Death, Disability, and Retirement Coverage: Pricing the "Free" Claims-Made Tail

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Abstract

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Introduced primarily as a marketing tool, free tail coverage is becoming a standard feature of claims-made insurance policies and is increasingly being used for medical malpractice and other forms of professional liability exposures. In addition, as of December 31, 1993 the NAIC is requiring that reserves be established to recognize this exposure, further elevating the need for proper pricing and reserving.

When free tail coverage is extended due to the death, disability, or retirement of the insured, it is commonly referred to as "DD&R" coverage.

This paper presents three models for determining the cost of DD&R as a function of mature claims-made coverage. Level funding, or constant premium loads, are calculated that take into account mortality, disability, retirement, and lapse profiles of the insured population.

We also examine model assumptions and the implications on unearned premium reserves attributable to the presented pricing models.

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I. Introduction and Background

Claims-made is currently the most widely used policy form for professional liability insurance, particularly in the area of medical malpractice. A feature of claims-made coverage is that extended reporting endorsements are generally available to insureds who wish to cancel coverage. An extended reporting endorsement is a separate insurance policy that will indemnify the insured for claims with injury dates subsequent to the insured's retroactive date but reported after the insured's final claims-made policy has lapsed. Extended reporting endorsements are also referred to as "tail coverage."

Free tail coverage, or issuing an extended reporting endorsement at no charge, has become a standard feature of many claims-made insurance programs. It is most often extended to insureds meeting certain conditions. Some common conditions include the following:

- Death of the insured;

- Disability of the insured making further participation in professional activities impossible;

- Retirement from practice after attaining a certain age and/or years insured with the same insurance company.

These conditions and the free tail coverage associated with them compose what is commonly referred to as Death, Disability, and Retirement coverage, or "DD&R."

As of December 31, 1993, the NAIC has required that companies establish a reserve for unissued extended reporting endorsements associated with DD&R coverage. The NAIC recommends an incremental premium charge be applied to insureds in order to fund the DD&R reserve. A copy of the applicable section of the NAIC's 1994 *Accounting Practices and Procedures Manual for Property and Casualty Insurance Companies* (provided through the Casualty Actuarial Task Force) is attached as Exhibit 4.

This paper will examine three separate models for the calculation of a DD&R premium load and the corresponding unearned premium amounts that result from the methods. We will also discuss how well each method conforms with the general guidance given by the NAIC. Finally, some ideas for handling changing assumptions and model inputs will be explored.

II. Perspectives on DD&R

As stated above, there are various coverage triggers for the issuance of DD&R. Each of these coverage triggers have implications on the cost of DD&R to the insurer. For example, if all insureds non-renew prior to the event of a DD&R trigger, the cost of DD&R to an insurer is zero. On the other hand, if all policyholders are able to take advantage of the DD&R coverage, then its cost is essentially the difference between claims-made coverage and occurrence coverage.

As such, there are elements that enter the DD&R ratemaking process that are not generally used for other property/casualty insurance coverages. These elements include:

-Policyholder lapse ratios

-Disability rates

-Mortality rates

-Retirement rates

For this discussion, we have made certain assumptions concerning each of these for our model inputs.

We have also made assumptions on other inputs such as loss trend, discount rates, and most importantly, the relationship between the cost of tail coverage and mature claims-made. Each of these must be examined prior to the determination of the DD&R premium load.

In discussions by the NAIC Casualty Actuarial Task Force that investigated the DD&R issue and its accounting treatment, two main viewpoints were apparent:

(1) Insurance companies do not have liability for DD&R until the policy is issued. We refer to this approach as "pay as you go," and relate it to the loss reserving principles of the property/casualty lines of insurance.

(2) Though not contractually, insurers are making a promise to policyholders to provide DD&R. As such, the expected liability of the promise must be recognized, preferably as an unearned premium reserve. This concept implicitly considers a much longer timing horizon than the first approach.

The NAIC currently requires that the second viewpoint must be used for Annual Statement reporting purposes. In light of this NAIC requirement and in recognition of generally accepted accounting principles, it is clear that the second viewpoint should be adopted by insurers. However, the position of the NAIC is interesting due to the fact that, in the case of liquidation, the first view may dictate which insureds are entitled to coverage

In conjunction with (2) above, the NAIC also recommends a level-funding premium load; that is, a load that will not vary due to age shifts in the insured population or to changes in the insurer's business plan.

In this paper, in order to provide concrete examples of the implications of each, we have included one pricing model for viewpoint (1), and two models for viewpoint (2).

For simplicity, we have assumed in each model that

- The cost of tail coverage, as a multiple of mature claims-made, does not vary by age or risk classification of individual insureds;

- All current insureds purchase mature claims-made coverage;

- The insurer has been offering DD&R coverage for many years; and,

- Policyholders are eligible for the coverage with no tenure ("years insured") restriction.

III. Model 1 - "Pay as You Go" Funding (Exhibits 1A and 1B)

This model is based on the concept that an insurer needs only to charge its insureds for DD&R coverage issued during the policy year.

The basics of the model are as follows:

(1) Given a group of insureds at the inception of a policy year, estimate the number of those insureds that will be issued DD&R policies for free during the course of the policy year. This exercise is performed by age using disability, mortality, and retirement assumptions. Given assumptions on the cost of extended reporting endorsements (as a percentage of mature claims-made), a total cost of the DD&R can be estimated for that policy year.

(2) Estimate the total premium to be collected net of DD&R.

(3) The ratio of (1) to (2) tells the insurer the average load to apply to its non-DD&R premium.

In this model, we have assumed that the number of policies that are non-renewed or canceled are offset by new policies written.

The following observations may be made concerning this model:

A. Comparison of Exhibits 1A and 1B shows premium loadings that are clearly dependent on the age of the population. As such, if the population age increases, the costs for DD&R could increase dramatically. In forming their guidelines, the NAIC clearly wished to avoid such a situation.

B. Using this model, the theoretical unearned premium reserve at the end of the policy year would be zero. This is due to the fact that all DD&R that had been charged for would be issued by the end of the policy period and all costs would be reflected as incurred losses or loss reserves.

C. Column (11) in each exhibit shows the costs and loadings attributable to each insured age group. Assuming that the actual charge to each insured is the group overall average, it is apparent that the younger insureds pay significantly more than indicated, with no assurance that they will receive DD&R coverage from the insurer in future policy periods.

D. This model is computationally simple. As assumptions change from year to year, it is a straight-forward exercise to update the DD&R premium loading.

IV. Model 2 - Level Premium Funding by Entry Age of Insured (Exhibits 2A and 2B)

Rather than funding each policy year's DD&R costs only, this model estimates total expected ultimate DD&R costs, by each insured's "entry age." Here, "entry age" is defined as the age of the insured when he first purchased claims-made coverage from the insurer. A flat DD&R loading, as a percentage of non-DD&R premium, is then computed for each insured. This charge is designed to stay constant during the insured's tenure with the insurer.

The entry age of each insured is important for this model. For example, for two insureds of the same absolute age but different entry ages, the insured with the earlier entry age should receive a lower DD&R charge because he has had more years to contribute for the same DD&R benefit.

The basics steps of the model are as follows:

(1) Estimate the expected costs associated with DD&R coverage over the expected lifetime of insurance coverage, by entry age. Exhibit 2A shows a calculation for entry age 42, and Exhibit 2B shows entry age 55.

For example, in Exhibit 2A the "pool" of insureds at entry age 42 starts out at 100,000 people. By the end of the first year of tenure, it is expected that 621 insureds will utilize DD&R coverage while 9,938 insureds will non-renew (further shrinking the eligible population) and will not be eligible for the coverage after their first policy year. Over the course of the next year, 606 insureds utilize DD&R, and 8,883 people non-renew for the next year.

Thus, over time your population shrinks and the actual number that may utilize DD&R is much smaller than your initial population would imply.

(2) Discount the expected future costs of DD&R for each entry age. This is shown as the total of Column (16) in Exhibits 2A and 2B.

(3) Estimate the discounted value of expected non-DD&R premium for each entry age. This is shown as the total of Column (14) in Exhibits 2A and 2B.

(4) The ratio of (2) to (3) above is the flat premium load that should be applied to the entry age in question for the insured's lifetime in order to pay all expected DD&R costs by the time the last policyholder has lapsed, died, become disabled, or retired.

Some observations on this process are warranted:

A. For each insured, the loading calculated is invariant to changes in the age makeup of the population. However, the resulting aggregate population load will change as the population changes. As such it does not follow the exact recommendations of the NAIC, though the problems exhibited in Model 1 are not a concern because there will be no "surprises" for insureds that are members of an aging population. The point here is that the charge to insureds will not change and the entire insurance program (rates and unearned premium reserves) will be in balance.

B. As long as model assumptions do not change, the loadings applied to insureds of the same entry age should always be the same, regardless of the absolute ages of the insureds. For example, if two insureds both begin coverage with the insurer at age 30 but one began in 1996 and the other began in 1999, the DD&R loadings for each should be identical.

C. The estimated unearned premium reserve at the end of each policy year is presented in column (20). As one can see, the reserve increases considerably as the years progress and becomes depleted by the time each insured has lapsed, died, become disabled, or has retired.

At any point in time, the unearned premium reserve is equal to the difference between the discounted expected future DD&R losses and the discounted expected future DD&R premium. As long as model assumptions are followed, this reserve will be identical to accumulating the unused DD&R premium along with its associated interest income.

D. The unearned premium per insured is presented in column (21). These factors could be used as inputs for an insurance carrier to estimate its unearned premium reserve based on its own rates and distribution of insureds.

E. This method is very sensitive to more assumptions than Model 1. In particular, the long term affects of trend, discount rate, and lapse ratio add considerable variation to the loading generated.

V. Model 3 - Level Premium Charge the Same for all Insureds (Exhibit 3)

The final model is a by-product of Model 2 and represents the true spirit of the recommendations made by the NAIC. This model estimates the per-insured charge by entry date, calculates the overall DD&R charge for the pool of insureds, and applies that rate to all insureds regardless of current age or entry age. We have assumed that new insureds over the course of a year will not be older than the current insureds.

Exhibit 3 shows the differences between the charges calculated using the average charge and those calculated using Model 2; we have constructed an example using only two different insured ages. All insureds in each age are assumed to have the same entry date.

Some observations on Model 3:

A. It is clear that those insureds who become insured early will pay more than those who become insured later in life. Thus, there is essentially a subsidy from the former group to the latter. This subsidy becomes less as the insured population's entry ages converge.

B. There is no difference in the aggregate DD&R premium collected in Model 3 than that implied in Model 2. Thus, the unearned premium reserve will not change either.

VI. Remarks on Assumptions

Throughout this paper we have made several assumptions that were applied to the models that simplify the analysis. We would like to comment on those assumptions.

- The cost of tail coverage, as a multiple of mature claims-made, does not vary by age or risk classification of individual insureds. This assumption follows common professional liability rating practices. Until such practices change in the marketplace, we feel this is a reasonable assumption for this analysis.

- All insureds purchase mature claims-made coverage. This premise is clearly not applicable to the actual insurance markets, with new-in-practice insureds often purchasing first-year claims-made coverage at significant discounts from the mature rate.

  Incorporating non-mature claims-made insureds into the analysis would be a relatively straight-forward process. For each entry age, the premium collected and the DD&R losses incurred during the insured's first several years would be different than those presented here. Of course, some insured's will have purchased prior acts coverage, eliminating the need for a non-mature adjustment.

- The insurer has been offering DD&R coverage for many years. Use of this assumption serves to eliminate the need for "catch-up" reserves when an insurer offers DD&R for the first time. Clearly, if an insurer "grandfathers" existing insureds into the coverage, an immediate liability exists.

In this situation, we see the insurer as basically having two choices. First, all insureds can be treated as new policyholders and an appropriate flat premium loading would be charged; i.e., entry age is equal to current age. This would serve to drive up the premiums of older insureds significantly based upon our Model 2 assumptions; using the Model 3 technique would put a smaller burden on older insureds.

Second, the insurer may chose a smaller flat loading recognizing the entry age of each insured. It would then be necessary to establish a beginning unearned premium reserve that would recognize the funding shortfall inherent in the premium load.

Policyholders are eligible for DD&R coverage with no tenure restrictions. Most programs do have "years insured" restrictions, or have discounts applied to the tail coverage cost for insureds with limited tenure. Clearly, the insurer's liability is decreased as eligibility restrictions are applied.

As a model adjustment, costs associated with DD&R could be eliminated from the model for those insured years where restrictions are applied. The computed DD&R loading would be thus be reduced.

VII. Sources of Data

We have used data sources in this analysis that need some identification. In particular, we will discuss possible sources for the mortality, disability, lapse and retirement assumptions.

Mortality. This paper used as its mortality source the 1979-81 U.S. Mortality Table, males only. This table is based on census information made available through the U.S. Department of Health and Human Services. Many other tables are available from the Society of Actuaries and insurance industry groups that may pool individual company data. These tables may reflect more closely the particular make-up of an insurer's insured population.

Disability. We have used the Commissioners' 1985 Individual Disability Table A. The rates used reflect male-only accident and sickness disabilities with a 90-day elimination period. This period was chosen assuming that an insured who recovered within this period would not be eligible for DD&R coverage. The table above is available through the 1985 *Transactions* of the Society of Actuaries.

Lapse Ratios. Insurers should review their book of business to review policyholder lapse ratios. The lapse ratios assumed in this model were hypothetical. Insurers should take a prospective view on lapse ratios: for example, future rate activity may effect persistency levels.

Retirement Rates. Insurers should review their book of business to review policyholder retirement rates. As stated above concerning lapse ratios, such inputs to the DD&R model should be prospective in nature. The retirement rates assumed in our model were hypothetical.

VIII. Additional Observations

In closing, we would like to make a few additional observations.

A. It may be very tedious to estimate flat loadings for each entry age grouping, particularly if distinctions are made between sex, the existence/non-existence of prior acts coverage, etc. Therefore, an insurer may wish to use entry age groupings. For example, insureds with entry ages between 45 and 50 could be "banded."

However, as long as assumptions in the model do not change, each entry age loading would have to be calculated only once.

B. Insurers may believe that insureds that retire may be superior risks or may have scaled back their activities and risk in the last few years before retirement. As such, some experience rating credit may be warranted for insureds that survive to retirement. In theory, such a credit would not be applicable to insureds that utilize DD&R due to death or disability.

C. When model assumptions change, updating of the models is required. Suppose that the cost of tail coverage should have been 3.00 instead of the 2.00 as used in the models. In this case, continuing to fund at the lower tail coverage ratio will prove to be inadequate. One solution to this problem is the following. First, premium loadings should be increased on a go-forward basis to indicated levels. Second, the unearned premium reserve should be in increased in order to make up for the shortfall in the current unearned premium reserve.

D. The unearned premium reserve estimated in Model 2 is not typical in the property/casualty sense due to the fact that the accrued investment income necessary to fund the DD&R is included in the reserve. This fact may pose some interesting tax situations for insurers.

DD&R Model 1
"Pay as You Go" Funding
Assumptions and Column Keys for Exhibits 1A and 1B

Assumptions:

- Premium is collected in the middle of the policy year.
- The average loss date for DD&R is the middle of the policy year.
- The number of lapses = the number of new policies.
- Mature claims-made rate is normalized to equal $1.00.
- All insureds lapse or use DD&R by age 75.

Column Key:

(1) is the insured's age.

(2) is the number of insureds of that age.

(3) is the percentage of the insureds that are that age.
(3) = (2) / total (2)

(4) is the assumed disability rate.

(5) is the assumed mortality rate.

(6) is the assumed retirement rate.

(7) is the resulting expected number of DD&R utilized during the year.
(7) = (2) x [1 - (4)] x [1 - (5)] x [1 - (6)]

(8) is the assumed cost of tail coverage in relation to the cost of mature claims-made.

(9) is the non-DD&R premium collected for the policy year.
(9) = (2) x $1.00

(10) is the expected DD&R dollars utilized during the year.
(10) = (7) x (8)

(11) is the ratio of expected DD&R dollars to non-DD&R premium.
(11) = (10)/(9)

The boxed entry at the bottom of (11) is the resulting DD&R charge that would be applied to all insureds regardless of current age. It is the ratio of total column (10) to total column (9).

DD&R Model 1
"Pay as you Go" Funding
Exhibit 1 - A: Average age = 51

Age	Distribution of Insureds	% of Insureds	Disability Rate	Mortality Rate	Retire Rate	Expected # of DD&R Utilized	Tail/Mature Cost	Premium Collected	DD&R Utilized	Ratio DD&R to Prem.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
27	1000	0.16%	0.166%	0.193%	0.000%	3.59	2.00	$1,000	$7.17	0.72%
28	2000	0.32%	0.159%	0.191%	0.000%	6.99	2.00	$2,000	$13.99	0.70%
29	3000	0.48%	0.155%	0.191%	0.000%	10.37	2.00	$3,000	$20.74	0.69%
30	4000	0.64%	0.152%	0.191%	0.000%	13.71	2.00	$4,000	$27.42	0.69%
31	5000	0.80%	0.151%	0.191%	0.000%	17.09	2.00	$5,000	$34.17	0.68%
32	6000	0.96%	0.151%	0.193%	0.000%	20.62	2.00	$6,000	$41.25	0.69%
33	7000	1.12%	0.154%	0.198%	0.000%	24.62	2.00	$7,000	$49.24	0.70%
34	8000	1.28%	0.158%	0.205%	0.000%	29.01	2.00	$8,000	$58.03	0.73%
35	9000	1.44%	0.164%	0.216%	0.000%	34.17	2.00	$9,000	$68.34	0.76%
36	10000	1.60%	0.172%	0.229%	0.000%	40.06	2.00	$10,000	$80.12	0.80%
37	11000	1.76%	0.181%	0.244%	0.000%	46.70	2.00	$11,000	$93.40	0.85%
38	12000	1.92%	0.192%	0.261%	0.000%	54.30	2.00	$12,000	$108.60	0.90%
39	13000	2.08%	0.206%	0.280%	0.000%	63.11	2.00	$13,000	$126.21	0.97%
40	14000	2.24%	0.221%	0.303%	0.000%	73.27	2.00	$14,000	$146.53	1.05%
41	15000	2.40%	0.239%	0.332%	0.000%	85.53	2.00	$15,000	$171.06	1.14%
42	16000	2.56%	0.259%	0.363%	0.000%	99.37	2.00	$16,000	$198.74	1.24%
43	17000	2.72%	0.281%	0.398%	0.000%	115.24	2.00	$17,000	$230.48	1.36%
44	18000	2.88%	0.307%	0.435%	0.000%	133.32	2.00	$18,000	$266.64	1.48%
45	19000	3.04%	0.335%	0.476%	0.010%	155.67	2.00	$19,000	$311.34	1.64%
46	20000	3.20%	0.367%	0.522%	0.020%	181.38	2.00	$20,000	$362.76	1.81%
47	21000	3.36%	0.402%	0.576%	0.040%	213.21	2.00	$21,000	$426.42	2.03%
48	22000	3.52%	0.441%	0.638%	0.060%	249.82	2.00	$22,000	$499.64	2.27%
49	23000	3.68%	0.485%	0.705%	0.080%	291.10	2.00	$23,000	$582.19	2.53%
50	24000	3.84%	0.533%	0.775%	1.000%	549.80	2.00	$24,000	$1,099.60	4.58%
51	25000	4.00%	0.586%	0.846%	1.000%	603.19	2.00	$25,000	$1,206.39	4.83%
52	24000	3.84%	0.645%	0.942%	1.000%	615.63	2.00	$24,000	$1,231.26	5.13%
53	23000	3.68%	0.710%	1.010%	1.000%	620.01	2.00	$23,000	$1,240.02	5.39%
54	22000	3.52%	0.780%	1.105%	1.000%	628.68	2.00	$22,000	$1,257.35	5.72%
55	21000	3.36%	0.858%	1.206%	2.500%	945.49	2.00	$21,000	$1,890.97	9.00%
56	20000	3.20%	0.943%	1.310%	2.500%	936.93	2.00	$20,000	$1,873.85	9.37%
57	19000	3.04%	1.036%	1.423%	5.000%	1391.19	2.00	$19,000	$2,782.38	14.64%
58	18000	2.88%	1.137%	1.549%	5.000%	1356.29	2.00	$18,000	$2,712.59	15.07%
59	17000	2.72%	1.247%	1.690%	5.000%	1320.92	2.00	$17,000	$2,641.84	15.54%
60	16000	2.56%	1.367%	1.846%	10.000%	2059.04	2.00	$16,000	$4,118.08	25.74%
61	15000	2.40%	1.497%	2.016%	10.000%	1970.18	2.00	$15,000	$3,940.36	26.27%
62	14000	2.24%	1.638%	2.201%	10.000%	1879.17	2.00	$14,000	$3,758.34	26.85%
63	13000	2.08%	1.779%	2.398%	10.000%	1783.72	2.00	$13,000	$3,567.44	27.44%
64	12000	1.92%	1.920%	2.604%	10.000%	1683.19	2.00	$12,000	$3,366.38	28.05%
65	11000	1.76%	2.061%	2.817%	20.000%	2624.15	2.00	$11,000	$5,248.31	47.71%
66	10000	1.60%	2.202%	3.044%	20.000%	2414.32	2.00	$10,000	$4,828.64	48.29%
67	9000	1.44%	2.343%	3.289%	20.000%	2199.96	2.00	$9,000	$4,399.91	48.89%
68	8000	1.28%	2.484%	3.563%	20.000%	1981.34	2.00	$8,000	$3,962.69	49.53%
69	7000	1.12%	2.624%	3.868%	20.000%	1757.87	2.00	$7,000	$3,515.74	50.22%
70	6000	0.96%	2.765%	4.207%	20.000%	1529.07	2.00	$6,000	$3,058.14	50.97%
71	5000	0.80%	2.906%	4.571%	20.000%	1293.77	2.00	$5,000	$2,587.53	51.75%
72	4000	0.64%	3.047%	4.951%	20.000%	1051.11	2.00	$4,000	$2,102.22	52.56%
73	3000	0.48%	3.188%	5.338%	20.000%	800.54	2.00	$3,000	$1,601.08	53.37%
74	2000	0.32%	3.329%	5.736%	20.000%	541.98	2.00	$2,000	$1,083.97	54.20%
75	1000	0.16%	3.470%	6.167%	100.000%	1000.00	2.00	$1,000	$2,000.00	200.00%
Total	625,000					37,500		$625,000	$75,000	12.00%

DD&R Model 1
"Pay as you Go" Funding
Exhibit 1 - B: Average age = 44

Age	Distribution of Insureds	% of Insureds	Disability Rate	Mortality Rate	Retire Rate	Expected # of DD&R Utilized	Tail/Mature Cost	Premium Collected	DD&R Utilized	Ratio DD&R to Prem.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
27	5000	0.72%	0.166%	0.193%	0.000%	17.93	2.00	$5,000	$35.87	0.72%
28	7000	1.01%	0.159%	0.191%	0.000%	24.48	2.00	$7,000	$48.96	0.70%
29	9000	1.30%	0.155%	0.191%	0.000%	31.11	2.00	$9,000	$62.23	0.69%
30	12000	1.74%	0.152%	0.191%	0.000%	41.13	2.00	$12,000	$82.25	0.69%
31	14000	2.03%	0.151%	0.191%	0.000%	47.84	2.00	$14,000	$95.68	0.68%
32	16000	2.32%	0.151%	0.193%	0.000%	54.99	2.00	$16,000	$109.99	0.69%
33	18000	2.60%	0.154%	0.198%	0.000%	63.31	2.00	$18,000	$126.61	0.70%
34	20000	2.89%	0.158%	0.205%	0.000%	72.54	2.00	$20,000	$145.07	0.73%
35	22000	3.18%	0.164%	0.216%	0.000%	83.52	2.00	$22,000	$167.04	0.76%
36	24000	3.47%	0.172%	0.229%	0.000%	96.15	2.00	$24,000	$192.29	0.80%
37	26000	3.76%	0.181%	0.244%	0.000%	110.39	2.00	$26,000	$220.77	0.85%
38	28000	4.05%	0.192%	0.261%	0.000%	126.70	2.00	$28,000	$253.40	0.90%
39	30000	4.34%	0.206%	0.280%	0.000%	145.63	2.00	$30,000	$291.25	0.97%
40	32000	4.63%	0.221%	0.303%	0.000%	167.47	2.00	$32,000	$334.93	1.05%
41	34000	4.92%	0.239%	0.332%	0.000%	193.87	2.00	$34,000	$387.74	1.14%
42	36000	5.21%	0.259%	0.363%	0.000%	223.58	2.00	$36,000	$447.16	1.24%
43	40000	5.79%	0.281%	0.398%	0.000%	271.15	2.00	$40,000	$542.31	1.36%
44	35000	5.07%	0.307%	0.435%	0.000%	259.23	2.00	$35,000	$518.47	1.48%
45	30000	4.34%	0.335%	0.476%	0.010%	245.80	2.00	$30,000	$491.59	1.64%
46	25000	3.62%	0.367%	0.522%	0.020%	226.73	2.00	$25,000	$453.45	1.81%
47	20000	2.89%	0.402%	0.576%	0.040%	203.06	2.00	$20,000	$406.12	2.03%
48	19000	2.75%	0.441%	0.638%	0.060%	215.75	2.00	$19,000	$431.51	2.27%
49	18000	2.60%	0.485%	0.705%	0.080%	227.81	2.00	$18,000	$455.63	2.53%
50	17000	2.46%	0.533%	0.775%	1.000%	389.44	2.00	$17,000	$778.88	4.58%
51	16000	2.32%	0.586%	0.846%	1.000%	386.04	2.00	$16,000	$772.09	4.83%
52	15000	2.17%	0.645%	0.942%	1.000%	384.77	2.00	$15,000	$769.53	5.13%
53	14000	2.03%	0.710%	1.010%	1.000%	377.40	2.00	$14,000	$754.80	5.39%
54	13000	1.88%	0.780%	1.105%	1.000%	371.49	2.00	$13,000	$742.98	5.72%
55	12000	1.74%	0.858%	1.206%	2.500%	540.28	2.00	$12,000	$1,080.55	9.00%
56	8000	1.16%	0.943%	1.310%	2.500%	374.77	2.00	$8,000	$749.54	9.37%
57	8000	1.16%	1.036%	1.423%	5.000%	585.78	2.00	$8,000	$1,171.53	14.64%
58	8000	1.16%	1.137%	1.549%	5.000%	602.80	2.00	$8,000	$1,205.59	15.07%
59	8000	1.16%	1.247%	1.690%	5.000%	621.61	2.00	$8,000	$1,243.22	15.54%
60	6000	0.87%	1.367%	1.846%	10.000%	772.14	2.00	$6,000	$1,544.28	25.74%
61	6000	0.87%	1.497%	2.016%	10.000%	788.07	2.00	$6,000	$1,576.14	26.27%
62	6000	0.87%	1.638%	2.201%	10.000%	805.36	2.00	$6,000	$1,610.72	26.85%
63	6000	0.87%	1.779%	2.398%	10.000%	823.25	2.00	$6,000	$1,646.51	27.44%
64	6000	0.87%	1.920%	2.604%	10.000%	841.60	2.00	$6,000	$1,683.19	28.05%
65	5000	0.72%	2.061%	2.817%	20.000%	1192.80	2.00	$5,000	$2,385.60	47.71%
66	5000	0.72%	2.202%	3.044%	20.000%	1207.16	2.00	$5,000	$2,414.32	48.29%
67	4000	0.58%	2.343%	3.289%	20.000%	977.76	2.00	$4,000	$1,955.52	48.89%
68	1000	0.14%	2.484%	3.563%	20.000%	247.67	2.00	$1,000	$495.34	49.53%
69	1000	0.14%	2.624%	3.868%	20.000%	251.12	2.00	$1,000	$502.25	50.22%
70	1000	0.14%	2.765%	4.207%	20.000%	254.85	2.00	$1,000	$509.69	50.97%
71	1000	0.14%	2.906%	4.571%	20.000%	258.75	2.00	$1,000	$517.51	51.75%
72	1000	0.14%	3.047%	4.951%	20.000%	262.78	2.00	$1,000	$525.55	52.56%
73	1000	0.14%	3.188%	5.338%	20.000%	266.85	2.00	$1,000	$533.69	53.37%
74	1000	0.14%	3.329%	5.736%	20.000%	270.99	2.00	$1,000	$541.98	54.20%
75	1000	0.14%	3.470%	6.167%	100.000%	1000.00	2.00	$1,000	$2,000.00	200.00%
Total	691,000					18,006		$691,000	$36,011	5.21%

DD&R MODEL 2

Level Premium Funding by Entry Age of Insured

Assumptions and Column Keys for Exhibits 2A and 2B, Sheets 1 and 2

Assumptions:

- Premium is collected in the middle of the policy year.
- The average loss date for DD&R is the middle of the policy year.
- Lapses occur at the beginning of the policy period.
- Premium increases every year by the yearly loss trend.
- Mature claims-made rate at year of entry is normalized to equal $1.00.
- All insureds lapse or use DD&R by age 75.

Column Key:

(1) is the insured's age at the entry year and subsequent years.

(2) is the number of years the insured has been insured with company (tenure).

(3) is the "normalized" expected number of insureds at the beginning of the policy year.
(3) = prior (3) - prior (7) - prior (9)

(4) is the assumed disability rate.

(5) is the assumed mortality rate.

(6) is the assumed retirement rate.

(7) is the resulting expected number of DD&R utilized during the year.
(7) = (3) x [1 - (4)] x [1 - (5)] x [1 - (6)]

(8) is the assumed lapse rate.

(9) is the number of lapses (non-renewals) for the next policy year.
(9) = { (3) - (7) } x (8)

(10) is the assumed loss trend multiple and expresses losses in current year dollars.

(11) is the assumed discount factor to the midpoint of the entry age year.

(12) is the assumed cost of tail coverage in relation to the cost of mature claims-made.

DD&R MODEL 2
Level Premium Funding by Entry Age of Insured
Assumptions and Column Keys for Exhibits 2A and 2B, Sheets 1 and 2
(continued)

Column Key (cont.):

(13) is the non-DD&R premium collected for the policy year.
(13) = (3) x (10) x $1.00

(14) is the present value of the premium collected as of the middle of the entry age year.
(14) = (13) / (11)

(15) is the expected DD&R dollars utilized during the year.
(15) = (7) x (10) x (12)

(16) is the present value of the expected DD&R dollars utilized as of the middle of the entry age year.
(16) = (15) / (11)

(17) is the ratio of the expected DD&R utilized to the non-DD&R premium collected (discounted).
(17) = (16) / (14)

(18) is the discounted value of future expected DD&R losses. (discounted to current year)
(18) = sum of remaining (15) discounted to current year

(19) is the discounted value of future expected DD&R premium. (discounted to current year)
(19) = sum of remaining (13) discounted to current year

(20) is the year-end unearned premium reserve.
(20) = (18) - (19)

(21) is the year-end unearned premium reserve per insured.
(21) = (20)/(3)

The boxed entry at the bottom of (17) is the resulting DD&R charge that should be applied to all insureds with the entry age in question, regardless of current age. It is the ratio of total column (16) to total column (14).

DD&R Model 2
Level Premium Funding by Entry Age of Insured
Exhibit 2 A: Entry Age = 42
(Sheet 1)

Yearly Discount Rate = 1.04
Yearly Loss Trend = 1 05

Age at Beginning of Year (1)	Years Insured at Start of Year (2)	# of Insureds (3)	Disability Rate (4)	Mortality Rate (5)	Retire Rate (6)	Expected # of DD&R Utilized (7)	Lapse Rate (8)	Expected # of Lapses (9)	Loss Trend Factor (10)	Discount Rate Factor (11)	Tail Cost (12)
42	0	100,000	0.259%	0.363%	0.000%	621	10.00%	9,938	1 000	1.000	2.00
43	1	89,441	0.281%	0.398%	0.000%	606	10.00%	8,883	1.050	1.040	2.00
44	2	79,951	0.307%	0.435%	0.000%	592	10.00%	7,936	1.103	1.082	2.00
45	3	71,423	0.335%	0.476%	0.010%	585	10.00%	7,084	1.158	1.125	2.00
46	4	63,754	0.367%	0 522%	0.020%	578	10.00%	6,318	1.216	1.170	2.00
47	5	56,858	0.402%	0.576%	0.040%	577	10.00%	5,628	1.276	1 217	2.00
48	6	50,653	0.441%	0.638%	0.060%	575	10.00%	5,008	1.340	1.265	2 00
49	7	45,070	0.485%	0.705%	0.080%	570	10.00%	4,450	1.407	1.316	2 00
50	8	40,050	0.533%	0.775%	1.000%	917	8.00%	3,131	1.477	1.369	2.00
51	9	36,002	0.586%	0.846%	1.000%	869	8.00%	2,811	1.551	1.423	2.00
52	10	32,322	0.645%	0 942%	1.000%	829	8.00%	2,519	1.629	1.480	2.00
53	11	28,974	0.710%	1.010%	1.000%	781	8.00%	2,255	1.710	1 539	2.00
54	12	25,937	0.780%	1.105%	1.000%	741	8 00%	2,016	1.796	1.601	2 00
55	13	23,180	0.858%	1.206%	2.500%	1,044	8.00%	1,771	1.886	1 665	2.00
56	14	20,366	0.943%	1.310%	2.500%	954	8.00%	1,553	1.980	1.732	2.00
57	15	17,859	1.036%	1.423%	5.000%	1,308	8.00%	1,324	2.079	1.801	2.00
58	16	15,227	1.137%	1.549%	5 000%	1,147	8.00%	1,126	2.183	1.873	2.00
59	17	12,953	1.247%	1.690%	5.000%	1,006	8 00%	956	2.292	1.948	2.00
60	18	10,991	1.367%	1.846%	10 000%	1,414	8.00%	766	2.407	2.026	2.00
61	19	8,811	1.497%	2.016%	10.000%	1,157	2.00%	153	2.527	2.107	2.00
62	20	7,500	1.638%	2.201%	10.000%	1,007	2.00%	130	2.653	2.191	2.00
63	21	6,364	1.779%	2.398%	10.000%	873	2.00%	110	2.786	2 279	2.00
64	22	5,381	1.920%	2.604%	10.000%	755	2.00%	93	2.925	2.370	2.00
65	23	4,533	2.061%	2.817%	20.000%	1,081	2.00%	69	3.072	2 465	2.00
66	24	3,383	2.202%	3.044%	20.000%	817	2.00%	51	3.225	2.563	2.00
67	25	2,515	2.343%	3.289%	20.000%	615	2.00%	38	3.386	2.666	2.00
68	26	1,862	2.484%	3.563%	20.000%	461	2.00%	28	3.556	2.772	2 00
69	27	1,373	2.624%	3.868%	20.000%	345	2.00%	21	3.733	2.883	2.00
70	28	1,008	2.765%	4.207%	20.000%	257	2.00%	15	3.920	2.999	2.00
71	29	736	2.906%	4.571%	20.000%	190	2.00%	11	4.116	3 119	2.00
72	30	534	3.047%	4.951%	20.000%	140	2.00%	8	4.322	3.243	2.00
73	31	386	3.188%	5.338%	20.000%	103	2.00%	6	4 538	3.373	2.00
74	32	277	3.329%	5.736%	20.000%	75	2.00%	4	4.765	3 508	2.00
75	33	198	3.470%	6.167%	100.000%	198	2.00%	0	5.003	3.648	2.00

DD&R Model 2
Level Premium Funding by Entry Age of Insured
Exhibit 2 A: Entry Age = 42
(Sheet 2)

Yearly Discount Rate = 1.04
Yearly Loss Trend = 1.05

Age at Beginning of Year (1)	Years Insured at Start of Year (2)	# of Insureds (3)	Premium Collected (13)	PV Prem. Collected (14)	DD&R Utilized (15)	PV DD&R Utilized (16)	Ratio DD&R to Prem. (17)	Discounted Value of Future DD&R Loss (18)	Discounted Value of Future DD&R Prem (19)	Year-End UPR (20)	Year-End UPR per Insured (21)
42	0	100,000	$100,000	$100,000	$1,242	$1,242	1.24%	$54,790	$49,991	$4,800	$0.05
43	1	89,441	$93,913	$90,301	$1,273	$1,224	1.36%	$55,683	$46,293	$9,390	$0.10
44	2	79,951	$88,146	$81,496	$1,306	$1,207	1.48%	$56,579	$42,797	$13,782	$0.17
45	3	71,423	$82,681	$73,503	$1,355	$1,204	1.64%	$57,461	$39,494	$17,967	$0.25
46	4	63,754	$77,494	$66,242	$1,406	$1,202	1.81%	$58,326	$36,372	$21,953	$0.34
47	5	56,858	$72,567	$59,645	$1,474	$1,211	2.03%	$59,156	$33,425	$25,731	$0.45
48	6	50,653	$67,880	$53,646	$1,542	$1,218	2.27%	$59,950	$30,644	$29,306	$0.58
49	7	45,070	$63,418	$48,193	$1,605	$1,220	2.53%	$60,711	$28,023	$32,688	$0.73
50	8	40,050	$59,172	$43,236	$2,711	$1,981	4.58%	$60,375	$25,554	$34,821	$0.87
51	9	36,002	$55,850	$39,240	$2,695	$1,894	4.83%	$60,041	$23,188	$36,853	$1.02
52	10	32,322	$52,650	$35,568	$2,701	$1,825	5.13%	$59,688	$20,922	$38,767	$1.20
53	11	28,974	$49,555	$32,190	$2,672	$1,735	5.39%	$59,351	$18,752	$40,599	$1.40
54	12	25,937	$46,580	$29,094	$2,662	$1,663	5.72%	$59,010	$16,677	$42,334	$1.63
55	13	23,180	$43,710	$26,251	$3,936	$2,364	9.00%	$57,357	$14,692	$42,665	$1.84
56	14	20,366	$40,323	$23,286	$3,778	$2,182	9.37%	$55,798	$12,834	$42,965	$2.11
57	15	17,859	$37,127	$20,615	$5,437	$3,019	14.64%	$52,486	$11,095	$41,391	$2.32
58	16	15,227	$33,239	$17,746	$5,009	$2,674	15.07%	$49,477	$9,522	$39,955	$2.62
59	17	12,953	$29,689	$15,242	$4,614	$2,369	15.54%	$46,751	$8,102	$38,649	$2.98
60	18	10,991	$26,451	$13,057	$6,808	$3,361	25.74%	$41,678	$6,821	$34,857	$3.17
61	19	8,811	$22,264	$10,567	$5,848	$2,776	26.27%	$37,381	$5,744	$31,637	$3.59
62	20	7,500	$19,900	$9,082	$5,342	$2,438	26.85%	$33,428	$4,766	$28,662	$3.82
63	21	6,364	$17,729	$7,780	$4,865	$2,135	27.44%	$29,804	$3,881	$25,922	$4.07
64	22	5,381	$15,740	$6,642	$4,416	$1,863	28.05%	$26,493	$3,082	$23,411	$4.35
65	23	4,533	$13,925	$5,650	$6,644	$2,696	47.71%	$20,777	$2,360	$18,417	$4.06
66	24	3,383	$10,910	$4,256	$5,268	$2,055	48.29%	$16,236	$1,793	$14,443	$4.27
67	25	2,515	$8,516	$3,195	$4,163	$1,562	48.89%	$12,639	$1,348	$11,291	$4.49
68	26	1,862	$6,621	$2,388	$3,280	$1,183	49.53%	$9,800	$1,000	$8,800	$4.73
69	27	1,373	$5,126	$1,778	$2,574	$893	50.22%	$7,567	$729	$6,838	$4.98
70	28	1,008	$3,950	$1,317	$2,013	$671	50.97%	$5,817	$519	$5,298	$5.26
71	29	736	$3,029	$971	$1,567	$503	51.75%	$4,451	$356	$4,095	$5.57
72	30	534	$2,310	$712	$1,214	$374	52.56%	$3,391	$230	$3,161	$5.91
73	31	386	$1,752	$520	$935	$277	53.37%	$2,573	$133	$2,440	$6.32
74	32	277	$1,322	$377	$717	$204	54.20%	$1,945	$58	$1,887	$6.80
75	33	198	$992	$272	$1,983	$544	200.00%	$0	$0	$0	$0.00
Total				$924,058		$54,968	5.95%				

DD&R Model 2
Level Premium Funding by Entry Age of Insured
Exhibit 2 - B: Entry Age = 55
(Sheet 1)

Yearly Discount Rate = 1.04
Yearly Loss Trend = 1.05

Age at Beginning of Year (1)	Years Insured at Start of Year (2)	# of Insureds (3)	Disability Rate (4)	Mortality Rate (5)	Retire Rate (6)	Expected # of DD&R Utilized (7)	Lapse Rate (8)	Expected # of Lapses (9)	Loss Trend Factor (10)	Discount Rate Factor (11)	Tail Cost (12)
55	0	100,000	0.858%	1.206%	2.500%	4,502	8.00%	7,640	1.000	1.000	2.00
56	1	87,858	0.943%	1.310%	2.500%	4,116	8.00%	6,699	1.050	1.040	2.00
57	2	77,043	1.036%	1.423%	5.000%	5,641	8.00%	5,712	1.103	1.082	2.00
58	3	65,689	1.137%	1.549%	5.000%	4,950	8.00%	4,859	1.158	1.125	2.00
59	4	55,881	1.247%	1.690%	5.000%	4,342	8.00%	4,123	1.216	1.170	2.00
60	5	47,416	1.367%	1.846%	10.000%	6,102	8.00%	3,305	1.276	1.217	2.00
61	6	38,009	1.497%	2.016%	10.000%	4,992	2.00%	660	1.340	1.265	2.00
62	7	32,356	1.638%	2.201%	10.000%	4,343	2.00%	560	1.407	1.316	2.00
63	8	27,453	1.779%	2.398%	10.000%	3,767	2.00%	474	1.477	1.369	2.00
64	9	23,212	1.920%	2.604%	10.000%	3,256	2.00%	399	1.551	1.423	2.00
65	10	19,557	2.061%	2.817%	20.000%	4,666	2.00%	298	1.629	1.480	2.00
66	11	14,594	2.202%	3.044%	20.000%	3,523	2.00%	221	1.710	1.539	2.00
67	12	10,849	2.343%	3.289%	20.000%	2,652	2.00%	164	1.796	1.601	2.00
68	13	8,033	2.484%	3.563%	20.000%	1,990	2.00%	121	1.886	1.665	2.00
69	14	5,923	2.624%	3.868%	20.000%	1,487	2.00%	89	1.980	1.732	2.00
70	15	4,347	2.765%	4.207%	20.000%	1,108	2.00%	65	2.079	1.801	2.00
71	16	3,174	2.906%	4.571%	20.000%	821	2.00%	47	2.183	1.873	2.00
72	17	2,306	3.047%	4.951%	20.000%	606	2.00%	34	2.292	1.948	2.00
73	18	1,666	3.188%	5.338%	20.000%	445	2.00%	24	2.407	2.026	2.00
74	19	1,197	3.329%	5.736%	20.000%	324	2.00%	17	2.527	2.107	2.00
75	20	855	3.470%	6.167%	100.000%	855	2.00%	0	2.653	2.191	2.00

DD&R Model 2
Level Premium Funding by Entry Age of Insured
Exhibit 2 - B: Entry Age = 55
(Sheet 2)

Yearly Discount Rate = 1.04
Yearly Loss Trend = 1.05

Age at Beginning of Year (1)	Years Insured at Start of Year (2)	# of Insureds (3)	Premium Collected (13)	PV Prem. Collected (14)	DD&R Utilized (15)	PV DD&R Utilized (16)	Ratio DD&R to Prem. (17)	Discounted Value of Future DD&R Loss (18)	Discounted Value of Future DD&R Prem (19)	Year-End UPR (20)	Year-End UPR per Insured (21)
55	0	100,000	$100,000	$100,000	$9,005	$9,005	9.00%	$131,221	$118,938	$12,283	$0.12
56	1	87,858	$92,251	$88,703	$8,643	$8,311	9.37%	$127,656	$103,893	$23,762	$0.27
57	2	77,043	$84,940	$78,531	$12,439	$11,500	14.64%	$120,077	$89,816	$30,261	$0.39
58	3	65,689	$76,044	$67,603	$11,460	$10,188	15.07%	$113,193	$77,085	$36,108	$0.55
59	4	55,881	$67,923	$58,061	$10,555	$9,023	15.54%	$106,956	$65,588	$41,368	$0.74
60	5	47,416	$60,516	$49,739	$15,575	$12,802	25.74%	$95,351	$55,221	$40,129	$0.85
61	6	38,009	$50,935	$40,255	$13,380	$10,575	26.27%	$85,520	$46,497	$39,023	$1.03
62	7	32,356	$45,528	$34,598	$12,222	$9,288	26.85%	$76,476	$38,584	$37,893	$1.17
63	8	27,453	$40,560	$29,637	$11,130	$8,133	27.44%	$68,184	$31,420	$36,764	$1.34
64	9	23,212	$36,010	$25,300	$10,102	$7,097	28.05%	$60,610	$24,947	$35,663	$1.54
65	10	19,557	$31,857	$21,521	$15,199	$10,268	47.71%	$47,534	$19,107	$28,427	$1.45
66	11	14,594	$24,960	$16,214	$12,052	$7,829	48.29%	$37,144	$14,513	$22,631	$1.55
67	12	10,849	$19,483	$12,169	$9,525	$5,949	48.89%	$28,916	$10,911	$18,005	$1.66
68	13	8,033	$15,148	$9,097	$7,503	$4,506	49.53%	$22,421	$8,096	$14,325	$1.78
69	14	5,923	$11,727	$6,772	$5,890	$3,401	50.22%	$17,312	$5,903	$11,409	$1.93
70	15	4,347	$9,036	$5,018	$4,606	$2,557	50.97%	$13,307	$4,199	$9,108	$2.10
71	16	3,174	$6,929	$3,699	$3,586	$1,914	51.75%	$10,183	$2,880	$7,303	$2.30
72	17	2,306	$5,285	$2,713	$2,777	$1,426	52.56%	$7,758	$1,861	$5,897	$2.56
73	18	1,666	$4,009	$1,979	$2,140	$1,056	53.37%	$5,886	$1,075	$4,811	$2.89
74	19	1,197	$3,025	$1,436	$1,639	$778	54.20%	$4,450	$468	$3,981	$3.33
75	20	855	$2,269	$1,035	$4,538	$2,071	200.00%	$0	$0	$0	$0.00
Total				$654,080		$137,677	21.05%				

DD&R Model 3
Level Premium Charge the Same for all Insureds
Assumptions and Column Keys for Exhibit 3

Assumptions:

- The same as applied in Model 2.
- Only two ages of insured: 47 and 60.
- Entry dates for each age were five years ago.
- Mature claims-made rate is $6,500 (average).

Column Key:

(1) is the insured's age.

(2) is the age at entry (i.e., age when first insured).

(3) is the number of insureds in each age class.

(4) is the DD&R rate for the insureds based on Model 2 analysis.

(5) is the assumed average mature claims-made rate.

(6) is the non-DD&R premium.
(6) = (3) x (5)

(7) is the resulting DD&R premium.
(7) = (4) x (6)

(8) is the assumed cost of tail coverage in relation to the cost of mature claims-made.

The boxed entry at the bottom of (4) is the resulting DD&R charge that would be applied to all insureds regardless of current age or entry age. It is the ratio of total column (7) to total column (6).

DD&R Model 3
Level Premium Charge the Same for all Insureds
Exhibit 3

Age at Beginning of Year (1)	Age at Entry (2)	# of Insureds (3)	DD&R Rate (4)	Average Mature C-M Rate (5)	non-DD&R Premium (6)	DD&R Premium (7)
47	42	50	5.950%	$6,500	$325,000	$19,338
60	55	35	21.050%	$6,500	$227,500	$47,889
Total		85	12.168%		$552,500	$67,226

EXHIBIT 4
ATTACHMENT ONE

Adopted Accounting Language on Claims-Made Policies and Reserves

The following language to be inserted on page 10-3 as the third paragraph under the caption "Claims-Made Policies":

Some claims-made policies provide extended reporting coverage at no additional charge in the event of death, disability or retirement of a natural person insured. In such instance, a reserve is required to assure that amounts collected by insurers to pay for these benefits are not earned prematurely and that an insurer with an aging book of business will not show adverse operating results simply because an increasing portion of insureds is earning the benefits for which it has paid. This reserve for "unclaimed coverage extension benefits" is most appropriately treated as part of the unearned premium reserve. However, an insurer may consider it to be a claims reserve and included with unpaid losses if authorized by the commissioner of the state of domicile. For a further discussion of this reserve, see Chapter 12 - Unearned Premiums.

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The following language to be inserted on page 12-2, immediately preceding the Section - "Unearned Premiums - Unauthorized Reinsurance":

Claims-Made Extended Reporting Coverage Options Relating to Death, Disability or Retirement

Some claims-made policies provide extended reporting coverage at no additional charge in the event of death, disability or retirement of a natural person insured. In such instance, a reserve is required to assure that amounts collected by insurers to pay for these benefits are not earned prematurely and that an insurer with an aging book of business will not show adverse operating results simply because an increasing portion of insureds is earning the benefits for which it has paid.

Insurers should fund this future liability by charging a higher price for insurance, rather than relying on financing from future revenues. The concept of level funding, applied to these grants of extended reporting coverage without additional charge, is that the indicated incremental premium should be the same proportion of premium regardless of whether an insurer: is just starting to write this business and does not expect any extended reporting options to be claimed in the near future; or has provided this type of coverage for several years and continues to write new business; or has ceased writing substantial amounts of new business but continues to renew existing accounts, expecting to grant increasing amounts of extended reporting coverage options without additional premium.

The amount of the reserve, when combined with premium appropriate for an on-going book of business, including some charge for extended reporting coverage, should be adequate to pay for all future claims arising from these coverage features. These future claims include those covered by future grants of extended reporting coverage, without diminishing future profitability below normal expectations for on-going business. If the loss rates for providing this coverage to an aging population are low enough to indicate a negative reserve, then the reserve should be set at zero.

Reserve estimates will normally assume that a portion of the existing population of insureds will not continue with the same insurer until qualifying for the benefit and exercising the option. Funding should not anticipate vesting or cash values for individual insureds unless specifically provided by contract.

These additional factors should be considered in estimating the reserve:

1. Loss trends;
2. Time value of money;
3. Nonrenewal rates;
4. Age and tenure eligibility requirements in the contracts;
5. Age and tenure demographics of the insured population;
6. Mortality considerations;
7. Morbidity considerations;
8. Pricing differentials (if any) related to age of insured;
9. Expected claim costs in relation to age of the insured and the number of years until retirement;
10. Waivers (if any) of charges for specialty changes before retirement;
11. Partial benefits (if any) for termination by either the insured or the insurer prior to retirement; and
12. Other factors that impact the value of future benefits.

Insurers should provide for this contingency as a reserve entitled "unclaimed coverage extension benefits." This reserve should be treated as part of the unearned premium reserve and should be considered to run more than one year from the date of the policy. The amount should be identified in a footnote. When the reserve is revalued at the close of each accounting period, a portion will flow into earned premium corresponding to insureds which have terminated claims-made coverage. A corresponding IBNR loss reserve will be established for those insureds which have exercised the extended reporting coverage option.

This reserve may alternatively be considered a claims reserve and included with unpaid losses by an insurer which has obtained authorization to do so from the commissioner of the state of domicile.

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Effective FY ending
12/31/93