

In a second model the distribution of the losses by size is discussed introducing the Log-normal distribution, while in a third model the Poisson distribution in model one is replaced by the Negative Binomial distribution by assuming that the distribution of probabilities of accident within the classification follows a Pearson-Type III curve. The problems of partial credibility, stability in rate revision, rate relativities, credibility and experience rating plans, merit rating, reinsurance and profit-sharing are treated and complete this most interesting paper.

This outline on the different problems involved in credibility helps to enrich the literature. It may be recommended to all actuaries.

*The Classification of Accident Risks*, by J. VAN KLINKEN (*Internationale Zeitschrift für versicherungsmathematische und statistische Probleme der sozialen Sicherheit*, Nr. 5-6, 1960).

This paper deals with certain problems of classifying risks. Under the provisions of the Dutch Accident Act all enterprises pay premiums according to a risk number previously allotted to them and based on earlier experience. The problem of determining new risk numbers arises when a new enterprise has to be insured.

In section 1 the author shows that the classification is reduced to a regression problem if the total number of accidents only is considered, thus neglecting subdivision into certain types of accident. A modified minimum  $\chi^2$  method is mostly used in cases when a Poisson distribution is justified.

Section 2 deals with the so-called discriminant function technique. Detailed information of the number of accidents according to definite types requires multi-variate methods. Again the application of multiple Poisson distributions leads to particularly simple solutions.

Finally, in section 3, some tests in connection with discriminant analysis are described. These tests permit objective standards to be obtained for classification purposes and are based mainly on the scheme of multiple Poisson distributions.

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