficiary accounts (distinguishing past and future service liability); increase in funding required where vesting has been added to a plan; history and prospects of multi-employer funds, evaluating prospects for growth of (a) reciprocity arrangements, (b) outright merger of smaller funds; minimum age and service requirements for a desirable level of pension security; vesting requirements abroad; alternative methods of dividing assets before a plan is fully funded (to deal equitably with interests of continuing employees and former employees with vesting rights). Meanwhile the State government might consider (1) how to increase public understanding of the relationship of transferability to the effectiveness of private pensions; (2) requiring the employer (or union) to inform each employee annually of his pension rights and benefit amount, and (3) how to assist private plans, through loans or reinsurance, to make the transition from nonvested status to a condition of vesting or transfer of pension rights.

*J. M. Kesslinger, *Guardian of a Century, 1860-1960*, pp. iv, 131, The Guardian Life Insurance Company of America, New York, 1960.

This volume traces the history of The Guardian Life Insurance Company of America by describing the careers of the men who founded it and their successors. The main stream of the story is contained in chapters on the experiment with tontine policies, the introduction of industrial insurance, the Armstrong investigation, and the great depression that followed 1929. Other chapters detail the formation of the Company's agency department, the development of various product lines, and investment operations.

HEALTH INSURANCE

O. W. Anderson, P. Collette, and J. J. Feldman, *Family Expenditure Patterns for Personal Health Services, 1953 and 1958: Nationwide Surveys*, pp. 68, Health Information Foundation, Research Series 14, New York, 1960.

———, *Health Insurance Benefits for Personal Health Services, 1953 and 1958: Nationwide Surveys*, pp. 23, Health Information Foundation, Research Series 15, New York, 1960.

These companion reports present the results of surveys conducted by sampling among the civilian population in the United States, in the summers of 1953 and 1958, by the Health Information Foundation and the National Opinion Research Center of the University of Chicago. The two surveys were designed to be comparable to permit comparisons of the changes in the various items investigated over the five-year period.

Report No. 14 deals with family expenditures for various types of health services; these are shown in total and separately for different types of service. The information is analyzed according to income class, class of residence area, insured or uninsured status, age and sex. Expenditures for some types of service are analyzed further; for example, physicians' services are shown for home, office and hospital calls and surgery according to age class. Several other tables and charges are given, covering relationship of expenditures to family incomes, average expenditure per family, increases in prices and usage of different types of service, and expenses for prescribed and non-prescribed medicines.

In Report No. 15 the relationship between gross expenditures and those covered by insurance benefits is analyzed in detail. The change in the average amount of ex-

penses per family and in the extent of reimbursement by insurance is shown for different types of services. According to these data, over the five-year period, the reimbursement has increased for the higher levels of expenditure but has decreased for the small expenditures. A comparison is made of the level of reimbursement for hospital and surgical expenses between Blue Cross and Blue Shield on the one hand and private insurance companies on the other.

E. Shanas, *Medical Care Among Those Aged 65 and Over—Reported Illness and Utilization of Health Services by the "Sick" and the "Well,"* pp. 35, Health Information Foundation, Research Series 16, New York, 1960.

———, *Meeting Medical Care Costs Among the Aging,* pp. 52, Health Information Foundation, Research Series 17, New York, 1960.

The data reported were derived from a small random sample of noninstitutionalized persons in the United States aged 65 and over. The survey was conducted in the spring of 1957 by the National Opinion Research Center at the University of Chicago under a grant from the Health Information Foundation. In Research Series 16, data are presented for selected demographic and social characteristics of the aged, including living arrangements, according to degree of illness. For this, an index of illness was derived by assigning numerical scores based on answers to questions on illness, health problems and time spent in bed. On the basis of a classification by degree of illness, data are shown regarding utilization of physicians' services, hospitalization, home nursing care, use of special appliances, costs of medical care, and attitudes toward health and medical care. The medical care costs refer only to out-of-pocket expenditures. Since a high proportion of the very sick reported public assistance as their main source of income, the average out-of-pocket costs underreports the total costs of medical care for the aged as a whole.

In Research Series 17, data are presented regarding employment, retirement, income, and resources used to pay for health services among those aged 65 and over. "The data . . . suggest that poor health is more likely to be a causative factor in retirement than a result of retirement. The majority of older people give up working because their health is poor, or their 'health and age' in combination make it impossible for them to continue in paid employment."

The report also states: "Income data for the aged are most meaningful, however, when these data can be related to living arrangements." The concluding paragraphs point out: "The data secured in this survey indicate that most older people do not feel they are being deprived of needed medical care because of lack of money. . . . The 5 percent of the aged who said that they could not afford medical care must be considered as a group of medically indigent who exist in addition to the roughly 20 percent of the noninstitutionalized aged whose medical costs were already being met by welfare agencies, children and relatives, and various other forms of free care." Finally: "The attitudes of the aged toward government health insurance demonstrate once again that the opinions and attitudes of the older population vary as much as do the opinions and attitudes of the population in general."

U.S. National Health Survey, *Acute Conditions, Seasonal Variations, United States, July 1957–June 1960,* pp. 47, Public Health Service, Washington, November 1960.

During the survey period, the incidence of acute respiratory disease was at a peak in October–December 1957 as a result of the outbreak of the Asian influenza epidemic. In nonepidemic years, the incidence of the respiratory diseases is usually highest in

January–March and lowest in July–September. The infectious and parasitic diseases apparently have their peak in late winter and spring. No seasonal pattern is discernible for diseases of the digestive system. Injuries are most frequent during the summer months.

U.S. National Health Survey, *Hernias Reported in Interviews, United States, July 1957–June 1959*, pp. 22, Public Health Service, Washington, December 1960.

In this report, hernias include conditions reported to the survey interviewer by the individual affected or by a member of his family which are codable to numbers 560 and 561 of the *International Classification of Diseases, 1955 Revision*. Since the survey inquired into conditions present during the 12-month period prior to interview and hernias may be corrected by surgery or other treatment, the actual average prevalence of the condition may be overstated to some extent. For males of all ages, the prevalence rate was 23.2 per 1,000; the female rate was 7.1 per 1,000. The rates for males rose consistently with advance in age, from 6.4 per 1,000 at ages 15–24 years to 122.9 at ages 75 and over. Only 21.6 percent of the cases with hernias (both sexes combined) reported one or more days of bed-disability during the year. No limitation of activity was reported by 78.9 percent of the cases.

U.S. National Health Survey, *Interim Report on Health Insurance, United States, July–December 1959*, pp. 67, Public Health Service, Washington, December 1960.

The report states: "In July 1959 the U.S. National Health Survey began experimentally to collect data on health insurance. . . . At the end of 1959 the experimental phase of collecting information was ended to allow time for evaluation of the data before the questions appeared on the questionnaire in a revised form." With regard to the findings presented in the report: "Because of certain limitations which are set forth in the sections which follow, some of these estimates—especially those on coverage for doctor visits—should be used with caution."

U.S. National Health Survey, *Hospital Utilization in the Last Year of Life*, pp. 30, Public Health Service, Washington, January 1961.

Since the U.S. National Health Survey covers only the experience of persons living at the time that household interviews are conducted, to obtain estimates of total hospital utilization by the population it is necessary to supplement the hospital data collected with similar data for decedents. "This report presents the results of a research project undertaken for the purpose of developing and testing a procedure for obtaining estimates of hospital utilization by decedents." The survey for this purpose was conducted in the Middle Atlantic States. When the National Health Survey interview estimates of utilization of general hospitals in the Middle Atlantic States during 1957 are adjusted to include the experience of decedents, the annual rate of discharges per 1,000 persons is increased from 90 to 98, and the annual rate of nights of care per 1,000 persons is increased from 895 to 1,116. These increases are by 9 percent and by 14 percent respectively. For persons at ages 65 and over, the adjustment raises both rates by 42 percent. The percent increases, as a result of the adjustments, were greater for males than for females.

U.S. National Health Survey, *Selected Health Characteristics by Area: Geographic Regions and Urban-Rural Residence, United States, July 1957–June 1959*, pp. 40, and *Geographic Divisions and Large Metropolitan Areas, United States, July 1957–June 1959*, pp. 44, Public Health Service, Washington, March 1961.

In both reports, data are presented for the following selected chronic conditions: heart, high blood pressure, diabetes, peptic ulcer, arthritis and rheumatism, hernia, asthma-hay fever, bronchitis, sinusitis, visual impairments, hearing impairments, and paralysis of major extremities and/or trunk. For each of these, numbers and rates are shown by sex, but without regard to age. Age data are shown for the number of persons with one or more chronic conditions, average annual rate of persons injured, physician visits per person per year, and dental visits per person per year. In the first report, some of these data are shown separately for urban, rural nonfarm, and rural farm areas in each of four regions—northeast, north central, south, and west. The second report follows the pattern of the first, with corresponding data for each of the nine geographic divisions and for the following selected Standard Metropolitan Statistical Areas: Boston, New York-Northeastern New Jersey, Philadelphia, Pittsburgh, Detroit, Chicago, Los Angeles, and San Francisco.

California's Older People: Their Health Problems, pp. 50, State of California, Department of Public Health, Berkeley, 1959.

Tables detailed with regard to age and sex show mortality rates, morbidity rates, and medical care data.¹

The Health of California Workers, pp. 72, State of California, Department of Public Health, Berkeley, 1960.

The data in this report are based upon a statewide survey between May 1954 and May 1955.² The health measures used are incidence of illness and prevalence of chronic conditions according to specific condition groups, days lost from work, and hospital admissions and days of stay. The variables considered are age and sex, occupation, health insurance coverage, sick leave coverage, marital status, family income, race, and geographic area.

Illness and Health Care in Canada: Canadian Sickness Survey, 1950-51, prepared jointly by The Department of National Health and Welfare and The Dominion Bureau of Statistics, Ottawa, 1960.

This volume contains data reassembled from previous preliminary reports, with revision of some of the earlier estimates.³ The present report comments: "It is felt that even today most of the results of the survey are still timely and valid . . . it is probably safe to assume that the patterns as expressed in averages, rates and percentage distributions will not have changed to an extent which would invalidate the findings. Regarding expenditure on health services, devaluation of the currency will mean that both incomes and expenditure are higher today than they were at the time of the survey, thus inflating dollar amounts but probably not affecting very greatly proportional relationships. The growth of prepayment and insurance plans, however, will have to be taken into account in interpreting today's situation in the light of survey figures."

SOCIAL SECURITY

*W. Haber and W. J. Cohen, *Social Security: Programs, Problems, and Policies—Selected Readings*, pp. xv, 606, Richard E. Irwin, Inc., Homewood, Ill., September 1960.

This volume of readings contains 64 articles with various authors on all aspects of social security. Some of the papers are quite significant although little known or not

¹ See TSA X, 800.

² See TSA X, 800.

³ See TSA VIII, 139.

readily available. The book has nine subdivisions: continuing issues, historical developments, OASDI, unemployment insurance, health insurance, other programs, economic and social implications, appraisal and criticism, and 1960 legislation.

At the beginning of each subdivision, Haber and Cohen have several pages of text summarizing the general aspects of the subject to be considered by the papers following. Many of the articles are solely of a factual nature; a considerable number are by authors who urge expansion of social security programs, but only a few are on the negative side of this question.

The views of Haber and Cohen are indicated by the last three sentences of the book that discuss the disability benefits under the OASDI system in particular but expansion of social security in general, as follows: "Its extension in 1960 is ample testimony to the fact that each step in the evolution of social legislation is won the hard way, over tremendous opposition and criticism. Then, when enacted, it eventually becomes the accepted way of dealing with the problem and soon gets to be supported by most of those who originally opposed it. The 1960 legislation is thus another step in the process of social legislation which will continue."

M. C. Hart, "Old-Age, Survivors, and Disability Insurance Program: History of the Benefit Formula," *Social Security Bulletin*, September 1960.

This article presents the history of one phase of the program, the benefit formula, from its inception to the present time. The analysis shows the effect of changes in the benefit formula upon the monthly amount of old-age benefits, based both on level wages and on the median of creditable earnings during the 25 years of operation of the program. The effect of each formula is projected to 1980 to demonstrate its operation in the case of "career-coverage," where coverage has been continuous during the working life of the beneficiary.

The comparison of the several formulas has been extended to family benefits payable to an old-age beneficiary and his wife. Also included is the history of minimum and maximum benefit provisions and the relationship between average monthly wage, primary insurance amount, and maximum family benefit.

The analysis portrays the changes in basic philosophy underlying the program, as expressed in the changes in the formula which determines the amounts of benefits.

J. P. Jones and M. C. Hart, *Analysis of Benefits, OASDI Program, 1960 Amendments*, Actuarial Study No. 50, pp. 56, Division of the Actuary, Social Security Administration, Washington, December 1960.

This is the sixth in a series of studies analyzing the provisions of the law as to benefit computation and the actuarial benefit costs for individuals under the Old-Age, Survivors, and Disability Insurance system. It first presents a detailed discussion of the system as it exists following the 1960 Amendments, and then explains the changes made by both the 1958 and 1960 Amendments.

Many illustrative examples and several charts and tables are given which show the method of determining insured status, types of insured status needed for eligibility for benefits, the method of computing average monthly wage, and total benefits for family groups according to average monthly wage.

Sections of the study are devoted to simultaneous and dual entitlement provisions, the retirement test, and actuarially reduced benefit provisions for women.

A final chapter contains tables of "individual equity" level-premium costs (as percentages of payroll, which may be compared with actual tax rates) of OASI benefits

for the male worker, his wife, and one, two, or three children, based on several ages at entry and retirement, and at several earnings levels. Actuarial assumptions include mortality according to U.S. Life Tables for 1949-51, 3% interest, and remarriage according to OASI 1956 experience under the mother's benefit provisions. The higher relative costs for the lower paid worker, for the larger family, and for late entry are illustrated by these tables.

A. M. Niessen, *Present Value of Benefits Payable Under the Railroad Retirement Act, 1938-59*, RRB Actuarial Study No. 3, pp. iii, 23, Railroad Retirement Board, August 1960.

The study brings out the progress of the liabilities for beneficiaries on the rolls under the railroad retirement plan for the valuation years 1938-59 by type of benefit. The estimated liabilities as of the end of 1938 (\$0.8 billion) increased slowly to \$1.0 billion in 1944, after which they increased rapidly to \$6.5 billion as of the end of 1959. A table and chart show the progress from one valuation year to another by type of benefit. A comparison of the liabilities and the funds on hand as of each valuation date is made. However, it is pointed out that the relationship shown cannot be taken as an indication of the over-all actuarial condition of the railroad retirement system.

The causes of this great increase include the rapid growth in the number of beneficiaries and the increases in benefit amounts, resulting largely from the increases in benefit levels and the introduction of new types of benefits through legislative amendments. Other contributing factors to this increase discussed are introduction of more conservative valuation standards from one valuation to the next and changes in age composition due to amendments that lowered age requirements. The effect of these causes and factors is brought out by means of tables and charts.

Of special value as a handy reference to the legislative developments of the program is the outline on the provisions of the Railroad Retirement Acts, 1935-59, which summarizes the major changes made. Provisions regarding taxation and coordination with social security are given in addition to the provisions on each type of benefit.

International Labour Office, "Old-Age Protection under Social Security Schemes: A Statistical Study of Selected Countries," *International Labour Review*, December 1960.

An analysis is presented of the degree of old-age benefit protection provided under social security systems in 10 selected countries for which reasonably reliable data are available. The study considers the proportion of the aged population actually receiving benefits in a recent year, with subdivision by age and sex where data are available. The study recognizes the numerous limitations involved, such as the overlapping when several programs are in operation, and the effect of differing retirement tests. Attempt is made to explain differences between the various countries. The proportion of the population aged 65 and over actually receiving pensions of some type or other (in some instances, only small amounts, namely the portion of the pension not requiring a means test) amounts to close to 100% in the Netherlands, Sweden and Switzerland and to about 9% in France and New Zealand. For Denmark and the United Kingdom, the corresponding figure is about 75%, while for Belgium, West Germany and the United States, it is about 65% (close to 75% as of 1961).

D. S. Gerig, "Automatic Cost-of-Living Adjustments of Pensions in Foreign Countries," *Social Security Bulletin*, March 1960.

There is a growing trend in social insurance systems, and also in private pension plans, for benefits to be automatically adjusted in accordance with changes in the cost

of living. This article describes in detail such provisions in the social security systems of nine countries that currently contain automatic adjustment of existing old-age pensions to take into account specified economic changes. Only one law was enacted before World War II, namely, Denmark in 1922. The other eight countries are Belgium, Finland, France, Iceland, Israel, Luxemburg, Netherlands, and Sweden. Chile also has such a provision but has suspended it because of extreme inflation. Also described are the semi-automatic provisions of the West German system, which further contains "dynamic" provisions for the initial calculation of the pension so that the past wages of the beneficiary are related to the average earnings of all persons, rather than being considered in the actual absolute amounts (as is also done under the portion of the Swedish system that is earnings-related).

U.S. Department of Health, Education, and Welfare, *A Report on Social Security Programs in the Soviet Union*, pp. x, 157, U.S. Government Printing Office, Washington, September 1960.

This report, prepared by the U.S. Team that visited the USSR under the East-West Exchange Program in August-September 1958, covers all aspects of social security programs in the Soviet Union other than medical care benefits. In addition, certain background information is given as to economic, social, and demographic conditions and on the opinions and views of the populace on social security and related matters. Separate chapters deal with the development of the system; the general pension provisions; the administration of the general pension system; special types of pensions; cash sickness, maternity, and workmen's compensation benefits; determinations of disability; family allowances; social security provisions for collective farms and producers' cooperatives; financing provisions; individual measures for economic security; welfare services and training of personnel. Detailed data are presented on social security operating experience; demographic developments; individual earnings and pension data; pension forms; disability regulations; and an example of Soviet propaganda in the field of social security (with inserted rebuttals and comments).