

DELAWARE COMPENSATION RATING BUREAU, INC.  
F-CLASS FILING

Tax Multiplier

Enclosed is a calculation of the tax multiplier for use in retrospective rating associated with F-Class coverages.

**CALCULATION OF TAX MULTIPLIER FOR USE IN RETROSPECTIVE RATING PLANS  
(U.S.L. & H.W. Act Coverages)**

**Expense Provisions for U.S.L. & H.W. Classes**

Losses	57.56
Loss Adjustment Expense	15.48
Loss & Loss Adjustment	73.04
Premium Discount	8.38
Acquisition	6.40
General Expenses	2.48
Profit and Contingencies	0.51
Taxes	2.30
Uncollectible Premium	2.62
Federal Assessment	4.27
	26.96

If

- T = Tax multiplier
- E = Expense provision in rates (General, Acquisition, and Profit), less premium discount
- L = Loss provision in rates
- C = Loss conversion factor
- B = Assessments made on premiums
- A = Assessments made on losses (adjusted so as not to collect profit and general expense dollars on the extra premium generated by the assessments)

Using average discount (Schedule Y) this yields:

$$E = 0.0101 = \begin{matrix} \text{ACQ} \\ 0.0640 \end{matrix} + \begin{matrix} \text{GEN} \\ 0.0248 \end{matrix} + \begin{matrix} \text{PROFIT} \\ 0.0051 \end{matrix} - \begin{matrix} \text{PREM DISC} \\ 0.0838 \end{matrix}$$

$$A = 0.0732 = 0.0742 \times \frac{1 - 0.0101 - 0.0492}{1 - 0.0034 - 0.0492}$$

Then

$$T = \frac{E + L(1 + C + A)}{E + L(1 + C)} \times \frac{1}{1 - B - S}$$

$$S = \text{Delaware Insurance Plan Subsidy} = 0.0105$$

$$T = \frac{0.0101 + 0.5756(1 + 0.2689 + 0.0732)}{0.0101 + 0.5756(1 + 0.2689)} \times \frac{1}{1 - 0.0492 - 0.0105} = 1.1240$$