

**LOSS RESERVE OPINIONS IN THE
PRINCIPAL INSURANCE MARKETS OF THE WORLD**

BY RALPH L. RATHJEN

BIOGRAPHY:

Mr. Rathjen is a Consulting Actuary with Tillinghast, a Towers Perrin company, in their Bermuda office. Prior to joining Tillinghast in 1983, he was an Actuarial Assistant with Employers Reinsurance Corporation. He received a Master in Actuarial Science degree from the University of Nebraska-Lincoln in 1979. He became a Fellow of the Casualty Actuarial Society in 1989 and a Member of the American Academy of Actuaries in 1984. Mr. Rathjen currently serves on the CAS Examination Committee.

ABSTRACT:

Loss reserve opinions have become one of the most common public pronouncements made by casualty actuaries today. From their introduction in 1980 in a select number of states to their current requirement as part of the 1990 annual statement instructions, non-life loss reserve opinions have become common place in U.S. insurance markets. However, the role and acceptance of the non-life actuary vary significantly outside the U.S. Studies of non-life actuarial subjects in other countries are generally not as structured and often not as advanced as in North America. This paper provides an overview of the role of the non-life actuary in countries other than the U.S. as it applies to statutory requirements for loss reserve opinions.

Loss Reserve Opinions in the Principal Insurance Markets of the World

INTRODUCTION

Among the public pronouncements most frequently required of U.S. casualty actuaries is the loss reserve opinion. This opinion, first implemented in 1980 in New York and seven other states, is a 1990 statutory statement requirement.

The U.S. and Canada have progressed significantly in specifying loss reserve opinion requirements from actuaries: other countries' definitions of the casualty actuary's role vary. This paper investigates non-life loss reserve opinion requirements in U.S. and foreign insurance markets and in certain submarkets such as captives and risk retention groups. Also addressed is the status of casualty actuaries, their capabilities and acceptance in the general (property and casualty) insurance areas.

The need for loss reserve opinions -- and, in part, for casualty actuaries -- arose from the long-tail nature of third party liability coverages. Prior to the 1970s, non-life lines (with the exception of workers' compensation) were perceived as short term in nature and were generally associated with property coverages. The litigious environment of the 1970s changed that perception and created a greater need for non-life actuarial expertise. Because of the relatively rapid change in the legal environment, loss reserve opinion requirements initially

were hampered by the lack (or perceived lack) of qualified actuaries to opine on the entire U.S. industry.

Many of the loss reserve opinion requirement issues first discussed in the NAIC hearings in 1979 are being sorted through today in other countries -- issues such as the independence of the opining individual, who is qualified to opine, experience requirements, the need for opinions, and the costs associated with the attainment of a loss reserve opinion. The troublesome issue of confidence intervals about the reserve estimate has been dropped since the NAIC exposure draft proposal to the NAIC Fire and Casualty Annual Statement Blank Relating to Certification of Loss Reserves. However, related issues as to the application of certain wordings such as "good and sufficient," "reasonable," "not unreasonable," etc. remain.

U.S. OPINIONS

HISTORICAL PERSPECTIVE FOR THE UNITED STATES

Opinions for property and casualty loss reserves have been in existence in the U.S. since the early 1980s. Loss reserve opinions (originally called Certification of Loss Reserves) came to the forefront of the NAIC during the late 1970s, after similar requirements had been imposed on life insurance policy reserves. The first opinion requirements for non-life insurance emanated in 1980 from a limited number of state regulations. Initially, the requirement was limited to a few states with significant variations between states. In some states the opinion

applied only to lines of business that were assumed to be problematic (e.g., medical malpractice and products liability). The first opinions for property and casualty insurance were based on life opinion wording, which had been added to the Life and Accident & Health Blank in 1975. Through the 1980s the number of states requiring loss reserve certification gradually increased; by 1989, 24 states had adopted some type of loss reserve opinion requirement for their domiciled companies. Most states used instructions similar to the NAIC instructions adopted in the early 1980s. The limited scope of opining on only the loss and loss expense reserves is expanded in Kentucky and Pennsylvania where the opinion in instances of discounted reserves must address the reasonableness of the matching of asset and liability cash flows and the appropriateness of the cash flow projections. Nearly 15 years subsequent to the NAIC requirement of actuarial opinions for Life and A&H companies, the NAIC voted to add a similar requirement for property and casualty companies effective with the 1990 statutory blank. With the decision by the NAIC to require loss reserve opinions from practically all companies with the 1990 annual statement instructions, many earlier state requirements for insurers, captives and risk retention groups are being revised to be consistent with the NAIC standard.

CAPTIVES

The domestic captive domiciles include Colorado, Delaware, Georgia, Hawaii, Illinois, Tennessee, U.S. Virgin Islands and Vermont. As of year-end 1989, Colorado and Vermont required statements of opinion concerning loss reserves from their captives. Georgia captives

may, at the commissioner's discretion, be required to submit an opinion. Some may be given a lenient time frame in which to file the opinion (July 1, for example, in Colorado).

The standards for loss reserve opinions vary widely in most other offshore captive domiciles. In the Bahamas, Guernsey and Grand Caymen there are no requirements for loss reserve opinions. In Barbados, an opinion is required if loss reserves exceed 200% of capital and surplus for the company. Turks & Caicos is considering an opinion requirement but is still in the process of putting its regulations in place. In Dublin, direct business is subject to EC standards but no opinion is required. In the Isle of Man, an opinion is expected for group captives, but this is not a statutory requirement.

RISK RETENTION GROUPS

Since risk retention groups are domestically licensed and therefore subject to only one state's regulatory requirements, RRGs will be required to provide an opinion statement to their state of domicile. At least seven states impose loss reserve opinion requirements on self-insurers or self-insurance pools.

NON-ADMITTED INSURERS INFORMATION OFFICE (NAIO)

The NAIIO operates under the auspices of the NAIC Special Insurance Issues (E) Committee. Its role includes procuring information on alien insurers in the U.S. and publishing a quarterly listing of qualified non-admitted insurers. Included as requirements for inclusion on the quarterly listing are minimum capital and surplus funds levels, a U.S. trust account and an established reputation concerning character, trustworthiness and integrity.

In 1989, the NAIIO added the requirement that all companies writing excess and surplus lines business in the U.S. provide an actuarial certificate with respect to their worldwide non-life business. This provides (or forces) a statutory role for non-life actuaries of non-admitted companies (many non-U.S.) who wish to write excess and surplus lines business in the U.S.

NON-U.S. OPINIONS

CANADA

Insurance companies in Canada are regulated on either a provincial or a federal basis. The approximately 280 federally registered companies write over 90% of all Canadian premium volume. Loss reserve opinions have been a part of the statutory regulation of Quebec since June, 1984. In 1986, Ontario required loss reserve opinions of all licensed companies; and in 1987, the federal government implemented loss reserve opinions of all federally licensed

companies. All three requirements included a five year phase-in period in which non-FCIAs are permitted to sign the reserve opinions in certain instances. For example, most U.S. non-life actuaries have been permitted to sign the opinion during the phase-in period. The flurry of loss reserve opinion requirements is attributable in part to a number of insolvencies in the early 1980s. While these insolvencies did not affect companies incorporated in Quebec, the Quebec government was proactive and initiated loss reserve opinion requirements soon after the insolvencies occurred.

The Quebec, Ontario and federal regulations require that the annual statement filing include an opinion by an actuary attesting to the adequacy of the provisions for unearned premium reserves in addition to the provision for unpaid claim and claim adjustment expense. The former is important because the annual statement accounting for the unearned premium reserve is compiled on a basis similar to U.S. GAAP accounting. The actuary is also required to opine on reserves both gross and net of reinsurance recoverables. In addition to the statement of opinion, the actuary must submit a report with the opinion and annual statement which documents the analysis and assumptions used in deriving the opinion. The professional standards of the CIA are similar those of the CAS as they pertain to loss reserving.

A revision to the insurance act being drafted in Canada would replace the two federal insurance acts, the Canadian and British Insurance Companies Act and the Foreign Insurance Companies Act. This new legislation is unique in that it may broaden the actuary's responsibilities even further to include short term (less than two years) financial projections and reporting on unusual circumstances. Canadian legislation is similar to that for life

actuaries in England. However, Canada would be the first to apply these broader responsibilities to non-life actuaries.

UNITED KINGDOM

The largest contingent of actuaries outside North America is in the UK. The actuary is explicitly defined in the UK Insurance Companies Act of 1982 but has no statutory responsibility for general insurance under this Act. However, there is much discussion of the role actuaries should have in general insurance (non-life). In 1989 the working party for the General Insurance Convention issued a discussion report that studied actuarial reporting. This working party consisted of 14 UK actuaries involved primarily in general insurance.

The UK working party generally believed that the supervision of companies should aim to encourage financial soundness but leave companies free to innovate and compete. The working party also believed that the thrust of the actuary's report should consider the overall financial condition of the company and not solely its loss reserves. The independence of the actuary was believed to be derived from the strength of the profession and its professional conduct rules. Whether or not the actuary was employed appears not to be of particular concern. There exists a view that the in-house actuary may perhaps be more knowledgeable about a particular company than any outside actuary and may be the actuary of preference. However, the external actuary has the advantage of being familiar with the practices of more than one company. The working party also recognized that due to the international nature

of insurance, which represents a particularly large slice of business in London, reciprocity for the recognition of professional reporting between authorities may be an issue.

Studies in general insurance are far less developed in the UK than in the U.S. The UK has deliberately not established a separate society for the study of non-life actuarial aspects. The UK's Institute of Actuaries has an informal General Insurance Study Group, formed in 1974, that maintains an informal relationship to the Institute of Actuaries. In 1978, general insurance was introduced on the Institute of Actuaries syllabus: The involvement of actuaries in general insurance has grown significantly since that time.

Interestingly, the U.S. non-life actuarial profession is viewed as having progressed far beyond current non-life studies in the UK. The working party states, "In the context of development of the role of actuaries in general insurance, it is reasonable to judge the US actuaries as having attained the 'mature state'". The group credits much of the proliferation of literature and development in general insurance in the U.S. to the establishment of a separate non-life society, distinct from the life actuarial society.

To place in perspective the presence of UK actuaries involved in general insurance relative to the U.S. presence, a comparison of the number of non-life actuaries with the total number

of actuaries in insurance companies is useful. The following comparison is based on insurance company employed actuaries as of 1985.

	UK Fellows	U.S. Fellows
Life Insurance Companies	853	2,884
Non-Life Insurance Companies	30	399

While the U.S. casualty actuaries represent a relatively small percentage of the total number of U.S. company actuaries (approximately 12%), they have a significantly greater presence in insurance actuarial practice than their UK counterparts (which represent about 3%). However, based on indications from the working party, the UK presence of non-life actuaries is growing significantly.

Consistent with past events in the U.S. and Canada, there exists a view that failure of a significant insurer or reinsurer could create the urgency necessary to induce greater actuarial involvement. This working committee expresses the belief that the question is not if actuaries will attain greater involvement in general insurance, but when.

The London Market is particularly rich for actuarial involvement in the projection of claims and premiums, both inward and outward, and their accompanying cash flow projections. There are also many areas besides the London Market for application of actuarial expertise. However, the lack of appropriate data, such as historical development data, in many instances limits the use of many traditional actuarial methods. Lloyds recently included in its bylaws

a limited role for actuaries through the requirement for actuarial involvement in certifying that it is reasonable to leave run-off years of account open.

LOYDS RUN-OFF YEARS OF ACCOUNT

The unique structure of Lloyds, in which individual members band together in syndicates to underwrite insurance risks on their own account, has recently necessitated actuarial involvement. Each Lloyds member pledges their entire wealth to support underwriting undertaken on their behalf and premium limits are imposed on members based on their wealth. At the end of a normal syndicate period (normally three years) the outstanding liabilities are usually reinsured and the profits of the syndicate are distributed to the members. To facilitate writing additional business the members' prior obligations must be reinsured and an account year "closed". If reinsurance is not purchased, the account year remains open precluding the release of the participants from future potential liabilities and hindering future underwriting activity.

Lloyds Bylaw No. 17 of 1989 requires actuarial involvement in instances in which the managing agent decides to keep an account year open by not reinsuring the outstanding liabilities into an open year of a Lloyds syndicate. Under the Syndicate Accounting Bylaws, the reinsurance transaction must be equitable to the names of the ceding and assuming syndicate. These run-off years of account are instances in which the managing agent has either been unable to solicit an offer to reinsure an account year or has received reinsurance premium

quotes that the managing agent feels are unreasonable due either to expected value of the reinsurance or to the uncertainty involved in the reinsurance, e.g. large pending cases.

In these instances, the actuarial involvement does not constitute a confirmation of the adequacy of the reserve as carried by the managing agent. Instead, the actuarial report is required to cover the adequacy of the accounting records, the reserving policy used by the managing agent as a basis for not closing the year of account and to certify whether leaving the account open is reasonable.

In addition to commenting on the reasonableness of decisions, the actuary may make recommendations concerning future accounting records or methodology and assumptions to be used by the agent -- with which the managing agent must comply if the Lloyds Council so directs. In many ways the actuary is asked to pass opinion on the judgment and action of the managing agent rather than on the reasonableness of the reserves. This, surprisingly, is one of the few instances in which the actuary may put on the "hat" of management and offer an opinion on issues beyond the narrow focus of actuarial pricing and reserving, into underwriting decisions specific to the syndicates in question.

The requirements of this act are that the actuary be a Fellow of the Faculty of Actuaries or of the Institute of Actuaries, have obtained the age of 30 and be considered "independent" -- that is, the actuary cannot be under contract with the managing agent who commissions the report. The guides to professional conduct for the respective professions require the actuary to be familiar with Lloyds' syndicates. Alternatively, the actuary is to seek assistance from

actuaries familiar with Lloyds' syndicates or from the Honorary Secretary of the Faculty or Institute.

The report by the independent actuary is to be incorporated into the managing agent's report and will thus be in the public domain.

Since the actuary's opinion is not an opinion as to the adequacy of the reserves, the use of the term adequate is qualified to mean "adequate in the sense that they are reasonable in the circumstances." However, while an opinion of reserve adequacy is not required, a reserve estimate or premium estimate for closing purposes may be subsequently requested of the actuary; and the actuary's original opinion about the appropriateness of the managing agent's leaving open the year should be consistent with his subsequent findings.

For an adverse opinion (i.e., one that states that the managing agent acted unreasonably) the agent may decide either to close the year for a given premium quote or to solicit the actuary's input as to a reasonable premium quote.

ITALY

Italy requires an enrolled actuary (one who is on the legal role of the National Order of Actuaries) to certify the balance sheets of the non-life insurance company. The actuary is employed not by the company but by the company's auditors; direct interaction between the

actuary and the company is limited. The certification constitutes an assessment of the correctness of any statistical, financial and future expense assumptions. The opinion is not a determination of an independent estimate to which the actuary attests, but rather a broad reasonableness check.

FINLAND

Non-life insurance companies that conduct compulsory insurance business (workers' compensation and third party auto liability insurance) must, by law, employ a person who has attained actuarial certification by passing the actuarial examination (SVH-examination). Generally, the role of non-life actuaries in Finland is considered well-developed. Of the 219 members of the Finnish Association of Actuaries in 1987, a relatively high proportion -- 50 members -- were employed in non-life actuarial positions. The role of the actuary includes submitting expert statements that the calculations for technical reserves comply with the law, that premiums are sufficient, as well as statements concerning the solvency of the company.

OTHER EUROPEAN COUNTRIES

Generally in European countries (with the exception of Italy and Finland), there exists no statutory definition of an actuary and a dearth of non-life regulation requiring actuarial

reporting. Some countries lack an organized actuarial association in the U.S. or UK sense. The establishment of technical reserves is generally left to management or, in some instances, to auditors.

As yet, there is no requirement for an actuarial opinion in draft European Economic Community non-life insurance legislation nor is such a requirement likely in the near future. This poses a problem in connection with the exchange of insurance and reinsurance between different countries, just as different levels of regulation pose a concern for state regulators.

BERMUDA

Bermuda has and continues to take pride in its regulatory environment, which is considered considerably less onerous than that of the U.S. Much of the initial growth of the Bermuda insurance market was an outgrowth of favorable tax treatment; recent revisions to the U.S. tax code have essentially eliminated any tax advantages for Bermuda domiciles. However, regulatory advantages remain. Generally, the government of Bermuda takes the position that the insurance industry should regulate itself.

The issue of loss reserve opinions arose from the Insurance Act of 1978. Included within the act was a provision that insurers with greater than 30% of gross written premiums in products liability or professional liability (considered at the time to encompass the lines with the longest tail) have their loss reserves certified by a qualified loss reserve specialist. The opinion is a

broad statement consistent with the UK life actuary's statement and targeted at the professionalism of the actuary.

The statement of opinion is brief. It states that the individual believes that the reserves carried by the company are "good and sufficient"; attached to this broad statement is what is referred to as "other pertinent information," which is referenced in the opinion statement. Note that the actuary is opining only on the products and professional liability reserves and not on the reserves of the company as a whole.

In 1989, new regulations were implemented that more explicitly address the issue of discounted reserves. An actuarial certificate is now needed for all lines in instances in which the company would not meet its solvency ratios unless it booked discounted reserves.

Loss reserve specialists are now approved for a particular company for a period of three years. All CAS members are considered qualified loss reserve specialists. Other actuaries usually are approved if they can prove experience in loss reserving. Non-actuaries are approved if they receive the sponsorship of an approved actuary.

AUSTRALIA

The principal area of loss reserve opinions in Australia involves workers' compensation reserves. In most of Australia, workers' compensation is offered exclusively through state

monopolies. In some instances, these monopolies are required through statute to submit an opinion on their loss reserves to the state agency. Even in those states in which opinions are not required, most state agencies still will seek a loss reserve opinion. The opinion requirement generally extends to self-insurers, where self-insurance is allowed.

Recently the New South Wales Motor Accident Scheme added the requirement that an actuary must provide an opinion on auto premiums to the Motor Accident Authority (a state regulatory body). These rates must be refilled each year. As part of this opinion, the actuary must determine a best estimate of the present value of the cost of claims and associated expenses. It is interesting to note that this requirement is being implemented while the auto insurance industry is in a transition period, reverting to a competitive environment. The actuary not only opines on the overall adequacy of the rates but must state the extent to which the premium for each category is adequate.

In 1990, Australia issued new General Insurance Accounting Standards. The new standards are silent concerning the use of actuaries and the requirements for actuarial opinions for general insurance. However, the new standards require that claim liabilities are to be measured as the present value of expected future payments. If claims are expected to settle within one year of being reported, the standards do not require discounting. While the new standards do not include actuarial input in either the present valuing of claim liabilities or the determination of ultimate claim liabilities, it is likely that actuaries will be asked to assist in these areas.

SUMMARY

One of the chief constraints on more global application of loss reserve opinions for non-life insurance company reserves appears to be the lack of qualified actuaries in non-life practice. The field of non-life actuarial studies in other countries is generally not as developed or not as structured as in North America. While other countries usually have not progressed as far in the non-life actuarial profession as North America, they are poised for growth.

The recent NAIC loss reserve opinion requirement in the U.S. may cause other domiciles to review their position on opinions, after weighing the costs/benefits of enlarging certification requirements. The far-reaching impact of the NAIIO in requiring non-admitted insurers to submit opinions may provide a statutory role to actuaries of companies wishing to conduct excess and surplus lines business in the U.S.

Concern about leaving companies free to innovate and compete -- expressed by UK and Bermuda actuaries -- appears to be far less prevalent in U.S. discussions concerning loss reserve opinions. The UK view that the actuary's report should consider the overall financial condition of the company and Canada's requirements are much broader than the U.S. sole focus on loss and loss adjustment expense reserve adequacy.

As evidenced in Canada, the accounting practice used in statutory financial reporting influence the areas where an opinion is being offered by the actuary. U.S. actuaries generally opine on undiscounted loss reserves. However, should Australia institute use of loss reserve opinions, such opinions would be on a discounted basis consistent with their accounting practices.

Developments in the EC concerning loss reserve requirements will prove useful in determining if global application of opinions will be commonplace in the future. The issue of loss reserve opinions will be only one of many questions to be resolved in the economic unification of Europe.

Perhaps the issue of reinsurance, with its implications on solvency of many insurers, will provide the impetus for more far-reaching requirements of opinions. As the U.S. Subcommittee on Oversight and Investigations stated in its recent report, Failed Promises - Insurance Company Insolvencies, "nobody seems to know for sure where the reinsurance chain goes or whether its links are all sound." Requirement of loss reserve opinions for all reinsurers, both admitted and non-admitted, would seem to be a step to ensure that all reinsurance links are sound. It appears that the future use of actuarial loss reserve opinions in other countries will be dependent on the supply of qualified non-life actuaries, their acceptance and the occurrence or absence of notable insolvencies.

BIBLIOGRAPHY

Association Internationale du Droit des Assurances. National Reports. "Financial Supervision of Insurance Companies". 1990

Australian Accounting Standard. Financial Reporting for General Insurance Activities. Version E. January 1990.

Canadian Institute of Actuaries. Standards for the Appointed Actuary (discussion draft). May 1990.

Council of Lloyd's. Run-Off Years of Account Bylaw (No. 17 of 1989). December 1989.

Czapiewski, Colin. "What a Decade for Non-Life Actuaries". The Actuary. October 1990, pp.13-14.

"Final Action Favorable on Loss Reserve Opinions". American Academy of Actuaries Newsletter. Vol. 9. No. 1. January 1980.

The Insurance Act 1978 and Related Regulations - Bermuda, March 1986 rev. ed.

NAIC Proceedings. Task Force on Certification of Loss Reserves for Property and Liability Insurance Companies. Vol. 1. 1980, pp. 266-274

NAIC Proceedings. Surplus Lines (E) Task Force. Vol. 1 B. 1990 pp. 897-921.

NAIC Proceedings. Casualty Actuarial (EX5) Task Force. Vol. 2. 1988, p. 388.

Ramming, Corinne, ed. Captive Insurance Company Directory 1990. Tillinghast Publications.

Reynolds, D.I.W and John Ryan. Professional Guidance for Casualty Actuaries in Australia, Canada, United Kingdom & USA. Casualty Actuarial Society Call Paper Program - Evaluating Insurance Company Liabilities. May 1988.

Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, U.S. House of Representatives. Failed Promises - Insurance Company Insolvencies. February, 1990

Transactions of the 23rd International Congress of Actuaries. "The Function of an Actuary". Helsinki: July 1988

UK GN12: General Insurance Business. "Actuarial Reports". August 1987.

UK GN14: Actuarial Reporting on Lloyd's Run-Off Years of Account. 1989

Working Party for General Insurance. September 1989. Actuarial Reporting In General Insurance.