

## DISCUSSION BY ROBERT L. HURLEY

The reader should have very little difficulty with Mr. Buffinton's interesting paper on "The Low Valued Risk." Its purpose is indicated by the subtitle, "A Study of the Premium Required for Habitational Risks of Various Policy Amounts." Within the specified framework, the reviewer found himself often in accord with the author's observations. There were, however, some phases of the argument on which we should like to comment.

The author summarized his paper with five conclusions. These will serve as a basis for specific evaluation of the author's thesis after some general remarks on the developing argument.

In an early section of his paper, the author correctly, I believe, maintained the position that the fire loss ratio on the habitational classifications has advanced with the switch of the "better" business to the Homeowners policy. The value judgment, "better," is used in the, maybe, general belief that the "fire" loss ratio on Homeowners (if we had such a figure) certainly could not be as unpalatable as those currently shown on straight fire dwelling business. It is hoped that the Dwelling Loss Constant Plan being filed by many Fire Rating Bureaus will help to improve the generally current unsatisfactory experience in the dwelling fire classes.

However, at this point the author seemed to imply that the situation is quite all right on the fire business, otherwise current fire rates are even redundant for other classes. This, unfortunately, is not so. There are those who believe that even an incurable optimist might well entertain some misgivings on current outlook for fire loss ratios on most classifications. The reviewer would like to be spared a recital of the unfavorable factors affecting the outlook for fire classification loss ratios. Maybe it would suffice just to note that Mr. Buffinton used five year written and paid loss ratios of happier days. They constitute a most imperfect representation of the prospective incurred loss to earned premium at effective rate levels for the years ahead.

The reviewer read with interest the section of the paper dealing with the Dwelling Loss Constant Plan, which has been filed by a number of Fire Rating Bureaus in response to the abnormally unfavorable experience on these risks. Mr. Buffinton noted that his study evidenced a similarity of results with the schedule of rates filed by the Fire Bureau. However, in going over the various exhibits, the reviewer noted that the figures indicated only a relatively slight trend towards higher loss cost per \$100 insurance on the smaller risks.

For example, Exhibit 4 shows practically the same loss cost for the risks under \$2,500 liability as for those in the size group \$2,501-\$5,000. The actual decrease is from 15.50¢ to 14.95¢, or only 3.5%. Moreover, the loss cost shown for the risk size \$25,001-\$50,000 (i.e., above which the data are extremely thin) is only 15% less than for the smallest risks. Similar observations might be made on Exhibit 5 although the trend in Section C (Habitational Lines only) is somewhat more pronounced. It would appear that the justification for the rate graduations in this paper would be influenced to a considerable degree by the treatment of expenses.

On the other hand, the Bureaus' Dwelling Fire Loss Constant Plans were based primarily on considerations related to the loss portion of the premium dollar. The Bureaus in their studies noted that there was apparently no significant trend in the average loss per payment as the risk size increased. Even more compelling were the data from a number of large companies show-

ing that the loss ratios on dwellings insured for less than \$2,500 were running almost 70% higher than the average for the class—and more than twice the loss ratio for risks insured for \$10,000 or more.

The Fire Bureaus were not unaware that the expense ratio on a \$2,000 dwelling policy was not likely the same as that on a \$20,000 policy. However, since a direct justification might be offered from the loss portion of the dwelling premium dollar, there was little need to become involved in disputes on the handling of expenses, which some regard as an inexact science that can easily degenerate into a makeshift art.

Many readers may benefit from the author's disclosure of the effect of a concentration of a company's portfolio on a risk classification once thought desirable, now proved unprofitable. Now these so-called "bad" risks (i.e., solely with advertence to higher than average loss ratio and expense ratios) were always present in the portfolio. Their effect was submerged in the overall class average. This will ever be so when rates are made on a classification basis.

However, every refinement in classification will produce "better" and "worse" than average risks. Both the discomfort of the underwriter who finds himself with a preponderance of the worst risks from the prior overall class and the delight of his more successful rival may alike be sobered by some mature reflection.

The overextension of the classification principle can ultimately prove expensive to the very people for whose benefit it was allegedly devised, the policyholders. It is the policyholder who pays for the increase in expense in order to measure the insurance cost with ever greater refinement. Except for those policyholders favored with significantly lower rates, all others must bear not only the higher loss cost but also likely the larger share of the increased expenses. Moreover, there are students of the business who warn that classification refinement pursued indiscriminately could defeat the insurance principle itself. While the reviewer has not yet succumbed to panic on the classification issue, he must admit that a company which may have geared its merchandising to class deviations from Bureau rates might have some extra cause for alarm wherein the refined classifications seem to indicate the business is probably not as good as once imagined.

Let us now turn to the author's five conclusions on which, after paraphrasing, the reviewer will offer some comments.

1. *Fire and Allied Lines Rate Formula should include provisions for fixed expense, variable expense, losses, profit and catastrophe.* One can hardly disagree with the principle of this conclusion which says in effect that rates should cover all costs plus a profit and catastrophe factor. However, the reviewer has some reservations (not exclusively semantical) on the term "fixed." The misgivings on the word "fixed" stem back some years, when there was considerable discussion on the "fixed" cost of issuing a policy.

While there was, as I recall, some willingness to accept a figure in the neighborhood of \$4.50 as a reasonably accurate figure for the "fixed" cost of issuing a fire policy, unfortunately this absolute standard did not remain "fixed" very long but drifted ever higher with the uptrend in the underlying economy.

Further, the exact method of establishing the rates so they provide for the total cost may possibly be subject to various treatments. The Bureaus now

have a recommended formula which expresses certain expenses as varying with written premiums and other expenses as varying with earned premiums in the determination of Fire and EC overall rate levels.

2. *The premium required to pay losses and the policy size are related according to the functional relationship  $y = ax^b$ .* The reviewer, too, believes that the fire loss cost per \$1,000 insurance on dwelling properties increases as the policy size decreases towards the lower end of the value scale. This may also be true for some other fire classifications, although it does not seem likely to be characteristic for those many fire classifications wherein the incidence of loss is of an abnormally small order of magnitude, and the severity factor pronounced.

The reviewer would be surprised if the author did not entertain the same reservations on the unassailability of any specific exercise in curve fitting despite the understandable delight to be derived from matching up some statistical observations against one of a number of theoretical curves.

With no thought of disparaging the author's ingenuity in fitting his data to a power formula, it is noted that the class in the top (open) end of the scale involved only \$193,000 in losses over the entire experience review period. When we consider the effect that just one or two losses could have on the average loss cost for this size group, we would hesitate to credit such a limited sample as a base on which to predicate an Industry statistical law that the premium required to pay losses is related to policy size necessarily according to a power formula.

3. *Average premium size affects a company's expense ratio, particularly a company specializing in private dwelling business.* The reviewer agrees that a company specializing in low premium policies may well run higher expense ratios than a company with a better balanced book of business. It is hoped that the Dwelling Fire Loss Constant Plan will ameliorate this situation at least to some extent.

4. *The expense retentions written into rates should vary by class of business.* The reviewer doubts that the author really intended that the expense as well as the loss experience for each class must be reviewed in the occupancy class adjustment procedure as he stated on page 17. The Bureau has over 600 class breakdowns to review losswise for each state. Mr. Buffinton could not have seriously meant that a statistical system be set up to collect expenses in any such detail, but would settle for a very limited number of broad classification groupings.

However, to get expenses allocated with reasonable accuracy on just a line basis by state is no easy task. To dig down below the line by state figure into the understrata of occupancy class may be a cost accountant's dream, but it could be a nightmare expensewise.

The pursuit of absolute equity is a burden not lightly to be undertaken. Attempts presumably could be made to arrange our scale of prices with ever increasing precision. But neither Insurance nor any other industry can afford not to question the net social value of such a project. Reasonable equity is all the Industry can expect and maybe is all the buying public can afford.

5. *This study indicates that current Fire and Allied Lines rating practices develop inadequate rates for dwellings and excessive rates for high premium risks or occupancy classes.* As mentioned previously, he would be a rare fire

underwriter who believes that he can afford to be sanguine on the prospects for the general run of fire classifications. There is, of course, the pleasing deception, sometimes irresistible, that, because the prospects for losses "A" through "M" (say, dwellings) are unfavorable, those for Classes "N" through "Z" (say, all other) must be favorable. Still, as Montaigne observed years ago, "good" does not necessarily follow as an offset to evil, rather a second evil can occur, even worse than the first.

The reviewer, too, likes to be optimistic. The Fire and Allied Lines business has the prospect of brighter days if it can solve some really difficult problems. But quite probably there are no longer any "sure for a profit" classes in fire insurance. The reverse is more likely true.

The reviewer enjoyed Mr. Buffinton's paper. It should prove a valuable addition to our Proceedings.