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BOOK REVIEWS AND NOTICES\*

M. W. Latimer, *The Relationship of Employee Hiring Ages to the Cost of Pension Plans*, pp. i, 209, U.S. Department of Labor, Bureau of Labor Statistics, July, 1965.

BACKGROUND

Responding to a requirement of the Civil Rights Act of 1964 to "study . . . the factors which might tend to result in discrimination in employment because of age," the Secretary of Labor submitted to Congress on June 30, 1965, the comprehensive report, *The Older American Worker: Age Discrimination in Employment*. As background for one phase of this study, the report, which is the subject of this review, was prepared for the Bureau of Labor Statistics by Mr. Murray W. Latimer, a consulting actuary and former chairman of the Railroad Retirement Board.

The purpose of Mr. Latimer's study is evident from its title: *The Relationship of Employee Hiring Ages to the Cost of Pension Plans*. It will, of course, be of particular interest to pension actuaries, who are frequently asked to make similar analyses of their clients' plans. The report should also be of interest to other actuaries because of the techniques employed to analyze this surprisingly complex subject.

SUMMARY OF RESULTS

The conclusions of the study are concisely expressed in the Secretary of Labor's report to Congress:

The annual cost of a given pension increases with age of entry because the plan's obligations must be met with fewer installments and with smaller savings from experience factors. However, cost evaluations for a variety of illustrative plans indicate that both cost levels and age-cost differentials are sharply reduced or even eliminated by a variety of plan provisions.

Benefit formulas influence age-cost differentials by the extent to which they curtail the pensions of older entrants as compared with those of younger entrants. Formulas in common use among single employer plans accomplish this by relating pensions to length of service or to length of service and compensation. The differential between entrants is about cut in half, even at relatively young ages, if pensions are proportional to the workers' length of service. If pensions are made a function of both service and compensation, further reductions usually occur because of the older entrants' lower average earnings under the assumptions used.

Other plan provisions also have an impact on age-cost differentials. The addition of a disability pension affects these differentials very little, although costs are increased. Vesting, on the other hand, increases the relative cost of the young entrant by eliminating a major portion of the savings that otherwise result from withdrawals. The incidence of withdrawals is greatest among young entrants. For that reason, voluntary

\* 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*.

early retirement also reduces age-cost differences, although it does not have a significant cost impact if vesting is provided and if the pension is actuarially reduced. Finally, service requirements and involuntary retirement provisions have some effect. Service requirements reduce both annual costs and age-cost differences while involuntary retirement increases costs without significantly changing age differentials.

In conclusion, as between a young job applicant (age 27) and an older applicant (age 47), the cost differences against the older applicant under the conventional assumptions used in this report average about \$80 a year for typical single employer plans. In some cases the difference would be greater; in others it would be nominal. The differences would average about \$100 if withdrawal rates or benefit levels are somewhat higher than those in this report. More significantly, as between a hiring policy which concentrates on young applicants only and one which includes a cross-section of the available labor force, perhaps even favoring older workers, the cost difference against the latter group would usually average between \$50 and \$100 per new entrant. However, the complete elimination of age-cost differences would rarely be compatible with providing a reasonable pension for older entrants.

#### TECHNIQUE

Contribution requirements were computed on the entry-age-normal method for a variety of benefit formulas, using an interest assumption of  $3\frac{1}{2}$  per cent per annum and mortality assumptions derived from the *a-49*, *Ga-51* and 1956 Railroad Retirement Board Disability Tables. Details about other experience assumptions and of the plan variations studied, of particular significance in analyzing the results obtained, are summarized below.

1. *Ages of employment.*—Separate sets of computations were made for each of two very different hiring patterns: a “young-hire” pattern and an “old-hire” pattern. The “young-hire” distribution was based on the experience of a large western public utility company which confines its employment principally to recent graduates of high school or college. In this pattern half of the new employees were under 22, three-quarters less than 26, and almost 90 per cent were less than 30. The median hiring age was 21.97.

The “old-hire” distribution is that of laborers employed by governmental units—state, county, municipal, special district—in an eastern state in which there is a statutory prohibition against discrimination in employment on the basis, among others, of age. Over half of these employees were over 40 when hired and more than one-quarter over 50. The median hiring age was 41.11.

The author believes calculations on the basis of these two assumed groups of new entrants “probably overstate the possible range of pension contributions which could result from, on the one hand, a policy of complete non-discrimination and, on the other hand, an almost complete preference for employees under 30.”

2. *Terminations of employment other than by death, disability, or retirement.*—Again, separate sets of calculations were made designed to cover the normal range of variations in pension plan experience. One calculation utilized a moderate turnover scale intended to produce experience gains in the typical case.

The other employed a scale derived from an industry with high turnover whose use in setting funding levels would typically result in funding losses.

Both of these scales were on a select and ultimate basis. In the moderate turnover scale, first-year termination rates were in the 15-10 per cent range, with ultimate rates grading from about 6½ per cent at age 20 down to 0 at ages 54-64. The heavy turnover scale showed first-year termination rates varying from 50 to 20 per cent, depending on age at hire, with ultimate rates ranging from 16 per cent at age 20 to a low of 1.66 per cent at age 54 and then increasing gradually to 4.49 per cent at age 64.

3. *Starting salary and rates of compensation increase.*—Contributions under all salary-based plans were calculated on the basis of an annual initial compensation of \$3,600, some of them also at \$4,200 or \$4,800. These starting salaries are associated with each of three assumptions about rates of salary increase: uniform annual increments of \$75, \$100, or \$150. The author believes the use of uniform increments rather than the more complex conventional salary scales is satisfactory for the purpose of observing the effect on contribution requirements of changes in compensation levels. Certainly, the interpretation of results would otherwise have been made considerably more difficult.

4. *Rates of retirement.*—Under plans providing for voluntary retirement after age 65, retirement rates for ages 65 and over ranging from 47 per cent (age 65) to 31 per cent (age 68) were employed; almost all employees were assumed to retire by age 70. Prior to age 65 it is assumed in the study that pensions will be the actuarial equivalent of the age 65 pension and that, because of this actuarial reduction, retirement rates at ages under 65 will be very low.

The author points out that if the pensions payable on early retirement are larger than the actuarial equivalent of the age 65 pension the assumption about low rates of retirement under age 65 would no longer be valid. He believes, however, that if an employer has a need for a pension plan which makes early retirement attractive he will be unlikely to be interested in hiring individuals at older ages; thus the study excludes consideration of plans with "no actuarial reduction" early retirement features.

5. *Other assumptions.*—No explicit distinction was made by sex, since the author felt the use of the two service tables provided a satisfactory measure of the effect of differing experience levels. No allowance was made for expenses, since, except for small plans, the allowance would be small and, in any event, would not change the relative contributions requirements at different ages.

6. *Plan variations.*—Calculations were made for four broad classifications of plans: a flat monthly amount; monthly amount per year of service; salary based plan without Social Security break-point adjustment; and salary based plan with adjustment at Social Security break-point.

Variations in plans were introduced depending on whether retirement occurs because of age alone or because of age and disability; whether or not vesting is provided; by changing the Social Security break-point assumption and the per-

centages applicable to compensation above and below the break-point; and by providing for offsets to adjust for retirement benefits (Social Security essentially) provided outside the plan. In total some eighteen different plans were studied.

A number of variants of each of the eighteen basic plans was also studied. These variants related to length of service required at retirement to qualify for pension; whether age retirement is compulsory or voluntary; whether the formula is career-average or final average in the salary-based plans; different combinations of benefit/salary ratios in salary-based plans with salary-break points; and different "Social Security offset" amounts.

Within each of the plan variants per capita contribution requirements were determined for representative ages at entry, usually 24, 47, and 57, and for the "young-hire" and "old-hire" groups described above. Cost differentials between young and old ages and groups were computed on a per capita and percentage basis.

Pension actuaries today are usually ready to agree that in many situations a proper measurement of the extent of a pension-plan commitment is best achieved by making valuations of the plan under several alternative assumptions about the course of future experience. It is not often, however, that they are called upon to apply this technique, as Mr. Latimer was, to measure cost variations for virtually the entire universe of private pension plans. The scope of such a task is evident from a few statistics about the text of the report: eighteen basic types of plans, hundreds of variants of the basic types, many thousands of different cost appraisals. These voluminous data are presented concisely in some twenty-seven tables in Mr. Latimer's study and still further summarized in seven tables in the research materials volume of the Secretary of Labor's report. For general actuarial reference—and admittedly the study was not prepared for this purpose—the report suffers somewhat from this very conciseness, since the coding employed to identify individual plan variants was difficult to keep in mind and the code keys, dispersed throughout the text, were difficult to locate.

The study is enhanced by the author's review, at the outset of the report, of the significance of the actuarial assumptions employed in making his calculations and the considerations which led to the particular choices he made.

A. CHARLES HOWELL

\*W. Haber and M. G. Murray, *Unemployment Insurance in the American Economy*, pp. xx, 538, Richard D. Irwin, Inc., Homewood, Ill., 1966.

The publication of *Unemployment Insurance in the American Economy* has occurred at a most propitious time. Perhaps in no other period in the history of unemployment insurance in the United States has there been as much public interest in this highly technical and little understood branch of our Social Security system. The introduction of the Administration's bills (H.R. 8282 and S. 1991) in 1965 evoked a torrent of discussion on the merits of the changes

proposed and made many heretofore disinterested persons aware of large areas of basic disagreement in the program. Answers to questions that arose were not usually easy to find. The mass of literature on unemployment insurance is diffuse, and the statistics, though voluminous, often fail to provide data in depth. This volume would justify itself if for no other reason than on the basis that it contains in a single volume discussions of every phase of unemployment insurance, listing, wherever necessary, source material for those who wish to pursue any particular subject in more detail than is possible in a book of this length. Moreover, the authors have been able to incorporate some developments that have occurred within the past year or two, adding greatly to the value of the book for reference purposes.

The book was made possible through financial grants by the W. E. Upjohn Institute for Employment Research, an organization responsible for a long series of reports on a variety of subjects pertinent to employment, unemployment, and unemployment insurance.

The authors have chosen to subdivide their book into five sections: Part I, "Unemployment and Its Insurability"; Part II, "How Unemployment Insurance Developed"; Part III, "Issues in Unemployment Insurance—Coverage and Benefits"; Part IV, "Financing Issues and Problems"; and Part V, "Problems in Relationships." Each chapter closes with a summary of its contents, and, finally, the book concludes with an over-all summary of progress and problems, together with the authors' recommendations for improving the present program.

As stated previously, unemployment insurance remains a controversial subject even though it is now accepted by all elements of our national community as a necessary and highly desirable social instrument for alleviating some of the loss incurred by persons who become unemployed. Unfortunately, much of the controversy that exists does so because of deep-seated and often prejudiced viewpoints held by all discussants—government, labor, employers, and the general public. Completely objective viewpoints are almost nonexistent. It is a credit to this book's authors that they have endeavored to present fairly all sides of each question discussed. This is not to say they do not have definite leanings in many of the topics discussed in this volume. This reader, at least, obtains the impression that the authors are inclined to favor a federally administered unemployment insurance program as opposed to the present federal-state structure, although in many places throughout their text they do point out the case in favor of state administration.

Most of the provisions of H.R. 8282 appear to be favored by the authors, including the proposal to change the experience rating standards. There are many in industry who would disagree vehemently with the arguments advanced by the authors in support of a change in the experience rating mechanisms. Uniform reductions in rates for all employers, regardless of their unemployment experience record, would give to the unstable employer an advantage at the expense of the positive account, stable employer. Negative account employers (i.e., those who are charged more in claims than they pay in unemployment insurance taxes) would be inclined to ally themselves with labor, the traditional

enemy of merit rating, in order to exert legislative pressure for uniform reductions in rates.

A sizable amount of state and national legislation of all types arises out of crisis situations, and the history of unemployment insurance legislation has been no exception. Much of the unemployment insurance legislation has been aimed at specific situations requiring immediate attention, and, as the authors state, a particular provision might have been included in a "horse-trading" deal as the only means of obtaining passage of some other more desirable provision. A great deal of information on the why and wherefore of these dealings is given by the authors. In fact, commencing with chapter vi, and continuing through chapter xix, the authors present a wealth of material on every issue pertaining to unemployment insurance that has arisen during the more than three decades the unemployment insurance laws have been on the statute books. Chapter x, "Issues in Coverage Extension," is given a thorough and scholarly analysis, as are also the subsequent chapters dealing with issues arising in problems of adequacy of benefits, duration of benefits, extended benefits, testing of labor market attachment, trends in disqualification, voluntary "quits," and the huge and pressing problem of financing the unemployment insurance program.

Recent events in Congress in the field of unemployment insurance legislation demonstrate that careful consideration and full debate, based on intelligent analyses of all facets of the problems, are needed. The hearings and debate on H.R. 8282, the subsequent rewriting and introduction of H.R. 15119 by the Committee on Ways and Means, and, finally, the hearings and amendments in the Senate illustrate both well- and ill-conceived actions on the part of our legislative bodies. It is to be hoped that this work of Messrs. Haber and Murray will be used by those uninformed members of Congress who must determine the course of unemployment insurance legislation in the forthcoming months.

Students of unemployment insurance will find this book a welcome addition to the literature, regardless of whether or not they agree with the authors' viewpoints in all cases. It is especially valuable because of the wealth of historical detail that forms the background for each topic discussed. It is often difficult to appreciate some of the idiosyncrasies of unemployment insurance unless one is fortunate enough to have access to source material detailing its development. The authors have done an excellent job in condensing and organizing such background material.

Although unemployment insurance may not provide as broad scope for actuarial analyses as some other types of insurance, nevertheless, in recent years it has become of increasing interest to many actuaries. Cognizance of this fact is indicated by inclusion of unemployment insurance in the required course of study of the Society of Actuaries. *Unemployment Insurance in the American Economy* appears to be an excellent possibility for inclusion, in whole or in part, in the syllabus of required reading for the Society's examinations.

A few errata, mostly in dates, were noted by this reader. Undoubtedly, they have been detected and will be corrected.

K. ARNE EIDE

## SELECT CURRENT BIBLIOGRAPHY

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

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

## ACTUARIAL AND OTHER MATHEMATICS, STATISTICS, GRADUATION

M. V. Dixon, Editor, *BMD Biomedical Computer Programs*, pp. viii, 620, Health Sciences Computing Facility, Department of Preventive Medicine and Public Health, School of Medicine, University of California, Los Angeles, 1965.

This text was "prepared to describe in a unified manner the various computer programs which have proved useful in many types of medical research projects at UCLA." They include programs of description and tabulation which calculate means, variances, correlations, chi-square tests, and frequency tables and also plot data curves and histograms. The section on multivariate analysis includes programs for principal component, factor, discriminant, and canonical analysis. Under regression analysis there are programs for simple linear, stepwise, multiple, polynomial, and periodic regression as well as harmonic analysis. There are also programs to prepare life tables, to calculate survival rates, to do contingency analyses, to analyze time series, and to prepare various analyses of variance including factorial designs, covariance, the general linear hypothesis, contrasts, and multiple range tests.

All programs, with some minor exceptions, are written in Fortran II for the IBM 7090/94. For each program there is (1) a general description which includes information on the input, output, and data limitations; (2) a section on the order of cards in the job deck; (3) a section on card preparation; (4) a computational procedure; (5) a reference list; and (6) a sample problem.

## HEALTH INSURANCE

L. S. Reed, *The Extent of Health Insurance Coverage in the United States*, Research Report No. 10, pp. 72, Social Security Administration, Washington, July, 1965.

This report presents estimates of enrollment in various types of health insurance plans, based on available data from reported enrollment and from household surveys. Analyses are made not only for the United States as a whole and for the major types of coverage but also by regions of the country and by state and for some types of coverage other than the major ones of hospital care, surgical services, and physician in-hospital visits.

L. S. Reed, *Financial Experience of Health Insurance Organizations in the United States*, Research Report No. 12, pp. 70, Social Security Administration, Washington, December, 1965.

This report presents and analyzes a wealth of data on the financial experience of Blue Cross and Blue Shield plans, insurance companies, and independent plans operating in the health insurance field for the period 1962-64.

Division of Information and Research, *Health Insurance and the Effectiveness of Health Care*, Health Insurance Association of America, New York, 1965.

This study paper deals with the following areas which have direct bearing on the effectiveness and quality of health care: professional education; supply and distribution of personnel and facilities; organization of health care services; licensure requirements; professional society membership standards and qualifications for physician hospital staff privileges; accreditation; maintenance of medical records; tissue, medical audit and utilization committees in hospitals; medical society review committees; area-wide planning of health resources; pricing practices; health insurance benefits patterns; research; consumer awareness.

"The relationship of health insurance to these areas of consideration has been scrutinized from the following standpoints: insurance contract provisions and benefit design; claims management or conservation programs; development of statistical information and improved measurement of the quality of care; consultation, collaboration, and negotiation with professional organizations; technical assistance to professional organizations, purchasers of group insurance, or public bodies; financial assistance to others in the interest of improved effectiveness of care; support for appropriate legislation; and publicity, public support of professional and hospital associations, and education of the public."

B. L. Gordon, M.D., Editor, *Current Procedural Terminology*, pp. xx, 172, American Medical Association, Chicago, 1966.

"*Current Procedural Terminology (CPT)* is a system of standard terms, provisional eponyms, and descriptors developed for the convenience of physicians and designated personnel to expedite the reporting of therapeutic and diagnostic procedures of surgery, medicine, obstetrics, psychiatry, roentgenology, clinical laboratory sciences, and physical medicine. The system also includes terms for supplementary and/or related services, as visits, consultations, examinations, evaluations, and miscellaneous studies and/or management. The names and codes were derived from the major systems of procedural terminology, current literature, and latest editions of textbooks, and co-ordinated to attain maximum uniformity and currency.

"A feature of *CPT* is the listing of terms alphabetically and numerically to provide simplified access to the names of procedures by term or code."

Where applicable, the corresponding codes of the "Standard Nomenclature of Diseases and Operations" and the "International Classification of Diseases, Adapted" are given.

U.S. National Center for Health Statistics, *Identifying Problem Drinkers in a Household Health Survey*, pp. 46, Public Health Service Publication No. 1000, Series 2, No. 16, Washington, May, 1966.

"Is it possible, by asking the respondent in a household survey sample a few simple questions about his own and other related household members' drinking behavior, to distinguish those persons who have been labeled 'alcoholic' or who are likely candidates for the label and to do so with reasonable accuracy?"

The findings of this study identified three out of four known alcoholics of lower socioeconomic status but only one out of three of those with more income and education. However, the concept of alcoholism remains ill defined, there is a misclassification problem, and measures developed in one area of the country remain to be tested in other areas.



U.S. National Center for Health Statistics, *Conceptual Problems in Developing an Index of Health*, pp. 18, Public Health Service Publication No. 1000, Series 2, No. 17, Washington, May, 1966.

"The problem of measuring levels of health is discussed with a view to identifying measures indicative of changing health status in the United States population. Traditionally, mortality rates have been used for this purpose but changing health problems and programs have impaired their utility as a measure of the need for and adequacy of health programs. If new indexes are to be devised the question of what to measure must be resolved."

U.S. National Center for Health Statistics, *Characteristics of Patients of Selected Types of Medical Specialists and Practitioners, United States, July 1963-June 1964*, pp. 63, Public Health Service Publication No. 1000, Series 10, No. 28, Washington, May, 1966.

Persons who consulted pediatricians, obstetricians or gynecologists, ophthalmologists, otolaryngologists, psychiatrists, dermatologists, orthopedists, chiropractors, optometrists, and podiatrists are tabulated in relation to age, sex, residence, geographic region, family income, usual activity status, color, and education of the head of family.

"As education of the family head increased the proportion of the population that was seen also increased, except for chiropractic patients. Family income was directly related to the percentage of the population reporting visits. In general, proportionally more of the population residing in metropolitan areas reported visits than did those living elsewhere. In every instance the white population had more people using the services of the professions studied than did the nonwhite population."

U.S. National Center for Health Statistics, *Hospital Discharges and Length of Stay: Short-Stay Hospitals, United States, July 1963-June 1964*, pp. 66, Public Health Service Publication No. 1000, Series 10, No. 30, Washington, June, 1966.

"Among the civilian population not residing in institutions, the rate of discharge from short-stay hospitals during the average 12-month period was 133.7 per 1,000 persons. The average length of stay per discharge was 8.4 days. The discharge rate for females, 157.5 per 1,000, was considerably greater than that for males, 108.3 per 1,000. However, if hospitalizations for delivery of mothers are excluded, the sex difference in rate is reduced substantially, amounting to a rate for females of 117.7 or 8.7 percent greater than the rate for males. The average length of stay for males was 9.9 days per discharge, and for females, 7.4 days for all discharges and 8.5 days for discharges other than for delivery."

Data are available for other demographic variables and are adjusted to include information for deceased persons.

U.S. National Center for Health Statistics, *Oral Hygiene in Adults, United States, 1960-1962*, pp. 30, Public Health Service Publication No. 1000, Series 11, No. 16, Washington, June, 1966.

"Women were found to have cleaner teeth than men, as were white men and women in comparison with Negro adults. Oral hygiene was also found to improve with increasing education and with increasing family income. On the other hand, oral cleanliness worsened with advancing age because of a gradual increase in the amount of calculus."

Oral hygiene was more closely associated with education than with family income, and to both these factors is attributed a large part of the difference by race.

U.S. National Center for Health Statistics, *Episodes and Duration of Hospitalization in the Last Year of Life, United States—1961*, pp. 48, Public Health Service Publication No. 1000, Series 22, No. 2, Washington, June, 1966.<sup>1</sup>

"In this report statistics are presented on the number of episodes of care and the average number of days of care persons received in short-stay hospitals and resident institutions during the last year of life."

"Of those persons dying in 1961, 72 percent received some care in hospitals or institutions during the 12 months preceding death," and, of those hospitalized, "three-fifths had one episode of care, about one-fifth had two episodes, and just less than one-fifth had three or more episodes." These persons averaged 63 days of care. "The episode rate for persons dying of malignant neoplasms was three times that of persons dying of accidents."

#### SOCIAL SECURITY

R. M. Ball, *Policy Issues in Social Security*, Social Security Bulletin, June, 1966.

This article, by the Commissioner of Social Security, expresses significant views in regard to the OASDHI program and should be read by all interested students of the subject. Discussed in particular are the level of benefits, automatic adjustment of benefits with changes in wages or with changes in prices, similar automatic adjustment of the earnings base, and the possibility of contributions from general revenues.

R. J. Myers, *Mortality Study of Charter Beneficiaries*, Actuarial Note No. 30, pp. 6, Social Security Administration, Washington, July, 1966.

This note presents a mortality study of persons who have received OASDI benefits continuously since January, 1940, and who are thus now at least 90 years old. The projected survivors (according to population mortality tables) agreed quite closely with the actual survivors. Continued study of this closed group in the future should provide interesting and valuable data in regard to centenarians.

G. I. Kowalczyk, *Enrollment for Supplementary Medical Insurance, July 1, 1966*, Actuarial Note No. 31, pp. 3, Social Security Administration, Washington, August, 1966.

This note gives data on the enrollment under the Supplementary Medical Insurance program as of July 1, 1966, by states, showing both the numbers involved and the percentage of those eligible to enroll who actually did so. For the United States as a whole, the participation rate was 91 per cent, and there was a relatively narrow spread around this figure for the various states.

W. Hasenberg, *Income-Tax Treatment of Old-Age Pensions and Contributions Here and Abroad*, Social Security Bulletin, August, 1966.

This paper presents interesting information on the income-tax treatment of benefit payments and contributions under old age pension programs in more than twenty foreign countries and discusses the policy considerations involved.

#### OTHER TOPICS

U.S. Bureau of the Census, *1960 Censuses of Population and Housing: Procedural History*, pp. 387, Washington, 1966.

This report is divided into three parts: Part I, "1960 Population and Housing Censuses"; Part II, "Survey of Components of Change and Residential Finance"; and

<sup>1</sup> See *TSA*, XVII, 590.

Part III, "Population and Housing Census Items." There are nine appendixes and an index, and most chapters are followed by detailed bibliographies.

Part I presents a brief history of the census, describes the organization of the Bureau, and discusses planning, sampling, and estimation, geographic work, preparatory work, and field organization and training; then enumeration, processing of data, the publication program, and the evaluation and research program are analyzed in detail. A description of the census in Puerto Rico and other outlying areas follows.

Part II relates the detail of the Survey of Components of Change and Residential Finance that "was developed to provide information about the types of changes that had occurred in the nation's housing and about the financing of residential properties for the use of Federal and private agencies engaged in planning, analysis and research in housing and related fields."

Part III details the items that were included on the questionnaires used in Parts I and II and defines the terms used thereon.

U.S. National Center for Health Statistics, *Seasonal Variation of Births, United States, 1933-63*, pp. 59, Public Health Service Publication No. 1000, Series 21, No. 9, Washington, May, 1966.

The seasonal pattern of births in the United States is characterized by a peak in September and a trough in April and May, with the magnitude of the former increasing over the years. The pattern is compared with that of other countries, and environmental and social theories are presented to try to explain the variation. Demographic factors and registration practices are also studied for their possible effects.