

GRADED RATE FOR CO-INSURANCE

Contributed by T. L. Morrissey

NOTE.—In response to a very general request from our subscribers in various centres, we are republishing below the Graded Rate for Co-Insurance prepared by Mr. T. L. Morrissey, Canadian manager, Union Assurance Society of London, and appearing in our issue of June 21st, 1918. The article in question is worthy of attention, not only because of the novelty of the method employed, but also because of the soundness of the conclusions reached.—Editor.

The existing method of allowing a percentage deduction from the flat rate for 80% co-insurance can hardly be said to be scientific inasmuch as the flat rate is fixed without regard to the percentage of insurance to value at risk, with the result that the tendency is towards selection against the Company and the better the risk the lower this percentage is likely to be.

To remedy this defect the rate should be graded according to a fixed scale for any given percentage of co-insurance.

Starting from the hypothesis that the present rates are adequate on the whole, it may be assumed that—on the average—a certain amount of insurance to value is carried. What is that average amount? This is an important factor. My experience tells me that it is not more than 50%—possibly less. Where more is carried, in nine cases out of ten, the assured probably takes the 80% co-insurance to get the benefit of concession in the rate presently allowed.

If what has been stated is a fact we are justified in assuming that existing rates are based on 50%

of insurance to value and so 50% might be considered the normal. It follows that the assured who carries less than 50% is getting an advantage over those who carry not less than 50% which is inequitable. The burden should be distributed equitably and no one assured given an advantage over another.

For all practical purposes a sub-division of the risk into tenths is a close enough approximation. Obviously the first 10% should bear the heaviest charge. The first 10% catches all the small losses, and the small losses, like the little foxes, contribute in no small degree to the destruction of our vineyards. I therefore begin by doubling the normal rate for the first 10%. The further you get away from the first 10% the less the risk is worth. This feature would seem to be met by charging for each succeeding 10% on a descending scale—arithmetical progression. Each succeeding 10% partakes of the nature of an excess insurance, and the preceding 10%, in theory, must first be exhausted before the next comes into play.

Another way of putting it: Taking 1% as the normal rate, this first 10% includes an initial charge of 1%—which it will be noted is carried throughout—and its proper percentage of the rate for that percentage of co-insurance, viz.: 1%. The second 10% is charged .90%, the third .80%, and so on. This is better illustrated by the subjoined table based on a risk of \$10,000 value carrying a rate of 1%.

CO-INSURANCE TABLE FOR ORDINARY RISKS:

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100%	\$1000.									1
90%	1000.								2	2
80%	1000.								3	3
70%	1000.								4	4
60%	1000.								5	5
50%	1000.								6	6
40%	1000.								7	7
30%	1000.								8	8
20%	1000.								9	9
10%	1000.	20.	9	8	7	6	5	4	3	2
Amount	\$1000.	\$2000.	\$3000.	\$4000.	\$5000.	\$6000.	\$7000.	\$8000.	\$9000.	\$10000.
Premium	20.	29.	37.	44.	50.	55.	59.	62.	64.	65.
Rate	2.00	1.46	1.283	1.10	1.00	.916	.843	.775	.71	.65

The foregoing is submitted as being applicable to ordinary risks presently granted a concession in rate for introduction of 80% co-insurance clause. The advantage is at once apparent that it need cause no disturbance in existing tariffs. The present tariff rate is taken as the normal—50%—and the proper percentage of that rate is charged for any given rate of co-insurance. For convenience the co-insurance rate finder submitted herewith might be used in conjunction with the present tariffs.

Fire proof risks should be treated differently. The value of co-insurance in risks of fireproof construction is admittedly greater and this is recognized in the rating of such risks, the rate being based upon 80% co-insurance. Assureds being quick to recognize that their property is not likely to suffer any such damage, frequently object to paying premium on an amount larger than they imagine they could possibly recover and consider it unreasonable that they should be compelled to pay such a premium. There is no reason why they