

the INSURANCE FORUM

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... for the unfettered exchange of ideas about insurance

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Editor's note: Previous issues of *The Insurance Forum*—all 101 of them—have been aimed at persons with a keen, professional interest in the insurance business. Now for the first time an issue is aimed at insurance consumers. Our present plan is to use an occasional issue of *The Insurance Forum* to communicate vital information to insurance consumers. We wish to remind our readers that *The Insurance Forum* is copyrighted, and that reproduction in whole or in part without written permission is strictly prohibited. For information concerning reprints, see the box below.

IS YOUR LIFE INSURANCE REASONABLY PRICED? (HOW TO EVALUATE AN EXISTING LIFE INSURANCE POLICY)

If you own a life insurance policy on which you have paid premiums for some years, and if you are wondering whether you are receiving fair value for your money, this article is aimed at you.

The Players

Many of those in the life insurance business are legitimate and ethical sales people; however, the business is plagued by a significant number of replacement artists and conservation artists. A replacement artist is a person who uses dubious methods to convince you—the owner of an existing life insurance policy—to replace your policy with a new one. Some replacement artists attempt to discredit the agent and the company from whom you bought your existing policy. Some of what replacement artists say may be accurate, but some of it may be deceptive or even false. The problem is that most policyholders cannot determine what is accurate and what is not.

A conservation artist, on the other hand, is a person who uses dubious methods to convince you—the owner of an existing life insurance policy—

that your policy should not be replaced. Some conservation artists attempt to discredit the replacement artist. Some of what conservation artists say may be accurate, but some of it may be deceptive or even false. The problem is that most policyholders cannot determine what is accurate and what is not.

In short, a war is going on between replacement artists and conservation artists. As the owner of an existing life insurance policy, you are caught in the middle. You probably do not know enough about life insurance to be able to distinguish accurate information from inaccurate information, and you probably do not know whom to believe. The purpose of this article is to arm you with the ability to find out for yourself whether the life insurance protection you own is reasonably priced.

The General Approach

This article describes three steps you must follow in order to determine whether the life insurance protection you own is reasonably priced: (1) gather certain information about each policy you wish to evaluate, (2) perform certain calculations using the

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information gathered in the first step, and (3) compare the results of your calculations with certain benchmarks.

Gathering Information

The most difficult step is not the arithmetic, but rather is the assembling of the necessary information. Some of what you need is in the policy itself, but you may find the information difficult to extract. And some of what you need may not be in the policy. It is suggested that you obtain the information by writing a carefully worded letter to the president of the life insurance company that issued the policy. A suggested letter is shown on this page.

You may find the address of the company on the policy itself, on a recent premium notice, or by calling your local library. You may find the policy number on the policy itself or on a recent premium notice. Your letter should request the following items of information:

- (1) **The amount that the insurance company would have paid to your beneficiary if you had died at the end of the most recently completed policy year. This is the face amount (F) of your policy.**
- (2) **The amount that the insurance company would have paid to you if you had surrendered your policy at the end of the most recently completed policy year. This is the cash value (CV) of your policy. (Some policies do not have cash values, so the amount here could be zero.)**
- (3) **The amount that the insurance company would have paid to you if you had surrendered your policy at the end of the year preceding the most recently completed policy year. This (CVP) corresponds to item (2), but for one year earlier.**
- (4) **The premium (P) for the most recently completed policy year. (Policies that are "paid up" require no further premiums, so the amount here could be zero.)**
- (5) **The dividend (D) for the most recently completed policy year. (Some policies do not pay dividends, so the amount here could be zero.)**
- (6) **The date on which the most recently completed policy year began.**
- (7) **Your insurance age, in accordance with the company's method of determining age, on the date referred to in item (6) above.**

It is recommended that you word the letter exactly as illustrated, and that you keep a copy of the letter. If you receive no response, or if you receive an inadequate response, you should file a written complaint with your state insurance commissioner. You may obtain the address of your state insurance commissioner from your local library.

The Calculations

Once you have acquired the information listed in the preceding section, you are ready to perform certain calculations, except for the choice of an interest rate (i). It is suggested that you use an interest rate of 6 percent (.06) in your calculations. (For comments concerning the interest rate, see the explanatory appendix at the end of this article.)

Now you are ready to perform certain calcula-

SUGGESTED LETTER

President
XYZ Life Insurance Company
Post Office Box 245
Ellettsville, IN 47429

Dear President:

Please furnish me with the following information concerning my policy number 1 234 567:

- (1) The amount that you would have paid in a single sum to my beneficiary if I had died at the end of the most recently completed policy year, including any supplemental term life insurance benefits. Please disregard any accidental death benefits, any dividends, and any loan against the policy.
- (2) The amount that you would have paid in a single sum to me if I had surrendered the policy at the end of the most recently completed policy year. Please disregard any dividends and any loan against the policy.
- (3) The amount that you would have paid in a single sum to me if I had surrendered the policy at the end of the year preceding the most recently completed policy year. Please disregard any dividends and any loan against the policy.
- (4) The premium for the most recently completed policy year, including the premiums for any supplemental term life insurance benefits. Please exclude the premiums for any accidental death benefits, disability benefits, or guaranteed insurability benefits. Please exclude the interest on any loan against the policy, and assume I paid the year's premium in full at the beginning of the year.
- (5) The dividend for the most recently completed policy year, including the dividends for any supplemental term life insurance benefits. Please exclude any dividends for any accidental death benefits or disability benefits. Please exclude any dividends credited to dividend accumulations or additions.
- (6) The date on which the most recently completed policy year began.
- (7) My age, according to your records, when the most recently completed policy year began.

Thank you for providing the information that I have requested.

Sincerely yours,

[*Editor's note:* The following postscript is optional. See the third point in the section entitled "Several Warnings."]

PS: Also, please furnish the above information for the two policy years preceding the most recently completed policy year, and for the two policy years following the most recently completed policy year. In the case of amounts payable in future years, please identify any nonguaranteed amounts and base the figures on your company's current scale.

tions in order to arrive at a yearly price per \$1,000 of protection for the most recently completed policy year. The formula is as follows:

$$\frac{(P + CVP)(1 + i) - (CV + D)}{(F - CV)(.001)}$$

To illustrate, suppose the response to your letter provided the following information:

- (1) **Face amount (F): \$25,000**
- (2) **Cash value at end of most recently completed policy year (CV): \$10,450**
- (3) **Cash value at end of year preceding most recently completed policy year (CVP): \$10,000**
- (4) **Premium (P): \$550**
- (5) **Dividend (D): \$400**
- (6) **Date on which most recently completed policy year began: March 10, 1981**
- (7) **Your insurance age on March 10, 1981: 56**

Your next step is to plug these figures into the formula. The calculations are as follows:

$$\frac{(550 + 10,000)(1 + .06) - (10,450 + 400)}{(25,000 - 10,450)(.001)}$$

$$= \frac{(10,550)(1.06) - 10,850}{(14,550)(.001)}$$

$$= \frac{11,183 - 10,850}{14.550} = \frac{333}{14.550} = 22.89$$

In words, the yearly price per \$1,000 of protection in the most recently completed policy year (which began on March 10, 1981) is \$22.89, assuming 6 percent interest.

The Comparison

The benchmarks against which to compare yearly prices per \$1,000 of protection are shown on this page. The suggested interpretations of the benchmark figures are as follows:

- (1) **If the yearly price per \$1,000 of protection is less than the benchmark figure, the price of your protection is very low, and you definitely should not consider replacing your policy.**
- (2) **If the yearly price per \$1,000 of protection is more than the benchmark figure but less than double that figure, the price of your protection is fairly low, and you probably should not consider replacing your policy.**
- (3) **If the yearly price per \$1,000 of protection is more than double but less than triple the benchmark figure, the price of your protection is fairly high, and you probably should consider replacing your policy.**
- (4) **If the yearly price per \$1,000 of protection is more than triple the benchmark figure, the price of your protection is very high, and you definitely should consider replacing your policy.**

To illustrate, the benchmark figure for age 56 is \$15, and the yearly price per \$1,000 of protection that came out of your calculations is \$22.89. Since the latter is more than the benchmark figure but less than double that figure, the price of your protection is fairly low, and you probably should not consider replacing your policy.

Several Warnings

Life insurance policies are complex financial instruments. In this article, we have tried to simplify the subject so that you can find out for yourself whether your life insurance protection is reasonably priced. The simplification process, however, makes it necessary to voice warnings in several areas.

(1) If your policy carries an extra premium because of a health impairment or other problem, the analysis of such a policy is beyond the scope of this article.

(2) If your policy covers more than one life, the analysis of such a policy is also beyond the scope of this article. Examples are family policies (in which husband, wife, and children are covered in one policy) and joint life policies (which cover two lives and pay the face amount on the first death).

(3) It is possible that the year for which you perform the calculations—the most recently completed policy year—is not representative of other policy years. For example, the price of the protection in the first one or two policy years is often quite high, reflecting sales commissions and the other expenses associated with the issuance of a life insurance policy. As another example, the price in a single isolated year may be quite low or quite high because of certain structural characteristics of the policy. For these reasons, you might wish to gather the information and perform the calculations for a few other years, especially if the figure for the most recently completed policy year is either very low or very high. The postscript of the suggested letter is optional; it is designed to help you obtain the information for a few other years, should you wish to perform the calculations.

(4) You may obtain a negative result. This may arise because of an unusual year, as mentioned in the preceding paragraph, or because the price of the protection in your policy is extremely low. A negative figure does not mean the company is crazy—remember that you are using a modest interest rate of 6 percent in your calculations.

(5) If the amount payable on surrender of your policy is equal to the amount payable on death, you have no life insurance protection, and the yearly price per \$1,000 of protection is without meaning. Under these circumstances, you should view your policy as a savings account. Calculate the yearly

BENCHMARKS

Age	Price
Under 30	\$ 1.50
30—34	2.00
35—39	3.00
40—44	4.00
45—49	6.50
50—54	10.00
55—59	15.00
60—64	25.00
65—69	35.00
70—74	50.00
75—79	80.00
80—84	125.00

rate of return (expressed as a decimal) with the following formula:

$$\frac{CV + D}{P + CVP} - 1$$

You can then judge your policy by comparing the yearly rate of return with what you can earn in a savings bank, savings and loan association, or credit union. In making such a comparison, however, you should consider the income tax situation, as discussed in the explanatory appendix below.

(6) If the amount payable on surrender of your policy is only slightly smaller than the amount payable on death (less than, say, 5 percent below the amount payable on death), you have very little life insurance protection, and the yearly price per \$1,000 of protection has very little meaning. Under these circumstances, you should view your policy as essentially a savings account. Use the above formula to approximate the yearly rate of return.

(7) If yours is a small policy—less than, say, \$3,000 in face amount, the yearly price per \$1,000 of protection may be fairly high because of the ex-

penses associated with the maintenance of a small policy. It may not be worth the bother to replace a small policy; indeed, a small policy may not be worth keeping unless you have some emotional attachment to it.

(8) We were careful to say that, if the price of the protection in your policy is very high, you should definitely *consider* replacing your policy. We did *not* say you should definitely replace your policy. There are several reasons for you to proceed with caution: a replacement necessarily involves the purchase of a new policy, and the purchase of a new policy requires great care if you wish to acquire low-priced protection; surrendering an existing policy may involve the sacrifice of certain valuable policy provisions; surrendering an existing policy may involve certain income tax considerations; purchasing a new policy may involve significant expenses in the first one or two years, as mentioned earlier; and because of a health impairment or other problem, you may find it difficult to qualify for a new policy. We intend to discuss some of these matters in future issues of *The Insurance Forum*.

AN EXPLANATORY APPENDIX

Instead of following the suggestions in this article blindly, you may prefer to acquire some understanding of the formula and the benchmarks. The purpose of this appendix is to provide a brief explanation.

Let's consider the numerator of the formula. The first parenthetical expression (P + CVP) is the amount that you would have had available to put into some other savings vehicle if you had decided to surrender the policy at the end of the year preceding the most recently completed policy year. You would have received the cash value (CVP) and you would have been relieved of the premium (P).

Multiplying the above expression by (1 + i) tells you what you would have had in that other savings vehicle by the end of the most recently completed policy year if you had invested the (P + CVP) at an annual interest rate of i. This leads us to a discussion of the interest rate.

The interest rate you choose is not important if your policy has little or no cash value. However, the interest rate you choose is quite important if your policy has a substantial cash value. If your policy has a cash value, it probably has a loan clause that permits you to borrow against the policy up to approximately the cash value at an interest rate of 5 to 8 percent. If you believe you could put the money in some other savings vehicle at a much higher interest rate and with a high degree of safety, and if the amount available is substantial, you should consider borrowing against your policy and investing the proceeds of the loan. Bear in mind, however, that the savings vehicle you are thinking about may produce interest income that is subject to current income tax. The interest earnings built into cash-value life insurance, on the other hand, are income-tax-deferred and eventually will be either partially or fully income-tax-exempt. For simplicity, we suggested you use an interest rate of 6 percent in the calculations.

The last parenthetical expression in the numerator of the formula (CV + D) is the amount that you had available, at the end of the most recently completed policy year, having continued the policy for that year. The difference between the product of the first two expressions (\$11,183 in the example) and the last expression (\$10,850) is the

price you paid (\$333) for the life insurance protection in that year (assuming 6 percent interest).

Now let's consider the denominator of the formula. The cash value is the savings component of the policy, and is an asset from your point of view. Therefore, the life insurance protection you had (\$14,550) is the difference between the face amount (\$25,000) and the cash value (\$10,450). The other expression in the denominator moves the decimal point three places to the left, so that the denominator represents the amount of life insurance protection in thousands of dollars (14.550).

Since the price you paid for the protection (assuming 6 percent) was \$333, and since the amount of protection in thousands of dollars was 14.550, the yearly price per \$1,000 of protection (assuming 6 percent) was \$22.89.

Finally, the benchmarks were derived from certain United States population death rates. The benchmark figure for each five-year age bracket is slightly above the death rate per 1,000 at the highest age in that bracket. What we're saying is that, if the price of your life insurance protection per \$1,000 is in the vicinity of the "raw material cost" (that is, the amount needed just to pay death claims based on population death rates), your life insurance protection is reasonably priced.

THE EDITOR

Joseph M. Belth, Ph.D., is professor of insurance in the School of Business at Indiana University (Bloomington). He has written several books, including *Life Insurance: A Consumer's Handbook* (1973). For one of his earlier books, he received the Elizur Wright Award for "outstanding original contribution to the literature of insurance," and he has received six awards for articles published in the *Journal of Risk and Insurance*. He is a past president of the American Risk and Insurance Association, an organization of insurance professors and others interested in insurance education. He has been a member of the Indiana University faculty since 1962.