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MALTHUS UP-TO-DATE IN DETAIL

by Frederic Seltzer

Population and the American Future, the final Report of the Commission on Population Growth and the American Future was published in 1972. This Report was reviewed briefly in the Sept. 1972 issue of *The Actuary* and at greater length in *TSA XXIV* p. 513. Now six volumes of the research papers drawn on by the Commission in writing up the final report, as well as a volume of the statements given at the Commission hearings and a summary volume entitled *Schemes and Highlights of the Final Report of the Commission on Population and the American Future* are available from the Superintendent of Documents of the Government Printing Office. The books of research papers are as follows:

Vol. 1 — *Demographic and Social Aspects of Population Growth* contains 25 papers on population growth, mortality, fertility, immigration, the family and women, and population stabilization.

Vol. II — *Economic Aspects of Population Change* contains 11 papers that consider the effect of population growth on economic development in the past, present and future, including projected effects on selected industries, the labor force, education, welfare and health care resources, demand for housing and family structure and life style.

Vol. III — *Population, Resources, and the Environment* contains 14 papers covering resource and environmental effects of population growth that consider resource levels, pollution and waste material recovery, life style and energy consumption, and some differing views on the relative importance of population growth on the physical environment.

Vol. IV — *Governance and Population: The Governmental Implications of*

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20TH INTERNATIONAL CONGRESS OF ACTUARIES

The 20th International Congress of Actuaries will be held in Tokyo from October 25 to November 1, 1976. The Institute of Actuaries of Japan will be the host for the Congress. Membership in the International Actuarial Association is a prerequisite for membership in the Congress. Actuaries who are not members of the I.A.A. can join the Association by requesting a membership application from the Secretary of the U.S. Section, Mr. Fredrick E. Rathgeber, at The Prudential Insurance Company of America, Prudential Plaza, Newark, New Jersey 07101.

I.A.A. members are invited to prepare individual papers on one or more of four subjects:

1. Standards for Appropriate Premium Rating under the Present Management Environment.
2. Mortality Rates.
3. Improvement of the Function of Pension Schemes not included in General Systems.
4. Mathematical Researches concerning Management of Insurance Companies.

Complete information about the topics and rules for submitting the papers are contained in Bulletin No. 1 of the Congress. Copies of the Bulletin are available from Mr. Rathgeber.

The dates for submission of titles of papers and actual submission of the papers have been changed. The new dates are:

Notice of intent and title: Dec. 1, 1974.
Actual submission of papers: Mar. 1, 1975.

These items should be sent to Mr. Robert J. Myers at 9610 Wire Avenue, Silver Springs, Maryland 20901. Mr. Myers is Chairman of the Committee on Papers from the U. S. Section. Any questions on topics or content of proposed papers should be referred to Mr. Myers.

CLAIM RESERVES FOR GENERAL PURPOSE FINANCIAL STATEMENTS

by Clayton A. Cardinal

In determining a company's general purpose financial statement earnings in conformity with the Audit Guide for Stock Life Insurance Companies (the Audit Guide), it is necessary to consider what basis may be deemed appropriate for establishing claim reserves on health insurance policies. The bases for determining the other values taken into a general purpose financial statement have been considered elsewhere (for example, see pages 70 and 71 of the Audit Guide and pages 4 through 7 of the September 1972 Response of the Joint Actuarial Committee on Financial Reporting).

In arriving at the earnings for general purpose financial statements, claim reserves generally are identical with those in statutory statements prior to applicability of the Audit Guide. With the advent of the Audit Guide, however, it is necessary to determine whether or not claim reserves should be determined differently for general purpose financial statements than for statutory statements.

For statutory reporting, the primary concern of the financial statement is solvency of the insurance company, because such statements are directed towards the interest of policyholders and the public at large. This purpose dictates that "liquidation or termination of company" principles be adopted in determining claim reserves rather than "going concern" principles. The object of general purpose financial statements is to provide reliable financial information about the economic resources and obligations of the company and changes in its resources and obligations. It is an object of generally accepted accounting principles, that the earnings and thus the claim reserves be presented fairly and be de-

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Deaths

John B. Neil

Publications

The operations of the Society are not exempt from the almost universal increase in expenses and it has been found necessary to increase the cost of the Society's publications. The 1974 Year Book lists the new prices in the Table of Publications on page 403. The charges for Study Notes are given on page 283 and in the order forms attached to the Year Book.

Malthus Up-to-Date*(Continued from page 1)*

Population Change contains 12 papers in four groupings: Part I — Population, Federalism, and Democratic Governance; Part II — Population Change and State and Local Problems of Governance; Part III — Population Change and American Foreign Policy in the Late Twentieth Century; Part IV — Population Policy in the American Political System.

Vol. V — *Population Distribution and Policy* contains 28 papers in five groupings: Part I — Population Distribution Trends and Projection; Part II — Immigration; Part III — Social and Economic Aspects of the Urban Size and Internal Distribution; Part IV — Impact of Slower National and Local Growth; Part V — Policy.

Vol. VI — *Aspects of Population Growth Policy* contains 19 papers in six groupings: Part I — The Setting: Institutional, Legal, Ethical; Part II — Fertility Control; Part III — Employment and Income Policy; Part IV — Guiding Population Change; Part V — Public Opinion; Part VI — The Policy Process.

Vol. VII. — *Statements at Public Hearings of the Commission on Population Growth and the American Future* contains statements by spokesmen for governmental, academic and religious institutions and representatives of various citizen groups on topics included in the preceding reports.

The final Report apparently is to be allowed to gather dust on Government shelves. Perhaps these supplementary volumes will prove to be of some value to workers in demographic, economic, and sociological fields.

Claim Reserves*(Continued from page 1)*

terminated consistently from year to year on the basis of "going concern" principles, with due consideration of materiality and accounting as generally practiced.

For statutory statements, "termination of company" principles dictate that claim reserves be determined with a high probability that they will be adequate under all (most) circumstances (see page 36 of "Health Insurance Claim Reserves and Liabilities," *TSA XVI*). Consistent with this consideration and with sound management (are there statutory surplus requirement considerations? federal income tax considerations?), the claim reserves then, in order to meet the high confidence required, should be set at a level equal to the mean value of the related expected payout plus, for example, two standard deviations thereof.

For general purpose financial statements, claim reserves are calculated consistent with the "going concern" philosophy adopted in the determination of the other statement values. If in application of this philosophy provision is made in the statement for both favorable and unfavorable deviations of non-random nature and for catastrophies, claim reserves then are properly set at a level equal to the mean value of the related expected payout, preferably discounted with interest.

Further, if "release from risk" principles are employed in determining values, claim reserves then are properly set at a level equal to the mean value of the related expected payout plus a number of standard deviations, again preferably discounted with interest. If values are determined in accordance with the intermediate form of "release from risk," then the number of standard deviations deemed appropriate for adding to the expected mean claim reserves may be, for example, only one (certainly less than whatever is appropriate for statutory). If the company uses a modification of the intermediate form in which the provision for adverse deviation is less than that for the regular intermediate form, then the standard deviation measure would be appropriately reduced.

The preceding comments are general in nature. Obviously, if a company's experience in establishing statutory claim reserves has been less than satisfactory,

EDP SOFTWARE AND SERVICES

by David P. Martin

LOMA has published two additional reports on EDP Software and Services. Reports Nos. 14 and 15 in this series were reviewed in *The Actuary* of September 1972.

Report No. 16, Evaluation of Software Packages contains 3 papers each of which discusses the evaluation criteria and techniques of three different life insurance companies in their search for outside software support.

Report No. 18, EDP Software and Services Companies No. 2 is a sequel to Report No. 14 already mentioned and now contains brief information about 111 companies.

Life insurance companies not members of the Association may obtain copies of these new reports at the following prices: No. 16, \$5.50; No. 18, \$5.00.

ISSA

The Sixth International Conference of Social Security Actuaries and Statisticians will be held in Helsinki from Sept. 1 to 6, 1975. Detailed information regarding arrangements for the Conference and topics to be discussed may be obtained from the General Secretariat of the International Social Security Association, 154 rue de Lausanne CH 1211, Geneva 22, Switzerland.

Errata

In the March issue on page 4 the last section of Table II should read:

Employee Contributions
Employee Pay All
Employer Pay All
Both Pay

and in Table III the first entry should read:

Age	Male
40	66% (140 with Family Benefit)

then that company's situation should not be further worsened by attempts to implement such concepts in its general purpose financial statement.