

are available in the Institute of Actuaries' literature and in particular they do not highlight the pragmatic aspects of the problem. There have been some papers written in the ASTIN bulletin e.g. Pitkanen, Tariff Theory (1974); however, they are generally theoretically based. The first full analysis found in the literature was Kahane and Levy, Regulation in the Insurance Industry: determination of premiums in automobile insurance (1975). However, the emphasis was statistical modelling rather than discussing the practical problems involved in premium rating. Recently, two groups have published studies concerning the problems of rating. In the Netherlands, a group of actuaries were asked to revise the motor rating structure and this is written up in the Netherland Group Report, New Motor Rating Structure in the Netherlands (1982). At the United Kingdom General Insurance Study Group meeting in Stratford-upon-Avon (1982), there were four case studies from different countries on premium rating. Hence, in general, there is little written assistance to help either the actuary new to motor insurance or the actuarial student trying to appreciate the practical problems of premium rating.

The paper emphasizes a detailed within-portfolio analysis, taking into account simultaneously, *inter alia*, some of the major underwriting factors and separate statistical analyses of claims frequency and costs, together with expenses, to arrive at a breakeven premium. By performing this detailed analysis, it is believed that the person responsible for the premium decision will be able to restrict his attention to the sensitive areas where judgement has to be exercised. The paper develops a 'points system' which is similar to a number of premium systems operated by United Kingdom Insurance Companies. This 'points system' is used to compare different sets of assumptions. Finally, an analysis of surplus is described with an example.

PENSIONS AND BENEFITS IN A REWARD STRATEGY

BY G. R. G. WILSON

(Synopsis of a paper presented to the Society on 15 February 1983)

TRY asking the Chief Executive of a large United Kingdom company why he decided to have his present pension scheme rather than one costing 5% of payroll more or less. Compare the answer with the answer to a question involving the same amount of money in a different area—say why he decided to go ahead and market his latest high-technology product rather than lower-technology products his Japanese competitors are now marketing. His answer to the second question will probably mention a long-term strategy, a short-term set of business objectives, an evaluation of the impact of the particular decision against a set of specific alternatives and a firm commitment by the Chief Executive to the success

of that decision. His answer to the first question will be less convincing, and often involves a shrug of the shoulders and a denial that he had anything to do with it.

The paper sets out an approach to pensions policy by companies that enables them to have a more effective decision process and to set out more clearly the place of pensions in employees' total reward.

The paper covers:

- * decision processes—how reward objectives need to be set to fit the business and how benefits can help to meet such reward objectives;
- * measuring benefits against objectives—how to present pensions, other benefits and total reward in a company in comparison to practices in other organizations. How to value pensions for the purpose by establishing a model employee group and valuing your and other pension schemes to that model group. How to assess employee perceptions of benefit value, and contrast this with cost and absolute value;
- * future developments in policy—some thoughts including:
 - pressure for more appreciated results from benefits expenditure;
 - some job groups needing less career-oriented, long-term reward structures;
 - contributory access to top-hat benefits for high-technology people;
 - more flexible benefits packages;
 - employees demanding more control, less paternalism in benefits.