**RECORD OF SOCIETY OF ACTUARIES**
**1993 VOL. 19 NO. 1A**

# NONFORFEITURE VALUES FOR LONG-TERM CARE

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- Approaches -- shortened benefit, reduced paid-up (RPU), extended term
- Definitions/advantages/disadvantages/examples
- Sensitivity testing
- Valuation of different approaches
- Implications for marketing
- Regulatory status

MR. BARTLEY L. MUNSON: The purpose of this session is to give an overview of nonforfeiture values for long-term care (LTC) insurance. I'm going to assume that it wouldn't hurt for all of us to have a review of the different forms, their cost, and where we seem to stand from a regulatory and industry point of view. The sources of information come largely from two major reports that our ad hoc actuarial group developed for the NAIC. My company also did a report on this subject for the American Association of Retired Persons (AARP) from which I derived some information.

I think the two documents for the NAIC are particularly useful to draw from, for they have been referred to many times by regulators, industry representatives, and consumer groups. They are particularly useful because pricing shown is the average of six different pricers (and the high and low of their range). Pricing consumed a lot of our time, but at least you know the documents don't reflect one person's view-point regarding how they price these benefits. I think the average of six different pricers gives you some confidence in their usefulness.

We'll first explore some background of why we might have nonforfeiture benefits in LTC insurance. Then we'll look at each of several forms -- their advantages, disadvantages, and costs. Then we'll consider where the NAIC and the federal people are at the moment.

For the purpose of our discussion, it's important to realize we're talking about paying benefits upon a voluntary cessation of premiums for a long-term-care plan not upon death. I'll make some comments about death, where it's relevant. But that's been confused many times when discussing this product. When we start having nonforfeiture benefits, we need to start discerning what type of terminations we're talking about. This is all voluntary. As we'll see, they'll take many forms.

I think many of us believe that as we do have level annual premiums, and annual claim costs that increase dramatically at the older ages, we have a question of equity and what's due to whom when. The consideration of nonforfeiture benefits is related to this prefunding in long-term-care insurance.

It's worth noting that for long-term care, a statutory active life, or contract reserve increases to some peak at a rather high attained age and then decreases at some rate, to zero, at the end of your mortality table. Unlike life insurance, it's not certain that we'll have a claim. It's not, therefore, necessary to peak to a reserve that's equal to the ultimate benefit. One can come up with their own shape (with peaks

and slopes), even for the same LTC policy, depending on the assumptions used, but that represents the basic nature of a long-term care active life reserve.

Analogies have been drawn, sometimes usefully and sometimes dangerously, to permanent, whole-life insurance. There are similarities and differences.

Whole life and LTC both have level premiums that involve prefunding, often by a considerable amount. Whole life has a fixed or a maximum premium, one or the other, unlike LTC, which has a guaranteed renewable premium so far. The qualifier refers to the "rate stabilization" subject which the regulators are pursuing. But so far it's guaranteed renewable. Unlike whole life, you can adjust the premium.

There's the matter of the certainty of the benefit payments. With whole life, the benefits will be paid if you keep the policy in force. We know some day that we'll all die, but with long-term care, beneficiaries may not ever claim LTC benefits, even if the policy is kept in force until death.

Hence, we have that hump in the active life reserve when we plot it by policy duration. This difference causes some dangers in the analogies we hear people drawing.

The motivations for exercising nonforfeiture benefits are different. Whole life, right or wrong, and usually right, is marketed sometimes for the value of its cash value and the investment side. Someone marketing life insurance can do a lot of things with that. On the other hand, long-term-care insurance is not marketed as a savings vehicle. In fact, people in Washington are afraid that it might become that and don't want it to be. If they permit certain nonforfeiture benefits, like cash, the fear is it could become a tax-sheltered savings plan.

We get different kinds of antiselection concerns when pricing life and LTC products. For life, we know extended term insurance presents antiselection, and we have priced for that for years. We have some risks from the cash and loan values and disintermediation that we've learned about in recent years. For long-term care, we don't have any of that yet. We would have to think about those if we have cash values. For some of the other noncash forms, we move towards a noncancellable product when we go to paid-up long-term-care benefits. So we introduce some antiselection issues different from life insurance.

When working for the SOA Task Force on LTC Valuation Methods and for the NAIC, I went back to some Society literature, and I found the Report on Actuarial Principles and Practical Problems With Regard To Nonforfeiture Requirements from January 1976. It was a special blue ribbon committee that the Society put together to look at life insurance and health insurance. At one point, I was hoping we might find something in our roots that would help us struggle through this debate that we've had on LTC nonforfeiture. Frankly, I didn't find much; long-term-care insurance did not exist back then.

I'd like to read a few sentences out of that report, because it's interesting to see what our sisters and brothers said about this issue back then. They said in brief summary:

"Some of the conclusions the committee has reached with regard to life insurance which may be relevant to considerations of health insurance are the following:

1. Nonforfeiture values derive from substantial prefunding of future coverage.
2. Asset shares are an appropriate and convenient measure of the "equity" in a contract.
3. It's desirable to avoid trivial nonforfeiture values.
4. The nature of the coverage provided should be preserved to the largest practical extent."

Many of us have thought and talked about those four comments without realizing it.

Then there was a paragraph that reveals some struggling with long-term disability. LTD relates to the long-term-care product although LTC is even a bigger struggle. "Disability coverages are enormously more complex than life coverages, with different disability definitions, elimination periods and benefit periods. Homogeneous morbidity data are often lacking." (This could have been an LTC paragraph.) "And published expense data are nonexistent. In practical terms, compiling data and enacting appropriate legislation and administering a wide array of contracts presents a formidable obstacle to be avoided if equity can be served otherwise. As we pointed out in connection with life insurance, equity can be maintained through premiums if there are no cash values." And this in many ways is part of the debate and struggle we have today with LTC. They acknowledged that there could be nonforfeiture benefits for some LTD. I sometimes wonder what they would have said if we had that group looking at LTC 17 years ago.

I want to show you some data on persisting policies that relate to what's been driving the regulators and the consumer groups (and frankly, some actuaries and companies) to struggle with finding appropriate nonforfeiture benefits. Table 1 shows the number of people that remain every quinquenial year if you look at only voluntary lapsation, with flat lapse rates by year shown at the top of the column. The number persisting under more realistic lapse pricing assumptions are shown in the last column. This table and others like it have been quoted by some folks to point out that very few people persist to get their long-term care benefit. For "those" who terminate voluntarily we ought to give them something, goes the argument. However you feel about those comments and arguments, these numbers are often quoted.

If you combine those lapse rates with mortality according to the 1983 Individual Annuity Mortality (IAM), and if the mortality is improving at 1.5% a year, Table 2 shows you how many people are left after 5-65 years.

The Ad Hoc Actuarial Group that published the two reports for the NAIC does not exist anymore. In fact, for the first report there were 14 original members; there was a group of 10 for the second report, and now the 10 have totally disappeared.

We truly were ad hoc. I told the NAIC that we would form a group and do something for them on this subject. Some of you were part of the group. We produced what is referred to as the June 2, 1992 report. We foolishly called it our Final Report. We did another one after it. So our first one was our final one. I'm not sure if that gave the regulators great confidence in our ability to work with numbers.

TABLE 1
Number of Policies Remaining In Force
Voluntary Lapses Only – No Mortality

| End of Policy Year | Percentage Lapsing Each Year | | | |
|---|---|---|---|---|
| | 5%[1] | 10%[1] | 16%[2] | Pricing Assumption (25%, 15%, 10%, 5% Forever) |
| 0 | 1,000 | 1,000 | 1,000 | 1,000 |
| 5 | 774 | 590 | 418 | 518 |
| 10 | 599 | 349 | 175 | 401 |
| 15 | 463 | 206 | 73 | 310 |
| 20 | 358 | 122 | 31 | 240 |
| 25 | 277 | 72 | 13 | 186 |
| 30 | 215 | 42 | 5 | 144 |
| 35 | 166 | 25 | 2 | 111 |
| 40 | 129 | 15 | 1 | 86 |
| 45 | 99 | 9 | | 67 |
| 50 | 77 | 5 | | 51 |
| 55 | 60 | 3 | | 40 |
| 60 | 46 | 2 | | 31 |
| 65 | 36 | 1 | | 24 |

(1) Arbitrary and merely illustrative.
(2) A number from Health Insurance of America, Research Bulletin. *Long-Term-Care Insurance: A Market Update,* January 1991; page 29. This annual lapse rate normally would not prevail over the many years a block of policies are in force, but it has been asserted by some to do so and thus is shown for illustration.

Table 3 summarizes the policy specifications on the policy we priced.

I don't know if the word "typical" ever makes sense for this product, but it is a fairly typical nursing home and home health care product, with a four-year lifetime benefit. This is the basic policy we used, with the benefit trigger shown. We did it with and without inflation protection.

Our pricing assumptions are shown in Table 4. We used "base" pricing assumptions, and also varied certain assumptions while holding all others at the "base" – we did that for lapse, interest rates and expenses. Every pricer used their own claim costs, methodologies and pricing system. We didn't feel there was a particularly correct one. I think all of us could have argued forever about which was best. So we confidentially used our own. However, we did use common assumptions for most everything else, as you can see here.

Throughout this discussion, I've drawn numbers produced by the base or middle assumptions. That's why you see that parenthetical description. We spent some time as a group working on these assumptions. We don't claim they're right for everybody. But we thought they were useful enough to be illustrative and helpful for the regulators and for the rest of us reviewing the report.

TABLE 2
Number of Policies Remaining In Force
Voluntary Lapses and Mortality Combined

| End of Policy Year | Issue Age 35 | 50 | 65 | 75 | 35 | 50 | 65 | 75 |
|---|---|---|---|---|---|---|---|---|
| | Pricing Assumption Mortality Plus 5%[1] Lapse Each Year | | | | Pricing Assumption Mortality Plus 10%[1] Lapse Each Year | | | |
| 0 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| 5 | 771 | 762 | 732 | 661 | 588 | 581 | 558 | 504 |
| 10 | 593 | 577 | 520 | 398 | 346 | 336 | 303 | 232 |
| 15 | 455 | 434 | 352 | 208 | 202 | 193 | 156 | 93 |
| 20 | 348 | 321 | 220 | 91 | 118 | 109 | 75 | 31 |
| 25 | 265 | 232 | 122 | 32 | 69 | 60 | 32 | 8 |
| 30 | 200 | 161 | 58 | 9 | 40 | 32 | 11 | 2 |
| 35 | 149 | 106 | 23 | 1 | 23 | 16 | 3 | |
| 40 | 110 | 63 | 7 | | 13 | 7 | 1 | |
| 45 | 78 | 33 | 1 | | 7 | 3 | | |
| 50 | 53 | 15 | | | 4 | 1 | | |
| 55 | 33 | 6 | | | 2 | | | |
| 60 | 19 | 2 | | | 1 | | | |
| 65 | 10 | | | | | | | |
| | Pricing Assumption Mortality Plus 16%[2] Lapse Each Year | | | | Pricing Assumption Mortality and Lapse | | | |
| 0 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| 5 | 417 | 412 | 395 | 357 | 517 | 510 | 490 | 442 |
| 10 | 173 | 169 | 152 | 116 | 397 | 386 | 348 | 266 |
| 15 | 72 | 68 | 56 | 33 | 305 | 290 | 235 | 140 |
| 20 | 30 | 27 | 19 | 8 | 233 | 215 | 147 | 61 |
| 25 | 12 | 11 | 6 | 1 | 177 | 155 | 82 | 21 |
| 30 | 5 | 4 | 1 | | 134 | 108 | 39 | 6 |
| 35 | 2 | 1 | | | 100 | 72 | 15 | 1 |
| 40 | 1 | | | | 73 | 42 | 5 | |
| 45 | | | | | 52 | 22 | 1 | |
| 50 | | | | | 35 | 10 | | |
| 55 | | | | | 22 | 4 | | |
| 60 | | | | | 13 | 1 | | |
| 65 | | | | | 6 | | | |

(1) Arbitrary and merely illustrative.
(2) A number from Health Insurance of America, Research Bulletin. *Long-Term-Care Insurance: A Market Update*, January 1991; page 29.

Table 5 is a page from that report. Here's where we took our pricing assumptions – mortality and gender mix with the three different lapse rates across the top – for four different issue ages to show how many people are left.

It is interesting to see how many people exited the column by death. If you look at age 65, you see on the bottom line, under the low lapse rates, that there were a total of 557 people in this cohort who died. You can see the impact of middle or base lapse rates; that became 339 under the base lapse rates and just 149 under the high lapse assumption. This gives you a feeling for the impact of those kinds of terminations.

TABLE 3
Policy Specifications

| | |
|---|---|
| Daily Benefits | |
| Nursing Home | $80 per day |
| Home Health | $40 per day |
| Benefit Period | Four-year lifetime |
| Elimination Period | 30 days |
| Benefit Structure | Days of Home Health benefits count as a half day |
| | Indemnity basis |
| | Premiums waived after 90 days Nursing Home benefits paid |
| | Community Care covered |
| Benefit Trigger | Medical Necessity |
| | Cognitive Impairment |
| | 2 of 5 activities of daily living (ADLs) (human assistance) |
| | ADLs: Continence, Dressing, Eating, Transferring, and Toileting |
| Inflation | 5% compounded for life, including while in claim |
| | Automatic |
| | Level premium |

TABLE 4
Pricing Assumptions

| | |
|---|---|
| Claim Costs | Each actuary's |
| Mortality | 1983 Group Annuity Mortality (GAM) blended unisex table |
| Gender | 60% female/40% male each issue age |
| Risk/Profit | 10% of premium |
| Taxes | 2.5% premium + deferred acquisition cost (DAC) |
| Lapse | 15%/10%/5% thereafter (Base) |
| Interest Rate | 7% level (Base) |
| Expense | First year = 75% of premium + $120 per policy |
| | Renewal Years = 15% of premiums + $20 per policy |
| | All years = 6% of claims paid |

It's looking at numbers like that, and the pattern of reserves and premiums, that cause many people to say we've got to have nonforfeiture benefits. I don't attempt to argue for or against them. I'll try to stay neutral in my comments. That's fairly easy to do, because while I think we should have them, I don't like any of them. So I don't know what to do. I think that's been the dilemma for many people. There are advantages and disadvantages in every form and every option. We'll look at these: cash surrender value, return of premium, reduced paid up, extended term, and shortened benefit period. The latter has become the form of choice among most of the regulators and the consumer groups. Then we'll look at some other forms, some of which would be combinations of these.

**CASH SURRENDER VALUE (CSV)**

There's nothing mysterious about cash surrender values. We're all familiar with them. They return a portion of the reserve or the asset share, and the value varies by issue age and duration. Obviously that form has some advantages and disadvantages. It's

paid in a lump sum (we'll assume for the moment). We'll talk about the variation on that later. It's paid at death or lapse. I said we're talking about voluntary terminations, but in this form we also have to consider death. Sometimes the necessity of that is obvious to people; sometimes it's not. From a public policy point of view, it doesn't seem fair not to also pay benefits upon death.

TABLE 5
Policies Persisting From 1,000 Issued
Mortality and Gender Mix Per Pricing Assumptions

| End of Policy Year | Low Lapse Rates (10/5/2.5), Issue Age | | | | Base Lapse Rates (15/10/5), Issue Age | | | | High Lapse Rates (25/15/10), Issue Age | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 45 | 55 | 65 | 75 | 45 | 55 | 65 | 75 | 45 | 55 | 65 | 75 |
| 1 | 899 | 896 | 891 | 871 | 849 | 847 | 841 | 823 | 749 | 747 | 742 | 726 |
| 2 | 852 | 848 | 836 | 798 | 763 | 759 | 748 | 714 | 636 | 632 | 623 | 595 |
| 3 | 829 | 823 | 805 | 747 | 723 | 717 | 701 | 651 | 571 | 566 | 554 | 514 |
| 4 | 807 | 798 | 773 | 696 | 686 | 678 | 657 | 591 | 513 | 507 | 491 | 442 |
| 5 | 785 | 774 | 741 | 645 | 650 | 640 | 614 | 534 | 460 | 454 | 435 | 378 |
| 6 | 763 | 750 | 710 | 594 | 616 | 605 | 572 | 479 | 413 | 406 | 384 | 322 |
| 7 | 742 | 726 | 678 | 545 | 583 | 571 | 533 | 428 | 371 | 363 | 339 | 272 |
| 8 | 722 | 703 | 646 | 496 | 552 | 538 | 494 | 380 | 333 | 324 | 298 | 229 |
| 9 | 701 | 679 | 614 | 449 | 523 | 507 | 458 | 335 | 299 | 289 | 261 | 191 |
| 10 | 681 | 656 | 582 | 404 | 495 | 477 | 423 | 294 | 268 | 258 | 229 | 159 |
| 11 | 661 | 633 | 549 | 360 | 468 | 448 | 389 | 255 | 240 | 230 | 199 | 131 |
| 12 | 642 | 610 | 517 | 319 | 443 | 421 | 356 | 220 | 215 | 204 | 173 | 107 |
| 13 | 623 | 587 | 484 | 280 | 419 | 395 | 325 | 189 | 193 | 182 | 150 | 87 |
| 14 | 604 | 564 | 451 | 244 | 396 | 370 | 296 | 160 | 172 | 161 | 129 | 70 |
| 15 | 586 | 541 | 419 | 210 | 374 | 345 | 267 | 134 | 154 | 143 | 110 | 55 |
| 20 | 497 | 425 | 264 | 82 | 279 | 238 | 148 | 46 | 88 | 75 | 47 | 14 |
| 25 | 410 | 306 | 139 | 19 | 202 | 151 | 68 | 9 | 49 | 36 | 16 | 2 |
| 30 | 322 | 194 | 55 | 2 | 139 | 84 | 24 | 1 | 26 | 15 | 4 | 0 |
| 35 | 232 | 102 | 13 | 0 | 88 | 39 | 5 | 0 | 12 | 5 | 1 | |
| 40 | 147 | 40 | 1 | | 49 | 13 | 0 | | 5 | 1 | 0 | |
| 45 | 77 | 10 | 0 | | 23 | 3 | | | 2 | 0 | | |
| 50 | 31 | 1 | | | 8 | 0 | | | 0 | | | |
| 55 | 7 | 0 | | | 2 | | | | | | | |
| 60 | 1 | | | | 0 | | | | | | | |
| Sum of Deaths at End of Policy Year | | | | | | | | | | | | |
| 10 | 19 | 47 | 129 | 328 | 15 | 38 | 104 | 269 | 10 | 26 | 72 | 188 |
| 20 | 54 | 140 | 338 | 591 | 37 | 96 | 236 | 437 | 19 | 49 | 125 | 259 |
| 30 | 24 | 291 | 508 | 663 | 71 | 169 | 320 | 474 | 27 | 66 | 146 | 269 |
| Final | 361 | 452 | 557 | 665 | 148 | 228 | 339 | 474 | 36 | 74 | 149 | 269 |

Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

What if you help your mother die comfortably, but realize the day after she's gone that if you had only surrendered the policy two days earlier you could have received your cash surrender value? We can't put insureds or family members in the position of needing to remember to surrender policies and then struggling with that decision when their minds ought to be on something else. This is a more expensive option than some of the forms that pay out in LTC benefits, because you're paying it out for two kinds of decrements: voluntary and death.

There certainly are some arguments against this form. The cost of it is one. Some fear it may encourage long-term-care insurance to be sold as an investment vehicle (though I think it's a bad one). I doubt we would see that developed as a threat to undermine this product. In addition, there are tax problems with the option. The

Senate Finance Committee staff, at least a year ago, discussed the tax problems with me. I pointed out that if it's limited to not more than the return of premium, I'm not sure why it needs to become a tax problem. I think regulations can be written to control that.

This was a form of choice for me some time ago. I left it, but now I've come back to it and like to think about it again. It has disadvantages, several of them, but it does have the advantage of letting people out of the contract; they can leave if they don't like their insurance, or if they don't need the insurance. As we'll see, there are serious problems with each of the other forms. So the cash surrender value option still intrigues me.

As an actuarial group we produced four cash surrender value schedules for the NAIC. Let me just quickly tell you what they were: (1) We had a Schedule A Uncapped. It was from an old report that another group did for the NAIC. It was essentially 90% of a no-lapse asset share, and it had no death benefit in it. It was the result of a model Jim Robinson at the University of Wisconsin had developed with some Robert Wood Johnson funding. (2) We had Schedule A Capped, where the CSV was capped at 100% of the premium. (3) We had Schedule C, which was based on our base pricing in this actuarial report. It was derived from an asset share that had no lapses above duration three. We did have a 10% risk charge. There was no inflation protection in the product. (4) Finally is Schedule E, which is the one we used for most testing in our report. That was developed a bit more actuarially.

Let me briefly describe how we derived these Schedule E cash values. First, we related them to reserves. Since we don't have reserve standards, we created some reserves for this purpose. We calculated reserves for the base policy, without inflation protection. We did it based on one-year preliminary term. We used the 1983 Group Annuity Mortality Table, unisex, with a blending of 60/40 female/male. We assumed no lapses. The claims costs were from one of the six pricers. We used 5.5% interest.

Second, cash values were a percentage of the reserve. In the first three years, the percentage was zero. There was no cash value. In duration four, the base started at 50% of the reserve and went up 5% a year to a maximum of 80% at duration 10. It remained 80% thereafter. That was an outcome of the discussion of the Actuarial Ad Hoc Group. It isn't recommended necessarily as a way to do it, but it's not an unreasonable way to do it.

Third, all the pricers priced that type of scale on base pricing assumptions and came up with premiums for a policy that would include, among other features, the scale of nonforfeiture benefits.

Next, we took those six sets of premiums, averaged them across the six pricers to obtain an assumed annual premium. Finally, we could then express the cash surrender scale as a percentage of premium and use the same scale for everybody in our six pricing systems. We divided the cash value from Step 2 by the sum of premiums to the date of lapse. That was the resulting scale we all used in our subsequent pricing -- a cash surrender value scale expressed as a common (across pricers) percentage of the sum of unique premiums (by pricer).

Table 6 is one page out of our report, just to show what the reserves in Step 1 and the cash values in Step 2 look like. I picked the page that has issue age 65 in the right-hand column. This is per $10 of nursing home benefit. You'll see the statutory reserve based on the assumptions I just mentioned, plus the cash value related to it in the last column.

TABLE 6
For Use in Producing Schedule E

| End of Policy Year | Cash Value Percentage | Issue Age 50 | | Issue Age 55 | | Issue Age 60 | | Issue Age 65 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Statutory Reserve | Cash Value | Statutory Reserve | Cash Value | Statutory Reserve | Cash Value | Statutory Reserve | Cash Value |
| 1 | 0% | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 2 | 0 | 35 | 0 | 47 | 0 | 67 | 0 | 89 | 0 |
| 3 | 0 | 70 | 0 | 96 | 0 | 136 | 0 | 177 | 0 |
| 4 | 50 | 107 | 53 | 146 | 73 | 209 | 105 | 264 | 132 |
| 5 | 55 | 145 | 80 | 199 | 110 | 283 | 156 | 348 | 191 |
| 6 | 60 | 186 | 111 | 256 | 153 | 359 | 215 | 431 | 258 |
| 7 | 65 | 228 | 148 | 315 | 205 | 434 | 282 | 509 | 331 |
| 8 | 70 | 273 | 191 | 378 | 265 | 511 | 358 | 586 | 410 |
| 9 | 75 | 320 | 240 | 445 | 334 | 587 | 440 | 660 | 495 |
| 10 | 80 | 370 | 296 | 514 | 411 | 662 | 529 | 731 | 585 |
| 11 | 80 | 423 | 338 | 584 | 467 | 735 | 588 | 800 | 640 |
| 12 | 80 | 479 | 383 | 654 | 523 | 804 | 643 | 865 | 692 |
| 13 | 80 | 538 | 431 | 725 | 580 | 871 | 697 | 925 | 740 |
| 14 | 80 | 602 | 482 | 795 | 636 | 936 | 749 | 981 | 785 |
| 15 | 80 | 667 | 534 | 864 | 691 | 998 | 798 | 1,030 | 824 |
| 16 | 80 | 733 | 587 | 931 | 745 | 1,057 | 846 | 1,074 | 859 |
| 17 | 80 | 800 | 640 | 994 | 795 | 1,113 | 890 | 1,110 | 888 |
| 18 | 80 | 867 | 694 | 1,055 | 844 | 1,164 | 931 | 1,140 | 912 |
| 19 | 80 | 933 | 746 | 1,115 | 892 | 1,211 | 969 | 1,164 | 931 |
| 20 | 80 | 998 | 798 | 1,170 | 936 | 1,251 | 1,001 | 1,182 | 946 |
| 21 | 80 | 1,062 | 849 | 1,223 | 978 | 1,286 | 1,029 | 1,193 | 955 |
| 22 | 80 | 1,120 | 896 | 1,273 | 1,018 | 1,314 | 1,051 | 1,203 | 963 |
| 23 | 80 | 1,178 | 942 | 1,319 | 1,055 | 1,335 | 1,068 | 1,203 | 962 |
| 24 | 80 | 1,233 | 986 | 1,360 | 1,088 | 1,351 | 1,081 | 1,192 | 953 |
| 25 | 80 | 1,284 | 1,027 | 1,394 | 1,115 | 1,361 | 1,089 | 1,177 | 941 |
| 26 | 80 | 1,334 | 1,067 | 1,423 | 1,139 | 1,365 | 1,092 | 1,154 | 923 |
| 27 | 80 | 1,380 | 1,104 | 1,446 | 1,156 | 1,367 | 1,094 | 1,123 | 899 |
| 28 | 80 | 1,422 | 1,137 | 1,462 | 1,169 | 1,359 | 1,087 | 1,089 | 871 |
| 29 | 80 | 1,459 | 1,167 | 1,473 | 1,178 | 1,340 | 1,072 | 1,049 | 839 |
| 30 | 80 | 1,489 | 1,191 | 1,478 | 1,182 | 1,317 | 1,054 | 1,010 | 808 |
| 31 | 80 | 1,515 | 1,212 | 1,476 | 1,181 | 1,287 | 1,030 | 967 | 773 |
| 32 | 80 | 1,534 | 1,227 | 1,473 | 1,179 | 1,250 | 1,000 | 928 | 743 |
| 33 | 80 | 1,546 | 1,237 | 1,460 | 1,168 | 1,208 | 967 | 885 | 708 |
| 34 | 80 | 1,554 | 1,243 | 1,436 | 1,149 | 1,162 | 929 | 845 | 676 |
| 35 | 80 | 1,555 | 1,244 | 1,409 | 1,127 | 1,115 | 892 | 789 | 631 |
| 36 | 80 | 1,550 | 1,240 | 1,374 | 1,099 | 1,066 | 853 | 728 | 583 |
| 37 | 80 | 1,544 | 1,235 | 1,332 | 1,065 | 1,022 | 818 | 669 | 535 |
| 38 | 80 | 1,528 | 1,222 | 1,286 | 1,029 | 973 | 779 | 610 | 488 |
| 39 | 80 | 1,501 | 1,201 | 1,235 | 988 | 927 | 742 | 550 | 440 |
| 40 | 80 | 1,470 | 1,176 | 1,184 | 947 | 866 | 693 | 491 | 393 |
| 41 | 80 | 1,432 | 1,145 | 1,131 | 905 | 800 | 640 | 433 | 346 |
| 42 | 80 | 1,387 | 1,109 | 1,083 | 866 | 735 | 588 | 376 | 300 |
| 43 | 80 | 1,338 | 1,070 | 1,030 | 824 | 671 | 537 | 321 | 257 |
| 44 | 80 | 1,283 | 1,027 | 981 | 785 | 608 | 486 | 275 | 220 |
| 45 | 80 | 1,230 | 984 | 916 | 733 | 544 | 435 | 0 | 0 |
| 46 | 80 | 1,174 | 939 | 847 | 677 | 481 | 385 | | |
| 47 | 80 | 1,123 | 899 | 779 | 623 | 419 | 335 | | |
| 48 | 80 | 1,068 | 855 | 712 | 569 | 359 | 287 | | |
| 49 | 80 | 1,016 | 813 | 645 | 516 | 304 | 243 | | |
| 50 | 80 | 949 | 759 | 578 | 462 | 0 | 0 | | |

Note: Values per $10 Nursing Home Daily Benefit.
Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

Table 7 shows what kind of scales we derived for issue age 65. All are expressed as a percentage of the sum of the premiums. These are what we developed, as Schedule A, C, and E (the footnote points out that the capped limitation on Schedule A didn't apply above age 60). You can see looking across which scale was relatively rich. Schedule E was thinner, and in fact, peaked and decreased, following the pattern of the reserve.

TABLE 7
CSV as % of Sum Premiums Issue Age 65

| End of Year | Schedule A* | Schedule C | Schedule E |
|---|---|---|---|
| 1 | 8% | 0% | 0% |
| 2 | 29 | 0 | 0 |
| 3 | 38 | 0 | 0 |
| 4 | 44 | 37 | 17 |
| 5 | 49 | 40 | 20 |
| 10 | 52 | 49 | 31 |
| 20 | 52 | 53 | 25 |
| 30 | 52 | 53 | 14 |
| 40 | 52 | 53 | 5 |

* Capping at 100% applies only below issue age 60
Source: June 2, 1992 Report to NAIC

Table 8 shows the premium results for these cash surrender scales; the top half of the table shows a policy without inflation protection, the bottom half shows it with inflation protection. The premiums shown are the averages of the six pricers and for policies with no nonforfeiture values. The table shows what happens to the premiums if we had a nonforfeiture benefit equal to any of these cash surrender value scales.

Look at age 65. For Schedule E, the premium went up 34% without inflation protection; with inflation protection we see it went up 33%. You can see the percentage changes across the different issue ages.

**RETURN OF PREMIUM (ROP)**

Let's look at return of premium, which is just a different way of saying cash surrender value, in my opinion. Lets discuss the kinds of options that are on the market. They start as early as the first policy year, but usually later. They return premiums almost always without interest. Returning premiums accumulated with some interest rate makes an already expensive option a lot more expensive. Also, the policy provides for deducting any long-term care claims that have been paid. That's a typical way of defining the option. That's what we did, although in our pricing we assumed no claims have been paid. We were doing it in theory. The result is a little bit conservative. This option is similar to cash surrender value and therefore you have to pay it at death or lapse for the same reasons.

Though I didn't mention it earlier, I would think if we go the route of cash surrender value and define it that way, we should deduct any LTC claims paid there, too.

## TABLE 8

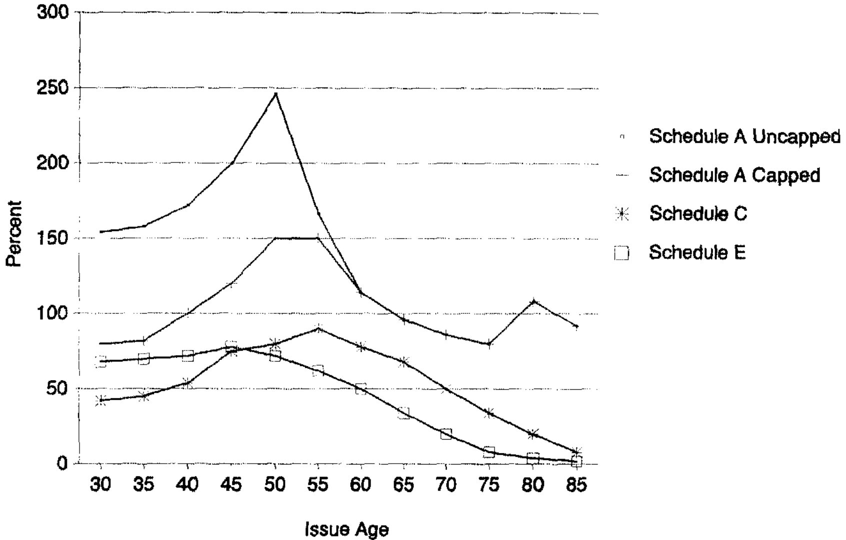
### Annual Premiums Base and Percentage Increase

| CSV Schedule | Issue Age 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Without Inflation Protection** | | | | | | | | | | | | |
| Premium | $138 | $172 | $217 | $282 | $378 | $537 | $795 | $1,231 | $1,979 | $3,195 | $5,047 | $7,372 |
| A-U* | 153% | 158% | 172% | 201% | 246% | 166% | 117% | 98% | 86% | 83% | 109% | 92% |
| A-C** | 80 | 84 | 99 | 122 | 150 | 149 | 117 | 98 | 86 | 83 | 109 | 92 |
| C | 41 | 44 | 56 | 73 | 81 | 89 | 77 | 69 | 50 | 36 | 21 | 7 |
| E | 68 | 70 | 72 | 76 | 72 | 60 | 49 | 34 | 20 | 10 | 5 | 3 |
| **With Inflation Protection** | | | | | | | | | | | | |
| Premium | $346 | $442 | $558 | $717 | $936 | $1,251 | $1,690 | $2,336 | $3,313 | $4,745 | $6,747 | $9,163 |
| A-U* | 150% | 156% | 171% | 200% | 245% | 167% | 118% | 100% | 89% | 87% | 116% | 102% |
| A-C** | 79 | 84 | 99 | 122 | 150 | 150 | 118 | 100 | 89 | 87 | 116 | 102 |
| C | 40 | 45 | 57 | 73 | 81 | 89 | 78 | 71 | 52 | 38 | 26 | 11 |
| E | 68 | 70 | 72 | 75 | 71 | 60 | 47 | 33 | 20 | 10 | 5 | 3 |

* A-Uncapped
** A-Capped
Source: June 2, 1992 Report to NAIC

Chart 1 shows the premium increases for all four of the cash surrender value scales, for a policy without inflation protection. Again, maybe Schedule E is the one to focus on.

CHART 1
Percentage Premium Increase versus Base Policy
to Provide Cash Surrender Value
Without Inflation Protection (Based on Average Premiums)




Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits Ad Hoc Actuarial Group, June 2, 1992.

What scale do you use for return of premium? We tried the base and then alternate scale. Again, these were the fairly arbitrary results of discussions among actuaries. We said let's start at year five at 15%, increasing 5% per year to a maximum of 75%. We looked at some products on the market that weren't too much different from this. The alternate scale started earlier (5% at year two) and it capped out higher (90% at year 20).

Table 9 shows what these scales do to the premium. Looking at age 65, we have both the base and alternate, which look very expensive. Return of premium can be very expensive, depending on how one comes up with a predefined scale. We try to make that clear in our report. There is nothing that says return of premium is inherently more expensive than cash surrender value. We just happened to pick some scales that were.

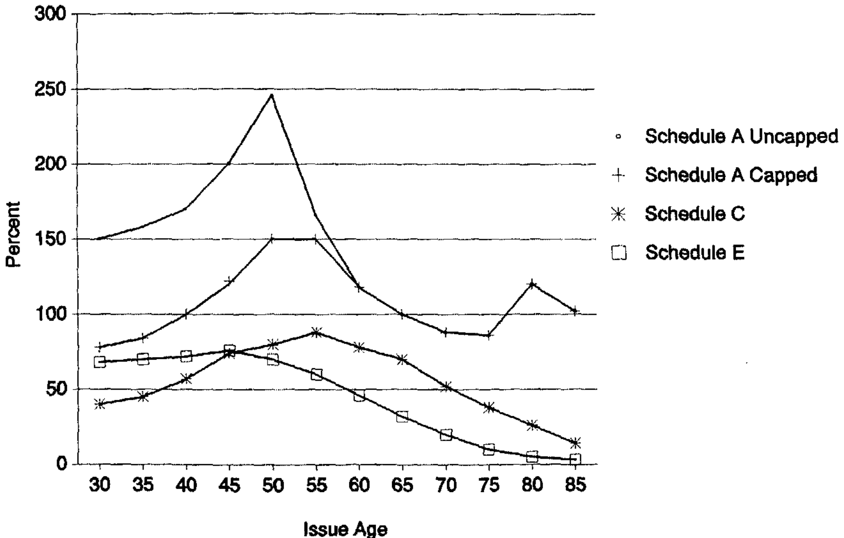
Chart 2 also shows the premium increases, but with inflation protection. The percentage increases look very much alike, with or without inflation protection. The dollar amounts, of course, are bigger, because we're starting with an inflation protection base premium that's higher.

TABLE 9
% Increase in Annual Premium

| ROP Scale | Issue Age 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Without Inflation Protection | | | | | | | | | | | | |
| Base | 58% | 59% | 58% | 57% | 55% | 54% | 51% | 46% | 41% | 34% | 28% | 21% |
| Alt | 65 | 66 | 68 | 70 | 72 | 73 | 73 | 70 | 66 | 59 | 50 | 39 |
| With Inflation Protection | | | | | | | | | | | | |
| Base | 58% | 59% | 60% | 56% | 55% | 54% | 51% | 46% | 41% | 34% | 28% | 21% |
| Alt | 64 | 66 | 68 | 69 | 71 | 73 | 73 | 70 | 66 | 60 | 49 | 39 |

Source: June 2, 1992 Report to NAIC

CHART 2
Percentage Premium Increase versus Base Policy
to Provide Cash Surrender Value
With Inflation Protection (Based on Average Premiums)




Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

**REDUCED PAID-UP (RPU)**

RPU is analogous to life insurance: we reduce the daily benefit, but coverage goes forever (for life) once you stop paying premiums, and benefits run for the full benefit period. It provides funding for LTC benefits, not cash independent of the policy's benefit trigger. I have some concerns about this form. I know there are some on the market, and they're not bad, but there's something wrong with every form, and that's been the struggle of the regulators and others. There's considerable administrative expense to maintain records forever on a small daily benefit. It's difficult to track

an insured who doesn't pay premiums anymore. Are they even alive? It becomes a noncancellable, long-term-care product. Depending on how rich the scale is – i.e. how early it starts, how big it is – we can get a block moving toward noncancellable quickly. While some have suggested with this form we could stack pieces from successive policies, I believe that's flawed. A buyer drops policies and buys others, as products evolve and get better. Some call that stacking of policies. I don't think that will work. The very reason they upgrade in that fashion is because the policy is better and different. Try to explain to consumers that they have four long-term-care policies, one with three-day prior hospital, one with no home care. We can imagine the variations. I'm not sure that's going to work very well. So I'm not sure it's very helpful to argue you can stack them.

A question: if we go to noncancellable, should we vary the daily benefit amount of the RPU after the policy is lapsed? The variation could be either because the company's experience has improved but more likely because it deteriorated. It's a block of business beyond reach of premium adjustment. Well, we've raised the question in our report. Should that scale that's published in the policy be subject to change after the policy is issued? Perhaps while it's still in premium paying status or even after it goes on paid up. But those who have thought about it say, once it goes on paid up and you tell them they have $22 of a daily benefit you really shouldn't 10 years later say, "Oops, you have $19." I haven't heard that this issue has been settled. But that opinion has been consistently expressed. RPU does have the advantage of paying out a benefit of the kind insured by the policy.

Table 10 shows what our RPU percentages were. We came up with a high scale, a middle scale, and a lower scale using a 1991 report. The latter two applied to all issue ages; all are predefined.

The scales produce premiums as shown in Table 11. Again at age 65, the low scale without inflation protection increases the premium 19%; with inflation protection the premium increases 27%. Then we asked, how do premiums compare with what we showed earlier for the cash surrender value scale? What's the relative cost for comparable benefits between cash surrender value and RPU? To answer that, we need some reasonably comparable benefit scales.

We developed an equivalent RPU scale by taking the premium that we generated for the cash surrender value, Schedule E. We'll add a risk charge because RPU becomes noncancellable and we think the insurer needs to charge a little more for this. How much more? We didn't successfully define that. We finally said, let's let each of the six pricers set their own charges. We never told each other what we did. We all had different opinions, and frankly, none of us felt we knew what we should do. We did use a 20% charge for a shortened benefit period in our next report.

We assumed that the cash surrender value amount would be paid upon death before the policy went on an RPU status, because our base equivalency was using the same premium. It wouldn't be entirely equivalent if we didn't do something for those who died before it went to nonforfeiture. So we assumed it would be paid on death.

TABLE 10
Reduced Paid Up Percentage

| End of Policy Year | "High" Percentage*, Issue Age 35 | 50 | 65 | 75 | "Middle" Percentage, All Issue Ages (Base Scale) | "Lower" Percentage,* All Issue Ages |
|---|---|---|---|---|---|---|
| 2 | | 1% | 6% | 5% | | |
| 3 | | 6 | 13 | 11 | | |
| 4 | 3% | 12 | 19 | 17 | | |
| 5 | 7 | 16 | 25 | 22 | 25% | |
| 6 | 10 | 21 | 31 | 27 | 28 | |
| 7 | 13 | 26 | 36 | 31 | 31 | |
| 8 | 17 | 30 | 40 | 35 | 34 | |
| 9 | 20 | 34 | 44 | 38 | 37 | |
| 10 | 23 | 38 | 48 | 42 | 40 | 30 |
| 15 | 39 | 55 | 61 | 54 | 55 | 45 |
| 20 | 52 | 67 | 70 | 62 | 70 | 60 |
| 25 | 64 | 75 | 75 | 67 | 80 | 75 |
| 30 | 72 | 80 | 78 | 71 | 80 | 75 |
| 35 | 78 | 83 | 80 | 73 | 80 | 75 |
| 40 | 82 | 85 | 82 | 74 | 80 | 75 |
| 45 | 85 | 86 | 83 | 74 | 80 | 75 |
| 50 | 86 | 87 | 83 | | 80 | 75 |
| 55 | 87 | 87 | 83 | | 80 | 75 |
| 60 | 88 | 87 | | | 80 | 75 |
| 65 | 88 | 88 | | | 80 | 75 |
| 70 | 89 | 88 | | | 80 | 75 |
| 75 | 89 | | | | 80 | 75 |
| 80 | 89 | | | | 80 | 75 |
| 85 | 89 | | | | 80 | 75 |

* From April 10, 1991 Report
Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

TABLE 11
% Increase in Annual Premiums

| RPU Scale | Issue Age 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Without Inflation Protection | | | | | | | | | | | | |
| High | 71% | 81% | 67% | 72% | 65% | 56% | 45% | 35% | 23% | 12% | 10% | 5% |
| Middle* | 86 | 100 | 78 | 71 | 62 | 51 | 38 | 28 | 18 | 10 | 5 | 3 |
| Low | 58 | 73 | 57 | 55 | 49 | 38 | 28 | 19 | 10 | 5 | 3 | 1 |
| With Inflation Protection | | | | | | | | | | | | |
| High | 217 | 172 | 142 | 131 | 100 | 76 | 58 | 43 | 28 | 16 | 9 | 6 |
| Middle* | 274 | 216 | 168 | 129 | 95 | 72 | 48 | 33 | 21 | 12 | 6 | 3 |
| Low | 234 | 182 | 142 | 119 | 83 | 60 | 40 | 27 | 16 | 9 | 4 | 2 |

* Base
Source: June 2, 1992 Report to NAIC

The resulting RPU scales for issue age 65 are shown in the last two columns of Table 12. If you want to put the same premium into the policy as for the cash surrender value, Schedule E, you could use this kind of an RPU scale.

TABLE 12
RPU Purchased by CSV

| End of Year | High | Middle (Base) | Low | Equivalent | |
|---|---|---|---|---|---|
| | | | | Without IP | With IP |
| 1 | 0% | 0% | 0% | 0% | 0% |
| 2 | 6 | 0 | 0 | 0 | 0 |
| 3 | 13 | 0 | 0 | 0 | 0 |
| 4 | 19 | 0 | 0 | 8 | 7 |
| 5 | 25 | 25 | 0 | 11 | 9 |
| 10 | 48 | 40 | 30 | 27 | 21 |
| 15 | 61 | 55 | 45 | 32 | 22 |
| 20 | 70 | 70 | 60 | 33 | 20 |
| 25 | 75 | 80 | 75 | 35 | 18 |
| 30 | 78 | 80 | 75 | 38 | 16 |

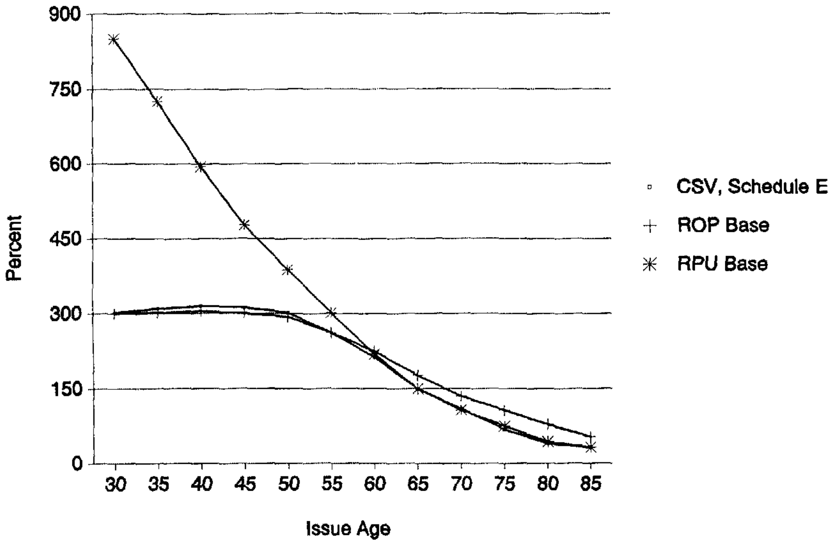
Source: June 2, 1992 Report to NAIC

Chart 3 shows the premium increase of a policy that has neither inflation protection nor a nonforfeiture benefit. Which of those two benefits is more important, inflation protection or a nonforfeiture benefit, or are both important? But if you have both, the chart shows what it does to the premium. I think this graph shows what some of the struggle has been about. You can define your own scale, you can do it in your own pricing assumptions, you won't get these exact percentages, but you'll get something that is generally serious. That really can't be avoided, no matter who prices it.

**EXTENDED TERM INSURANCE (ETI)**
Extended term benefit works just like it does in life insurance. It provides a long-term-care benefit which is desirable. It provides the full daily benefit and the full benefit period once you go in claim. Of course, one of the disadvantages of it, as many have said, is that the claim must start within the extended coverage period. You get what you pay for, and many insureds won't have the coverage they need when they become older. That's a disadvantage. It also has other difficulties of RPU: tracking people, expensive administration, going on a noncancellable block. So this form really hasn't caught the fancy of many people.

We calculated, as six pricers, scales of ETI that are equivalent to what could be purchased by the premium for that cash surrender value Scale E. They look, on average, something like Table 13. Look at issue age 65, at the end of policy year 10. If one quits at age 75, we say, as a group, you'd have about three-and-a-half years of coverage (whether the policy has inflation protection or not). In this case, if you incur a claim within those three-and-a-half years a full four years of benefit would be provided.

CHART 3
Percentage Premium Increase versus Base Policy to Provide Nonforfeiture Benefit Form Specified Plus Inflation Protection Base Policy Contains Neither
(Based on Average Premiums)




Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, AD Hoc Actuarial Group, June 2, 1992.

**SHORTENED BENEFIT PERIOD (SBP)**
What is the benefit form of choice for consumer groups and the NAIC? The shortened benefit period is a form of nonforfeiture benefit that ensures that the full daily benefit will be paid. The claim can start at anytime in the future, and that's nice, but there's no free lunch. The benefit period will be shortened from that which you would normally get on a premium-paying basis. It came up in a report my office did last March for AARP. This issue also was addressed in the subsequent report we did in which we tried to cover the waterfront for the NAIC in our June 2, 1992 report. I'll tell you what happened with this report, and how we got into the shortened benefit period later.

The SBP has negative factors similar to the RPU and ETI. It moves to noncancellable. It's difficult to track a paid-up insured. It has administrative expense for a benefit that might be very short. (There's something wrong with everything, remember.) Is it a great deal to have a paid-up benefit that pays long-term-care benefits for only two months? That's what your four-year benefit period can become. That's not real helpful, either. But at least if you get a benefit, it's your full daily amount that may mean something, and you're covered forever. So if you go into long-term care, you'll get something. I think that's why it appealed to people. You may go off insurance sooner than you would if you had a premium paying policy, and you may go on to self pay, or Medicaid after you spend down, sooner than you otherwise would. But at least until you get there you have some meaningful benefit in the policy.

TABLE 13
ETI Years of Coverage, Equivalent to CSV, Schedule E
Pricers' Averages

| End of Policy Year | Without Inflation Protection, Issue Ages | | | | | With Inflation Protection, Issue Ages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 35 | 45 | 55 | 65 | 75 | 35 | 45 | 55 | 65 | 75 |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 1.8 | 2.0 | 2.3 | 1.7 | 0.6 | 4.9 | 4.4 | 3.8 | 2.1 | 0.6 |
| 5 | 2.5 | 3.2 | 3.2 | 2.2 | 0.7 | 6.5 | 6.0 | 4.7 | 2.6 | 0.8 |
| 10 | 9.4 | 9.7 | 7.2 | 3.5 | 1.2 | 12.7 | 11.4 | 7.8 | 3.4 | 1.0 |
| 15 | 12.8 | 11.1 | 6.9 | 3.2 | 1.0 | 12.6 | 10.6 | 6.4 | 2.3 | 0.7 |
| 20 | 13.7 | 10.8 | 5.5 | 2.7 | 0.8 | 11.3 | 8.7 | 4.1 | 1.4 | 0.5 |
| 25 | 12.9 | 9.2 | 4.1 | 2.3 | 0.8 | 9.0 | 6.1 | 2.4 | 0.9 | 0.4 |
| 30 | 11.6 | 7.1 | 3.3 | 1.9 | 0.6 | 6.8 | 3.7 | 1.4 | 0.5 | 0.2 |
| 35 | 9.4 | 5.2 | 2.7 | 2.0 | 0.0 | 4.4 | 2.0 | 0.8 | 0.4 | 0.0 |
| 40 | 6.9 | 5.1 | 2.4 | 1.4 | | 2.4 | 1.1 | 0.5 | 0.3 | |
| 45 | 5.0 | 3.5 | 2.4 | 0.0 | | 1.3 | 0.7 | 0.4 | 0.0 | |
| 50 | 3.7 | 3.0 | 1.8 | | | 0.7 | 0.4 | 0.3 | | |
| 55 | 3.1 | 2.8 | 0.0 | | | 0.4 | 0.3 | 0.0 | | |
| 60 | 2.4 | 2.1 | | | | 0.3 | 0.2 | | | |
| 65 | 1.7 | 0.0 | | | | 0.2 | 0.0 | | | |
| 70 | 1.8 | | | | | 0.1 | | | | |
| 75 | 0.0 | | | | | 0.0 | | | | |

Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

If you surrendered several policies with a shortened benefit period option, you would stack again in a different way. You would stack full daily benefits. Some have said for that reason, if you provided four months of benefit on the first policy, then you'd want to buy an elimination period that's at least that long on the next policy you would buy. Then you'd get some reasonable coordination between those policies. Would that lead us someday to long-term care policies with long elimination periods? Maybe. However, the same problems with coordinating disparate RPU policies are present for SBP.

In Table 14 we have the SBP percentage of a four-year benefit policy, using a premium equivalent to one developed for cash surrender value, Schedule E. You can see the SBP gets up maybe to close to half of the premium paying benefit period, or two years, without inflation. It's much lower on the policy with inflation, because benefits will inflate.

We gave our June 2, 1992 report to the regulators at their June 1992 meeting in Washington, D.C. They were very interested in the shortened benefit period. They asked us whether we would do another study. Ten of the 14 actuaries from the first

group agreed to do another report. We produced a 78-page report that we presented last fall which focused as requested just on the shortened benefit period.

TABLE 14
SBP % of Four-Year Benefit Period Equivalent to CSV, Schedule E
Pricers' Averages

| End of Policy Year | Without Inflation Protection, Issue Ages | | | | | With Inflation Protection, Issue Ages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 35 | 45 | 55 | 65 | 75 | 35 | 45 | 55 | 65 | 75 |
| 1 | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 2 | 3 | 1 |
| 5 | 1 | 2 | 3 | 4 | 2 | 1 | 2 | 3 | 4 | 3 |
| 10 | 8 | 11 | 14 | 14 | 9 | 6 | 9 | 10 | 11 | 7 |
| 15 | 14 | 18 | 20 | 19 | 13 | 7 | 11 | 13 | 12 | 7 |
| 20 | 20 | 27 | 25 | 24 | 16 | 8 | 13 | 13 | 11 | 6 |
| 25 | 25 | 30 | 26 | 31 | 21 | 8 | 13 | 12 | 10 | 7 |
| 30 | 28 | 33 | 32 | 37 | 25 | 8 | 11 | 10 | 9 | 5 |
| 35 | 29 | 34 | 35 | 46 | 0 | 8 | 9 | 8 | 9 | 0 |
| 40 | 30 | 37 | 38 | 43 | | 6 | 7 | 8 | 7 | |
| 45 | 31 | 46 | 50 | 0 | | 5 | 7 | 7 | 0 | |
| 50 | 31 | 46 | 49 | | | 4 | 6 | 7 | | |
| 55 | 41 | 47 | 0 | | | 4 | 6 | 0 | | |
| 60 | 42 | 47 | | | | 3 | 5 | | | |
| 65 | 41 | 0 | | | | 2 | 0 | | | |
| 70 | 48 | | | | | 2 | | | | |
| 75 | 0 | | | | | 0 | | | | |

Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

Some have said the actuaries prefer this. I don't know. We never polled "the actuaries." In fact, the first group who participated in the June 2, 1992 report were asked by the regulators which form they should adopt. I argued, semisuccessfully, that it was not an actuarial question; we were not policymakers, and it was not our role to get that involved in this. I kept the Academy and the Society informed of what we were doing, though we weren't a community of either body. We can do something as a profession by providing objective factual information, which I thought was desperately needed on this subject. The only problem was, the more we did, the more questions we raised. That's probably still where we're at. But we did not feel that there was any particularly unique actuarial expertise that would say: "These are the policy choices you need to make." We did poll ourselves with carefully crafted questions to try to determine what we liked and what we didn't like. The results are in the report. I think it was useful. It's been misquoted a couple of times, but we worked very hard to be objective.

A few weeks ago I was called by a client and berated by their actuary for what the regulators are doing for nonforfeiture – it was kind of like shooting the messenger because of the message. I felt badly about that. Then I was really relieved when out of the clear blue the actuary said: "But you know, I want to tell you that those

reports that the actuarial group did for the regulators were really objective and fair. I couldn't find any real bias in there." I was relieved, because that was our goal. I also think that's the role of our profession. That's what we ought to try to do. (I can tell you that the first group of 14, and then the group of 10, had all kinds of opinions.)

The regulators wanted more information on nonforfeiture benefits and especially on the SBP. This is how we tried to do that.

Regulators -- and others -- had the following questions: When should the benefits start? Should benefits begin at the end of the second year, the third year, the fifth year, the seventh, the tenth? How high should they start? What's nontrivial? How fast should it go up by duration? Would you try some scales? I'm paraphrasing, but that was the request. We decided to look at something that will give us some foundation. So we came up with a scale using a modified asset-share approach. Six actuaries can spend a lot of time on the phone debating how to define this. We tried to be as specific and consistent across all six pricers as we could.

We focused on the four-year benefit period for this part of the exercise. Each of us did our own asset share under normal pricing assumptions, except we assumed that there would be no lapses beyond duration four because that's where we were going to start the nonforfeiture scale. We were trying to treat lapsers and persisters equitably by producing a scale of benefits that would be insensitive to lapse rate changes. We put no profit margin in the pricing in this asset share. So we modified the asset share in those two ways.

We used the asset share that was developed, policy duration by duration, as a single premium to purchase: the present value of future per-policy expenses; 6% of future claims, as the cost of claim handling; and the present value of long-term care benefits. Claim costs were based on whatever each pricer used, plus 20% of their premium-paying claim costs. That's our risk margin for a noncancellable benefit. Unlike the prior report, we decided we really ought to come up with something as a risk charge. We were worried about it becoming the "right" charge. Would observers think because a group of actuaries agreed that 20% is the right charge for going noncancellable, then it must be? That is not what we did, and I say it every time I have a chance. We wanted to make the point that there is a risk charge for removing the possibility of being able to change premiums when and if needed.

We then expressed the benefits thus purchased at each policy year as a percentage of the four-year benefit period.

We did some for both the two-, the four-, and the eight-year benefit periods. The results are shown in Table 15 for issue ages 55 and 65. Let's just look at the 4-year benefit period and issue age 65, without and with inflation protection. You can see the kinds of years/days, as well as percentage of benefit period, that result. Are those meaningful benefits? I don't know. Are they the correct or desirable ones? Not necessarily. But they gave us a benchmark. If each of us silently sat down and wrote down our own correct scale, I don't know what it would have been compared to these. But this gave our group and the NAIC some feel for what the scale might be if it doesn't unduly disrupt the equity to persisters or lapsers.

TABLE 15
SBP Scales for Two-, Four-, and Eight-Year Benefit Period
Produced by Modified Asset Shares
Averages of All Pricers
(Four-Year Benefit Period Repeated From Table 1 for Comparison)

| | Two-Year Benefit Period | | Four-Year Benefit Period | | Eight-Year Benefit Period | |
|---|---|---|---|---|---|---|
| End of Year | Years/ Days | % of Benefit Period | Years/ Days | % of Benefit Period | Years/ Days | % of Benefit Period |
| **Issue Age 55 – Without Inflation Protection** | | | | | | |
| 5 | 0/64 | 9 | 0/110 | 8 | 0/143 | 5 |
| 10 | 0/175 | 24 | 0/291 | 20 | 1/9 | 13 |
| 15 | 0/273 | 37 | 1/96 | 32 | 1/236 | 21 |
| 20 | 0/347 | 48 | 1/235 | 44 | 2/49 | 27 |
| 25 | 1/34 | 55 | 1/330 | 48 | 2/163 | 31 |
| 30 | 1/54 | 57 | 1/382 | 51 | 2/188 | 31 |
| 35 | 1/49 | 57 | 1/348 | 49 | 2/164 | 31 |
| 40 | 1/24 | 53 | 1/243 | 42 | 2/129 | 29 |
| **Issue Age 55 – With Inflation Protection** | | | | | | |
| 5 | 0/104 | 14 | 0/172 | 12 | 0/226 | 8 |
| 10 | 0/229 | 31 | 1/22 | 27 | 1/144 | 17 |
| 15 | 0/330 | 45 | 1/199 | 39 | 2/33 | 26 |
| 20 | 1/35 | 55 | 1/324 | 47 | 2/140 | 30 |
| 25 | 1/75 | 60 | 2/35 | 52 | 2/294 | 35 |
| 30 | 1/85 | 62 | 2/58 | 54 | 2/338 | 37 |
| 35 | 1/79 | 61 | 2/42 | 53 | 2/304 | 35 |
| 40 | 1/53 | 57 | 1/363 | 50 | 2/247 | 33 |
| **Issue Age 65 – Without Inflation Protection** | | | | | | |
| 5 | 0/89 | 12 | 0/147 | 10 | 0/186 | 6 |
| 10 | 0/201 | 28 | 0/347 | 24 | 1/63 | 15 |
| 15 | 0/282 | 39 | 1/139 | 35 | 1/241 | 21 |
| 20 | 0/326 | 45 | 1/232 | 41 | 1/320 | 23 |
| 25 | 0/338 | 46 | 1/249 | 42 | 1/325 | 24 |
| 30 | 0/321 | 44 | 1/153 | 35 | 1/219 | 20 |
| **Issue Age 65 – With Inflation Protection** | | | | | | |
| 5 | 0/125 | 17 | 0/205 | 14 | 0/264 | 9 |
| 10 | 0/253 | 35 | 1/79 | 31 | 1/200 | 19 |
| 15 | 0/346 | 47 | 1/247 | 42 | 2/53 | 27 |
| 20 | 1/27 | 54 | 1/348 | 49 | 2/156 | 30 |
| 25 | 1/37 | 55 | 2/10 | 51 | 2/170 | 31 |
| 30 | 1/18 | 52 | 1/246 | 42 | 2/131 | 29 |

Source: NAIC Long-Term Care Insurance, Nonforfeiture Benefits, Ad Hoc Actuarial Group, June 2, 1992.

To be sure we all understand these results, let's look at issue age 65 without inflation protection. Suppose you kept the policy in force 10 years. You'll have coverage forever. You are now 75. If you have a claim, you do not have 4 years of benefits anymore; you have the maximum of 347 days. The policy will pay the full daily benefit of $80 in nursing home care, and $40 in home care.

Some of us (and I'm one) think that benefit is more useful than RPU or ETI. It is not illusory. It can provide a consequential benefit. I don't want to argue too much for SBP, because it's not perfect either. But in many ways, I can understand why the regulators and the consumer groups find this more appealing than some other forms.

Table 16 presents the annual premiums that resulted based on this modified asset share, where the base policy is one with no nonforfeiture benefits. At least we now have some idea of what it might cost to provide this form of benefit, without arbitrarily predefining what the scale was.

TABLE 16
Annual Premiums – Four-Year Benefit Period

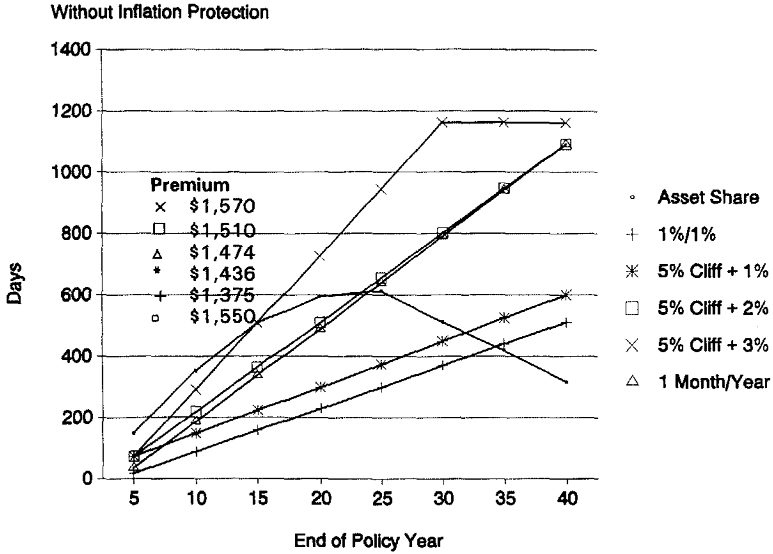
| Policy | Issue Age | | | | |
|---|---|---|---|---|---|
| | 35 | 45 | 55 | 65 | 75 |
| Without Inflation Protection | | | | | |
| Base | $174 | $284 | $539 | $1,236 | $3,209 |
| With SBP* | 285 | 459 | 805 | 1,550 | 3,442 |
| Increase | 64% | 62% | 49% | 25% | 7% |
| With Inflation Protection | | | | | |
| Base | $ 445 | $ 721 | $1,257 | $2,350 | $4,784 |
| With SBP* | 1,477 | 1,811 | 2,354 | 3,372 | 5,398 |
| Increase | 232% | 151% | 87% | 43% | 13% |

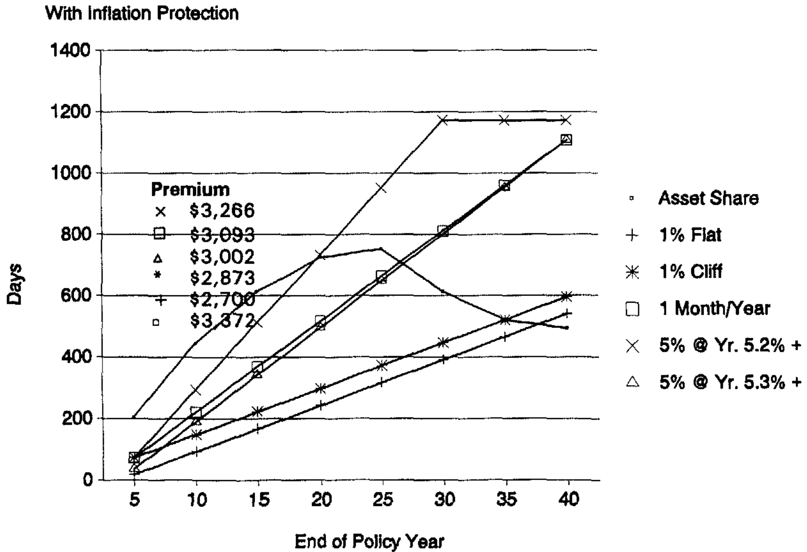
* Scale based on modified asset share
Source: September 20, 1992 Report to NAIC with October 6, 1992 Corrector

I think it's worth saying a few things about what we did using issue age 65. We still had the NAIC's request to do several predefined scales. With the scale produced by the modified asset share we had a base line for comparison. The results are depicted in Chart 4.

The lines in the graphs represent the days of shortened benefit period. The annual premiums for each of those lines are shown on the right. The benefit scales are defined in the small print. The first one shown is the scale provided by the modified asset share. But then we also priced several predefined scales all starting at the end of the fifth policy year. We priced one to start at 1% of benefit, going up 1% a year (1%/1%). We had what we named a 5% cliff start. That means that we started at 5% at the end of the fifth year. It went up either 1%, 2% or 3% a year. You can see the different slopes in the lines and the different resulting premiums.

CHART 4
Comparison of SBP Scales Four-Year Maximum Benefit
Issue Age 65




The triangle-shaped line represents a benefit that accrued one month of SBP per year the policy was in force. It tracks along reasonably well for a four-year maximum benefit basic policy. However, if you take that same one month per year on a two-year maximum benefit premium paying policy, you have a fully paid-up policy in 24

years. The other extreme is an eight-year benefit period policy. So that didn't seem to fit real well with any reasonable definitions of equity across various policies. But we were asked to calculate premiums for such a scale.

I've become endeared with a phrase: "Equity is a range." We tried to explain in our report that one shouldn't focus on the scale from the modified asset share as being the right answer. There are many reasons to apply caution:

1. We get different results from different actuaries. Those were averages, and you get some different numbers.
2. Nobody knows the right noncancellable charge.
3. It's not easy to express some of these results, so maybe we need to find simpler ways to express them.
4. Some would like us to return all the premium that's paid in. Not many products will do that. So be careful we don't push and define equity as returning everything back to the buyer if they want to change the agreement.
5. Even if one could define "equitable," it doesn't mean that's what we should pay. We may have antiselection, cashing out of assets, expenses of handling it, and things we've heard about in other nonforfeiture arenas.
6. We should recognize we have to balance things. The more a shortened benefit period (or whatever other form) we buy, the more premium is paid by everybody. Persisters and early lapsers (who never get to the first duration where there's any nonforfeiture benefits) are among those who will pay a higher premium though they'll never avail themselves of nonforfeiture benefits. So we need to be careful how we struggle with equity.
7. We certainly could start somewhere other than at duration five. In some of the combination forms we might want to marry an SBP with a cash out for a few prior years.
8. Equity to some is a function of why a lapse occurs. We hear about the people who, through no fault of their own, can't keep up the premium; their life has changed in some way, and we ought to give them something. There are other people who just say, oh the heck with it, I don't want to pay my premium anymore. We should carefully sort out the stories we hear and determine how to translate that information into numbers and actuarial pricing.
9. Fairness can change after a policy is issued. What we think is fair today might change a lot with environmental developments down the road.

We should remind ourselves, as we reminded the regulators, that there are other important considerations, including the mechanics of actually developing and applying a shortened benefit period scale and the types of benefits that don't lend themselves to an SBP, etc. Do we delete claims that have been paid from the shortened benefit period once calculated or first from the cash amount that buys it? There are a host of issues that we listed in a chapter. Again it's just a start. Wait until we try to write the actual regulation; we'll find a lot more.

There are other forms of nonforfeiture benefits in addition to the five that we just reviewed.

- There's a benefit-bank approach, which may be paid upon death also. When you quit paying premiums, take a percentage of the premiums that have been paid, maybe 100% of the premiums. Set them aside and hold them as an

insurance fund. You might pay interest on them, if you're in New York, and then pay them out when and if long-term-care claims are filed against the policy.

- We could pay the benefit out as a life annuity, which was an idea that caught a lot of attention about two years ago. It has been suggested this avoids the payment on death problem. I think we're only deferring a problem to the next debate if we pay it out as a life annuity. If the annuitant dies a month after that annuity starts, I'm not sure the insurer can withstand the pressure. So we can put a certain period in it, or offer a refund annuity.

- There's a combination of forms of benefit payout that we could use: by policy duration, by issue age, or by attained age. Duration catches some peoples' fancy. What if an SBP started at duration five? What if we want to take care of people who might lapse in the first few years, on the grounds there has been an inappropriate sale in the first place. If that's the case, we ought to give something back to somebody. So one looks at different forms of benefits there, because you don't want to give them a very brief and useless shortened benefit period for life. Maybe you'd pay back some cash. We should consider merging two different options in the same policy, depending on when the lapse occurred.

There are companies that have advocated addressing this concern about rate stabilization when there's a rate increase by providing a 30-, 60-, or 90-day window for the policyholder to take a nonforfeiture benefit. Or instead of the rate increase they might take a benefit decrease, which is a type of nonforfeiture benefit.

The following paragraph was adopted March 9, by the NAIC Health Insurance (B) Committee in Nashville upon recommendation of the Long-Term-Care Task Force. It is the amendment to the NAIC Long-Term-Care Insurance Model Act:

> No long-term care insurance policy or certificate may be delivered or issued for delivery in this state unless the policy or certificate provides for nonforfeiture benefits to the defaulting or surrendering policyholder or certificate holder. The commissioner shall promulgate a regulation specifying the type or types of nonforfeiture benefits to be included in such policies and certificates and the standards for the benefits.

It will be considered in June 1993 by the NAIC for final adoption. If adopted, it would amend the Long-Term-Care Insurance Model Act. The big issue that was finally settled at this point, unless things are changed in June, is that it provides mandatory inclusion of nonforfeiture benefits, not a mandatory offer. This is just the first shoe. The second shoe is a lot of work. It doesn't mention the shortened benefit period. Who knows what the model regulation will say.

In developing the regulation I think people will look at whether the scale or scales that should be in a policy will be what our group called fixed, minimum, or equivalent. For a fixed scale, the regulation would say here's the scale (days or percentages or whatever) and there shall be no variation. All policies will include this. For a minimum scale, the policy would have to contain at least the stated percentages, but it

could have higher benefits at some of the durations. Anything is allowed, under the equivalent scale approach, as long as it's equivalent to what the regulation specifies.

We said as an actuarial group that fixed scales were not our preferred form, because it's too early in the game to be that specific and not allow flexibility. We also said equivalent scales were not our preference, because it would lead to hopeless challenges for our profession to figure it out and for regulators to do their jobs. Imagine companies filing policy forms with goofy looking scales and alleging they are equivalent. You think rate filing is a challenge these days! So we said we prefer the minimum scale approach.

We all think about Washington, D.C. these days when discussing health care, including long-term care. There were at least three bills introduced this year with regard to nonforfeiture benefits. All of them are very similar and require that all long-term-care policies provide nonforfeiture benefits "without payment of any additional premiums." I've never been sure what that phrase means. It's possible that whoever wrote this thought it might be free; instead of the company keeping the values (whatever they are), the lapsing policyholder would have them, and that shouldn't affect the cost.