

compound distribution. Perhaps the Poisson Pascal distribution might serve as a useful first approximation.

Despite these comments Mr. Hewitt's paper is interesting and informative. This discussant learned a good bit from it and it does seem to be the first paper to develop formulae for forward claim probabilities by classes. It is a worthy contribution to the growing body of literature on the subject.

AUTHOR'S REVIEW OF DISCUSSION

CHARLES C. HEWITT, JR.

The author would like to express his appreciation to Professor Dickerson for his kind treatment of the paper under discussion.

He is in complete agreement with most of the items which Professor Dickerson refers to as "sins of omission." Although pleading guilty on virtually all counts of the indictment, I do wish to indicate certain extenuating circumstances:

- (1) As freely indicated, my paper is built on the foundation of earlier work in this field by Lester Dropkin. As Professor Dickerson correctly infers, Mr. Dropkin and I did arrive at our conclusions with respect to forward claim frequencies of stochastic groups independently, and I suspect almost simultaneously.

Therefore, there is some duplication of Dropkin's work in my paper. Professor Dickerson will be glad to know that Mr. Dropkin and the writer got together on the matter of symbols and when these two papers are printed in the Proceedings, there will be a general agreement.

- (2) Professor Dickerson suggests that the creation of groups based upon driving record is not completely random. I think that our difference on this matter is a question of semantics (he is speaking of the shell into which the group is placed, and I was speaking of the aggregation of individuals that are placed in the shell).

The author is particularly grateful to Professor Dickerson for two items in his review:

- (1) He recognizes that the subject matter of this and earlier papers consists basically of actuarial models for the rating of Automobile insurance. It is to be expected that no model will exactly fit the actual data.
- (2) Professor Dickerson devoted considerable space (and rightly so) to the lack of communication between European and American actuaries. He says "There is apparently a total lack of familiarity with European literature on the subject on the part of most Americans." I would like to add my voice to that of Professor Dickerson in urging this

Society to make available to its members in English much more of the European literature in this area and in the more general area of collective risk theory. Professor Dickerson does not state outright, but does imply that European actuaries are substantially ahead of American actuaries in this field. In my mind, there is no question that this is true. However, we would be a lot further behind European actuaries in this field were it not for the recent papers by such individuals as Bailey, Dropkin and Simon. I hope we can look forward to many more papers of this general type in our *Proceedings* in the near future.

COVERAGE AND UNDERWRITING ASPECTS OF BURGLARY INSURANCE

BY

WALKER S. RICHARDSON AND RICHARD J. WOLFRUM

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DISCUSSION BY T. E. MURRIN

At a time when an increasing frequency of crimes has adversely affected underwriting results for Burglary Insurance, Messrs. Wolfrum and Richardson are to be commended for their timely and valuable contribution to our *Proceedings*. That this is the first paper presented to the Society on the subject, "Burglary Insurance—Rates and Ratemaking," should, as the authors suggest, help raise the veil of mystery that has shrouded this form of insurance. Furthermore, the paper should serve as a useful reference to the students of the Society preparing for its examinations.

The authors have chosen to limit their discussion to non-banking commercial sublines, noting that the trend in providing coverage on banks and individuals is towards the indivisible package policies.

A substantial part of this paper deals with a description of the various commercial contracts, and based on my review it appears that the authors have covered the subject matter clearly and completely. The summary exhibit of the many burglary forms is unique for its clarity and simplicity and should be of great assistance to one not familiar with the various relationships of the different burglary policy forms. Some comments on our part at this point might be helpful.

The authors state that burglary underwriters have generally refused to offer insurance for the disappearance peril on merchandise outside the insured's premises. This is due to the fact that the nationwide definition of forms and coverages consider this inland marine coverage and thus is provided under appropriate inland marine policies.

The authors further point out that coverage for money in some cases includes coverage for other property, such as merchandise, but this coverage is incidental. Undoubtedly, there are many cases where there is a heavy mer-