

The problem is that the yardstick Miss Salzmänn has proposed can be described only in mathematical terms. Actuaries need credibility. They stand to lose their credibility if they are not able to talk about their business so that lay people will understand. The worry here is that because this important yardstick cannot be described in words, but must be demonstrated mathematically, it may never be sold and will never be used. The evaluation of loss reserves is not an abstruse subject, like credibility, for instance, or variance. Rather it is an area of our business where almost every informed practitioner has ideas and likes to talk about them. A system that can be explained only mathematically may be rejected by the industry even if it has theoretical merit.

The reviewer hopes that readers of Miss Salzmänn's paper and of this review will think seriously about the public presentation of actuarial ideas. Even the concept of credibility can be illustrated for lay people if the analogy of thrown dice, or tossed coins, is used. But the president of an insurance company, if he is not an actuary, is going to question Miss Salzmänn's yardstick where his own reserves are concerned, because there is no concept that he can grasp.

It is hoped that Miss Salzmänn's rebuttal to this review will also be read and seriously considered, because it is a good one. The subject she has tackled is important to actuaries, but, in the opinion of this reviewer, the communication problem is also important and deserves attention.

AUTHOR'S REVIEW OF DISCUSSION

Mr. Rodermund's review criticizes the yardstick proposed in my paper because of its phantom qualities in that it is a mathematical expression devoid of verbal explanation. This criticism is well deserved and may, as the reviewer points out, seriously detract from both the acceptance and use of the new yardstick.

This lack of verbal identity was a matter of concern to the author when the paper was written, and there are some subtle, and not so subtle, references to this dilemma in the paper. The most obvious reference, of course, is that the author had no better name for the new yardstick than "formula base". Then there was the rather lame argument made in the paper that the results themselves would sell the product.

Mr. Rodermund's review did point out the major stumbling block to any immediate widespread use of the proposed yardstick, but the impact of his criticism diminishes when one considers the effectiveness of the alternatives. Such alternatives are those presently in use which are covered in the paper itself. The other alternatives fall into one general category. These latter approaches, in one way or another, use an expected loss and loss expense ratio to generate expected liability levels with which reported liabilities are then compared. On this basis, unity or greater becomes the rule-of-thumb for redundancy. Such yardsticks would be simple to explain, simple to apply and simple to make comparisons by company. But lost in this shuffle of over-simplification is the fact that all of the answers would be dependent upon the accuracy of the selected expected loss and loss expense ratio.

Because liability levels, and inherent loss and loss expense volumes, are equally difficult to measure, a simplified version of one should not be used to generate a yardstick for the other. Furthermore, any such subtle infusion of assumptions for the sake of simplicity might also tend to under-emphasize the tolerance needed in the application of a yardstick to a very complicated and sophisticated actuarial compilation. For this reason alone, such alternatives must never be produced or encouraged by the profession that lays claim to the need for such expertise in this area. As a result, the proposed yardstick incorporates the relevant financial data, as reported in the Annual Statement, unadjusted for any assumptions on that data.

The author recognizes and accepts the criticism made by Mr. Rodermund, but also recognizes the very great need for a better yardstick. This better yardstick has to be one that will produce satisfactory answers while still recognizing the tolerance and judgment needed in its application. This primary principle, in the opinion of the author, should not be compromised to meet other concerns, regardless of their individual merit.