

General Insurance Study Group - Brockenhurst Seminar September 1978
The role of the Actuary in Non-Life Reinsurance and Lloyds

Introduction

The Actuary in the U.K. has had only limited involvement in the Non-Life Reinsurance and Lloyds fields. In recent years there would appear to be the opportunity for the Actuary to play an increasing role in the analysis of statistical and financial data for these two fields.

The session arranged at the Seminar at Brockenhurst will give the participants the opportunity to listen and join in a discussion between two Actuaries and two with Reinsurance & Lloyds backgrounds.

It is anticipated that as well as giving Actuaries the chance to exchange ideas with experts from these two areas it will also be educational.

The principal areas for discussion will be:-

- (a) Technical Reserves
- (b) Financial Analysis

Technical Reserves

The technical reserves are:

1. IBNR premiums
2. Outstanding claims
3. IBNR claims

The definition of IBNR reserves in Non-Life Reinsurance is broadly:-

'That reserve required to cover those claims which have occurred but have not yet been reported to the Reinsurer plus movement on those claims already reported less future premium income not yet debited.'

In reinsurance the IBNR reserve is a sizeable proportion of the technical reserves especially in long tail liability classes, e.g. Accident, Excess of Loss.

At Lloyds they use the Lloyds Audit formula to estimate the fund required for liabilities not yet reported. The Lloyds Audit formula is similar to the grossing-up method. Different formulæ (table of factors) are available for Hull and Cargo for each of the Marine and Aviation portfolios.

The principle areas of discussion will be:-

- (a) How important is the estimate of IBNR to Lloyds members.
- (b) How do Lloyds and Non-Life Reinsurers assess their IBNR reserves - presumably statistical methods are used especially for long-tail liability classes.

- (c) What statistical information should be collected and what exogenous factors should be allowed for? Suggested points are:
- (i) Currency
 - (ii) Inflation
 - (iii) Different levels of Protection
 - (iv) Accounting and administrative delays
 - (v) Individual claims information.
- (d) Can we expect Reinsurers and Lloyds syndicates to collect this amount of information?
- (e) Do they have the computing facilities for analysing the information?
- (f) Lloyds Audit formula
- (i) What is its value?
 - (ii) Can the Actuary produce anything better?
 - (iii) Does the formula allow for discounting?
 - (iv) How often is it reviewed?

Financial Analysis

The three main areas for discussion are:-

- (a) Profit - objectives and measurement
- (b) Investment - strategy
- (c) Retention levels and solvency

Profit

To operate any business there should be objectives, one of which should be a profit objective.

- (a) Can the Actuary assist in measuring profit?
- (b) What is the relative profitability of the different classes?
- (c) What should be used to measure profit? - Return on capital employed?

- (d) Should more consideration be given to the level of funding of reserves for the different accounts and its effect on the release of surplus?
- (e) Should discounting of reserves be used?

Investment

In business with large funds meeting future liabilities there should be an investment strategy.

- (a) What should that strategy be?
- (b) Do Lloyds syndicates attempt to match assets with liabilities?
- (c) To what extent do reinsurers match assets with liabilities by term and currency? Is it important?

Retention Levels and Solvency

- (a) How should the solvency level be related for the different classes of business? How important is it for Lloyds syndicates and Non-Life Reinsurers?
- (b) What should reinsurance companies and Lloyds syndicates own retention levels be? How can they be assessed? Should they relate to the solvency margin, to premium volume or to what?

T.G. Clarke,
Actuary

25th July 1978