DISCUSSION BY FREDERIC J. HUNT, JR.

The problem of dwelling policies written for small amounts is one with which many in the property insurance field have long been concerned. Originally attention was centered on insurance to value as shown by a 1952 statement that ". . . the loss value dwelling continues to present the most serious underinsurance problem."[1]

In 1955 and 1956 the subject received considerable publicity in the state of Texas, where deviations using rates graduated by size of policy were filed as a result of information developed by the Texas Checking Office and others. At that time the problem was described as "the failure of the present method of rating dwellings (for both fire and extended coverage) to take into account the very substantial differences in loss ratios for varying amounts of insurance."[2]

It was also stated that ". . . it appears conclusive that the vast differences in results . . . are not related to insurance to value. . . ."[2]

While the problem is one of long standing, the departure of most of the larger dwellings to the Homeowners Policy has in recent years served to highlight the poorer experience of the small policies. This presumably has served to spur on the various interested parties in their studies and has resulted in the recent introduction of the "loss constant" method of rating into the dwelling fire schedules, with the method already being in effect in a dozen or so states. Thus Mr. Buffinton's paper comes at a particularly appropriate time and is a most welcome and valuable addition to our proceedings.

With the "loss constant" method an accomplished fact, and one which will obviously be with us for some time to come, it is a source of no little comfort that Mr. Buffinton's independent investigations produced comparable results in important areas. The early "loss constant" filings had to make use of limited and unrefined data which supported the broad principles of the filings and clearly showed the disparity in experience between smaller and larger policies. However, the actual premium and rate schedules involved considerable judgment because of the lack of detailed information. Thus the importance of the similarity of results would seem to outweigh the question of whether the constant should be described as "loss" or "expense".

There are several points on which I wish to comment. The first, while not necessarily material to the conclusions in the paper, is the unfortunate use of written premiums and paid losses in the author's Exhibit I, since earned premiums and incurred losses are a much more accurate reflection of actual results. We are attaching Exhibit A which shows that the National Board earned-incurred experience on habitational risks has deteriorated from 1956 to 1960 but not as rapidly as written-paid figures would imply. Also the remainder of the fire account has improved. However, with a 48% expense ratio,[3] the earned-incurred results for both categories indicate underwriting profits or losses of only three points or so, rather than the dire habitational loss and handsome all other profit which would be assumed from the written-paid figures.

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[1] The National Underwriter (February 7, 1952), Vol. 56, No. 6, p. 2.

[2] Tom R. Chatfield, "Original 'Chatfield Report'—Refinement of Dwelling Fire and Extended Coverage Rates", dated September 7, 1955.

[3] Based on the total expenses of 20 of the largest stock companies as shown in Table 9—as New York Insurance Department Loss and Expense Ratios booklet.

A second point to which we must take exception is the author's assumption that there is a fixed cost per policy which is the same for all classes of fire business and that the expense ratio on dwelling policies will therefore be higher because the average premium size will be smaller than that of other fire policies. Other things being equal, we, of course, agree that, because of certain of the expenses included under the other acquisition and general expense categories, the ratios for these categories will be less for policies involving larger premiums. However, other things are not equal for all classes of fire insurance. The method of handling dwelling business is materially different than that for commercial business. Particularly for the smaller dwelling there is little if any underwriting. Dwelling policies are usually simpler and should cost less to prepare. They involve little, if any, of the special inspection, rating, mapping and similar detailed procedures necessary in the writing of many of the other fire classes. For policies of the same size, the cost per policy in the dwelling classes should accordingly be less than that for the other fire classes. Therefore, even though the average dwelling premium is smaller than the average of all fire policies, the total expense ratio will not necessarily be higher.

The subject of dwelling expenses as compared to the fire total received considerable attention during rate hearings held by the New York Insurance Department in 1955, 1956 and 1957. In the Allstate case we find statements such as the following:

"The writing of the fire risks in the commercial classes involves expense elements that do not occur in the dwelling classes, because commercial risks involve high units of coverage and all kinds of industrial premises, and are therefore rated on a building-by-building basis. . . ." "It is admitted . . . that the cost of loss adjustment expense, general expense and other acquisition expense is higher on mercantile than on dwelling insurance."[4]

In the North America case which followed, the Superintendent included the following paragraph in his decision:

"I am satisfied that the North America Companies properly used their expenses for all fire classes substantiating the independent filing, since their expenses for the dwelling classes are slightly lower than the average of all fire classes. Actuary Longley-Cook testified that while the loss adjustment expense ratio for dwellings is slightly higher than for all fire classes, his studies showed that lower other acquisition and general expense ratios for dwellings more than outweigh the higher loss adjustment expense. It is recognized that a number of items of expense are not applicable to dwelling class business."[5]

We do not have a list of the companies specializing in dwelling business which the author cites in support of his position that the expense ratio for such companies is higher than the standard expense formula so that we cannot attempt an analysis of the reasons for their higher expenses. However, we do suggest that at least some such companies have higher other acquisition and

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[4] Brief on Behalf of Respondent-Petitioner Allstate Insurance Company, pp. 48-50 Matter of Cullen, as Treasurer of NYFIRO, etal. v. Holz, as Superintendent of Insurance of State of New York, and Allstate Insurance Co., 7 A.D. 2d 718, 181 N.Y.S. 2d 163 (1st Dept. 1958), aff'd. 6 N.Y. 2d 971, 161 N.E. 2d 392 (July 8, 1959).

[5] Opinion and Decision of Leffert Holz as the Superintendent of Insurance of State of New York In the Matter of The Independent Rate Filing for Dwelling Classes By The North America Companies, September 4, 1957, p. 3.

general expenses not because they write dwelling business, but because of their method of operation. Direct writers and other companies not operating through the independent agency system reduce or eliminate the commission element of their expenses but must absorb into the other elements of expense some of the functions which would otherwise be performed by the independent agent. One instance of this appears to be the Government Employees Insurance Company, which in 1960 had a negligible fire commission ratio of 0.2% but a ratio of other acquisition and general expenses to net earned premiums of 29.1%, comparing with the stock company aggregate other acquisition and general expense of 15.4%. (In fairness to Government Employees, it should be pointed out that their "other expense" drops from 29.1% to 18.5% when related to written premiums and adjusted to full manual.) That certain items of expense are transferred from commission to "other expense" in the direct writer's operations was admitted by the Allstate Insurance Company in the New York case previously mentioned, as follows:

"It is contended that under the old-line agency system, the agents perform certain services (policy writing, underwriting, coding, billing, collecting premiums, etc.) for which they are paid out of their commissions; that under the Allstate system these functions are performed by the company and must thus be added to the Bureau factor of 6.3 . . . in Allstate's expense tabulation. "So much is granted."[6]

Finally, while we are in agreement with the indicated results with respect to loss or expense constants and with the proposition that the policies for small amounts of insurance should be charged proportionately larger premiums than average sized policies, we are not convinced that this relationship continues all the way up the line. In other words, we feel that large policies may not be entitled to a proportionately lower premium than medium sized policies. The bureau "loss constant" method, while increasing the premium on small policies, usually reduces the premium for larger policies with the maximum reduction going to the largest policies. The extreme effect which this method can have is indicated by the first "loss constant" filing in Tennessee in which risks with the best protection and with insured amounts over $50,000 received reductions of over 50%. No attempt was made to justify such large reductions, the filing being primarily concerned with the justification of the increases on the small policies and the assumption apparently being made that virtually all risks of any appreciable size would be insured under a Homeowners policy. With the currently existing price comparisons between Homeowners policies and Fire and Extended Coverage policies of equal size, the assumption is no doubt valid but does not make the resulting premium correct. In fact, with the price differential, underwriters might do well to be particularly cautious concerning larger dwellings written on a traditional fire policy.

The loss data developed by the author does not appear to segregate buildings from contents and, in fact, the curve depicted in his Exhibit 6 appears to be based on his data for all fire and allied lines. This results in having amount groups one and two disproportionately affected by contents policies, while the non-habitational policies have an effect on all sizes. The experience for dwelling contents has long been quite different (in most cases much worse) than dwelling buildings and some of this difference can be presumed to be

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[6] Op. cit.

attributable to the different exposure of contents with respect to frequency and small losses such as cigarette burns and also to the greater effect of under-insurance. Thus the buildings and contents pose at least slightly different problems, the solution to which may not be exactly the same.

Also, as would be expected, the loss data is much more limited for amount groups 5 and 6. The curve on Exhibit 6 passes through the premium point indicated for group 6, and yet this group can carry very little weight in terms of number of risks or of losses paid. In the fire field a total loss is always a very real possibility and represents a substantial part of the total hazard. A single total loss to the average size risk in group 6 would increase the loss cost of the group by more than a third.

If we were to recompute the curve in Exhibit 6 on the least squares method weighing the points on the basis of the liability figures in Exhibit 4, the slope would be decreased. The indicated premium to pay losses would remain about the same for policy amounts in the $10,000 to $15,000 area but would increase for the smaller policy amounts and decrease for the larger amounts. However, as discussed above, we suspect that the lower part of the curve may be distorted by the mixture of building and contents while the upper end does not have sufficiently credible data to prove or disprove its validity. Thus, the curve is most meaningful in its middle area where, coincidentally, the indicated results are closest to those produced by the loss constant method.

We do have one source of information by size of policy which can be considered in connection with this problem, namely, the statistical data compiled under the Homeowners Policy Statistical Plan. This data is compiled with respect to policy size on a written premium-paid loss basis by the National Board of Fire Underwriters. While number of risks and amount of liability are not a part of the compilation, we know that the premiums, except for the liability coverage and partially the theft coverage, were originally computed using discounted component rates applied to the amounts of insurance furnished and that the bulk of the premium was, therefore, proportional to the amounts of insurance. This, in effect, amounted to a premium computation similar to that contained in the "loss constant" method, that is, flat premiums or charges plus rates applied to the amount of insurance. If this method were completely accurate in allocating loss costs by size of policy, we would expect to find a uniform loss ratio by size. We are attaching Exhibit B showing the policy size results for 1958, 1959 and 1960 for Policies A and B. Since this exhibit is on a written-paid basis, it does not give any indication as to adequacy of premium levels. However, adjustment to the more accurate earned-incurred basis would presumably have a similar effect on the various groupings so that the figures are useful for comparisons between sizes. There appears a highly consistent pattern with the medium policies producing the best loss ratios and both the smaller and larger policies showing less favorable results.

The Homeowners results are consistent with the various low valued dwelling studies with respect to the smaller policies. However, these same Homeowners results directly contradict the extension of conclusions based on these studies to the high valued dwelling. Whatever the reasons, and this discussion is not the place to attempt an analysis, the larger dwellings do not appear to be entitled to as great a percentage "discount" as the average sized dwellings, at least insofar as the loss portion of the premium dollar is concerned. Thus, while very large policies may be entitled to a lower rate than very small poli-

cies, they may actually require a higher rate than the average policy. Such a situation would not be completely new in the property insurance field. Paul Johansen of Denmark presented a paper to the International Congress of Actuaries discussing fire insurance experience on rural buildings in which the indicated premium did not increase in proportion with the increase in the sum insured but rather increased in proportion with the square of the sum insured.[7]

The Homeowners policy size experience illustrates a final point which we believe deserves strong emphasis. Extreme care must be used in transferring rating procedures from components to established multiple line packages. As a package approaches a credible volume for establishing its own rate levels, it also approaches the point where its departure has a comparably credible effect on the characteristics of the residual business written under the components. Changes in component rates or rating procedures occurring subsequent to the establishment of a multiple line package must not automatically be considered applicable to that package. Because the packages are ordinarily designed to attract only preferred or specialized segments of classes written under the components, conclusions reached on the basis of the residual business and perfectly valid for that business may well be completely wrong for the package and completely inapplicable to the package.

[7] Johansen, Paul, "On Fire Insurance of Rural Buildings," Transactions XVth International Congress of Actuaries, Vol. 2, pp. 211-215.

EXHIBIT A

FIRE EXPERIENCE
NATIONAL BOARD OF FIRE UNDERWRITERS
COUNTRYWIDE 1956-1960

Habitational Risks*

Year	Earned Premium	Incurred Losses	Loss Ratio
1960	$467,714,243	$260,326,568	55.7
1959	484,595,363	260,231,058	53.7
1958	479,815,213	259,982,942	54.2
1957	476,098,977	241,409,062	50.7
1956	482,202,242	242,408,159	50.3

All Other Risks

Year	Earned Premium	Incurred Losses	Loss Ratio
1960	$740,696,287	$372,789,952	50.3
1959	708,208,395	348,314,686	49.2
1958	679,125,111	342,514,212	50.4
1957	659,039,234	348,945,812	52.9
1956	648,709,441	352,197,515	54.3

*The following classes comprise the Habitational Group: 002 Household
Contents in Mercantile Buildings; 007 Boarding Houses; 009 Household
Contents - Dwelling; 011 Seasonal Dwellings; 019 Dwelling Building &
Contents; 021 Farm; 029 Dwelling Building Only; 030 Large Area Housing;
031 Apartment Buildings Without Mercantile; 032 Apartment Buildings With
Mercantile; 033 Household Contents - Apartments.

EXHIBIT B (1)
Homeowners Country-wide Experience By Amount
Policies A and B and Forms 1, 2 and 3

Year	Amount of Insurance (2)	Premiums Written (3)	Losses Paid	Pd/Wr Ratio
1958	Under 10,000	26,688,036	7,560,083	28.3
	10,000-13,499	55,879,543	14,463,089	25.9
	13,500-17,499	50,918,911	12,487,932	24.5
	17,500-24,999	40,105,224	10,870,453	27.1
	25,000-29,999	12,008,300	3,468,385	28.9
	30,000-37,499	8,204,221	2,688,935	32.8
	37,500-50,000	3,794,129	1,595,471	42.1
	Over 50,000	1,359,034	661,495	48.7
1959	Under 10,000	40,742,586	10,793,856	26.5
	10,000-13,499	84,341,827	19,825,524	23.5
	13,500-17,499	77,177,235	16,938,253	21.9
	17,500-24,999	60,398,753	14,327,476	23.7
	25,000-29,999	18,439,863	4,944,833	26.8
	30,000-37,499	13,462,466	3,586,510	26.6
	37,500-50,000	6,714,229	2,099,968	31.3
	Over 50,000	2,585,278	578,640	22.4
1960	Under 10,000	66,469,051	21,080,238	31.7
	10,000-13,499	120,858,215	35,270,108	29.2
	13,500-17,499	108,136,926	29,787,823	27.5
	17,500-24,999	82,481,401	23,211,658	28.1
	25,000-29,999	26,077,475	8,011,340	30.7
	30,000-37,499	20,025,059	6,194,680	30.9
	37,500-50,000	10,497,262	3,739,947	35.6
	Over 50,000	4,789,051	2,727,350	56.9
1958-1960	Under 10,000	133,899,673	39,434,177	29.5
	10,000-13,499	261,079,585	69,558,721	26.6
	13,500-17,499	236,233,072	59,214,008	25.1
	17,500-24,999	182,985,378	48,409,587	26.5
	25,000-29,999	56,525,638	16,424,558	29.1
	30,000-37,499	41,691,746	12,470,125	29.9
	37,500-50,000	21,005,620	7,435,386	35.4
	Over 50,000	8,733,363	3,967,485	45.4

(1) Experience of stock companies under National Board of Fire Underwriters "1958 Statistical Plan" and earlier statistical plans. Developed from figures compiled by Inter-Regional Insurance Conference and Actuarial Bureau of National Board of Fire Underwriters.

(2) Amount of insurance on the dwelling building.

(3) No adjustment has been made to reflect rate changes.