THE INTERPRETATION OF LIABILITY INCREASED LIMITS STATISTICS

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DISCUSSION BY THOMAS W. FOWLER

In reviewing a paper one must determine at the very outset what the author's primary purpose was in writing the paper. Having ascertained the goal, we are then in a better position to make the determination of whether or not it was attained. It would appear from Mr. Lange's comments that he wishes us to view his paper as a philosophical discussion rather than something definitive and susceptible of rigorous analysis. On reading the paper it is well to keep this fundamental thought in mind since statements are made throughout the paper which implicitly call for further explanation or in themselves raise further questions. In another context this could be a basis for criticism; however, the author's hypothesis gives him a wide latitude in this regard.

Mr. Lange comments that attention in the past, insofar as the papers in the *Proceedings* are concerned, has been almost exclusively limited to rate-making techniques for basic limits coverage since these have been firmly established and widely accepted. In retrospect, it is somewhat unfortunate that this has been the case. Perhaps, inadvertently, the emphasis in this particular area has caused the rate-making process to be associated directly with losses. Another way of saying this is that, although "past experience" is only one of several factors that are considered in the rate-making process, actual practice has given it a much used and unfortunately sometimes abused role. I hope that no one will conclude from my remarks that past loss history, no matter how erratic, should be disregarded, even the situation where there is a total absence of losses. The question becomes one of interpretation of the loss pattern, along with other indications of exposure.

We are painfully aware that a critical area in the rate-making process is that which is involved with low frequency — high severity situations — where, in effect, an absence of losses or a paucity of losses is usual. As a matter of fact, insurance companies in general and, reinsurers in particular,

have always been faced with pricing situations where loss patterns are extremely irregular, or even nonexistent, but where potential exposure to severe loss is present. (The relative importance of such situations has increased in recent years because of such things as larger concentrations of value and larger jury awards.)

Even though the paper is admittedly a philosophical one, I was somewhat disappointed that a short explanation of the present method of the Insurance Rating Board in arriving at their excess limits factors was not included. I am not referring to the almost universal procedure of applying factors to basic limit rates, but to the method by which the factors are obtained, especially those at the higher levels. Perhaps this could form the basis for a future supplement to this general topic. Nonetheless, Mr. Lange's suggested use of the ratio of losses, within each increased limits interval to basic limits losses, provides a solid initial approach for further study; however, it raises some pertinent questions as to how such loss statistics should be used. Thus, the loss distributions which are developed arise out of a certain spread of exposures. I think it must be clear to anyone carrying this research further that a functional relationship must be established between loss and exposure before any valid inferences can be drawn from the loss data.

We can follow this line of reasoning further by asking how increased limits intervals are valued (or rated), when the losses within these intervals become thin or become negligible. Mr. Lange alludes to this problem near the end of his paper when he makes the statement that for limits above $100,000 (e.g. $1,000,000), risk is more important than pure premium. He leaves us with the impression that for excess limits intervals possessing a certain undefined level of losses (the lower levels) a procedure would be used using his "ratio of losses" method, to which I previously alluded. We are not told how to proceed when we go beyond these levels; however, one possibility would be to explore the lower distributions as a means of forecasting what will transpire at the higher levels. This is another challenging problem which Mr. Lange gives us to solve.

In my opinion, the greatest contribution of the paper is its timeliness. It is significantly concerned, although indirectly, with one of the major problems of the day — capacity, or more correctly, the lack of capacity. Specifically, Mr. Lange leads us into a rating region where the price for exposure to loss must be measured by means other than the loss itself.

In this regard Mr. Lange presents us with two basic problems. The explicit one is that there must be developed a technique of rating for areas beyond the so-called basic level. This is a fit technical problem for actuaries to tackle; however, in my opinion it is secondary in importance to his second point — which is implicit in his paper. This is that the Insurance Industry and the Reinsurance Industry must spend much more time and effort in the field of increased limits exposure. This is an area which is already of significant importance and it is growing at an accelerated rate. Both buyers and sellers of insurance and reinsurance must become better acquainted with the price and capacity relationship which is a significant part of the Excess Limits Area. Until this groundwork is laid the acceptance of rating techniques, no matter how elegant or rational, will be difficult to come by.

DISCUSSION BY J. ROBERT HUNTER

THE MISUNDERSTANDING

"Dear Prudence, won't you open up your eyes?"
— John Lennon

The making of rates for increased limits of liability is not, as Mr. Lange points out, given coverage in the *Proceedings* even in proportion to its importance as a premium-producing element in the overall structure of our business. Therefore, not only are executives and underwriters confused by the available experience, but also many actuaries are drawing wrong conclusions. There has been and is much ado about "gravy" in the increased limits factors, but this may well be due to a misunderstanding of long term loss development, different trend, and different credibility criteria (discussed below), as these elements are lost in the unstratified calendar year result. If it does nothing else, Mr. Lange's paper serves as an eye-opener for those in prudent management yet capable of eye-opening. As an aside, this eye-opening process seems to have occurred in the reinsurance area, as evidenced by a contraction, from 1966 to 1968, of 11% in reinsurance company countrywide automobile bodily injury premiums earned, while combined stock and mutual premiums earned increased 18%.[1] Capacity, anyone?

[1] New York Insurance Department's "1968 Loss and Expense Ratios," page 110. It is recognized that the reinsurance premium split may be misleading, but these data should be indicative of a bad situation.