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# COST DISCLOSURE IN INDIVIDUAL LIFE INSURANCE 

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1. Status of NAIC model disclosure bill, and experience under it.
2. Questions related to comparisons of costs and value of dissimilar policies.
3. Characteristics of a good disclosure and comparison method in a replacement situation.
4. Developments in the use of the "retention" method.

MR. RUSSELL R. JENSEN: The purpose of disclosure is to let the life insurance buyer know what he's getting. At its best it ought to be--and often is--a simple matter. But things do get complicated. Comparison, on the other hand, is to help the buyer determine which of several of the same kind of policy he would prefer to buy. At its best it too is a simple thing, but it also gets complicated. There are difficulcies and complexities. Regulations are written. These regulations produce more difficulties and complexities and in turn more regulation. This appears to be the cycle of contemporary society.

Back in 1970 the LIAA formed a commitree to "consider the method or methods chat a prospective buyer of life insurance might find most suitable for use in comparing premiums, dividends and cash values of comparable policies." They found that the interest-adjusted method was an improvement over the traditional method, but the debate was grear and wide and continuing. The Society of Actuaries formed a special committee on cost comparison methods which reported in September of 1974.

Now there is a study by the United States Federal Trade Commission to determine what buyers want to know and what they will actually use in life insurance cost comparisons. The FTC seems to have an inkling that what buyers want is the retention method, which is known north of the border as the "Actuaries' Index."

After the LIAA report in 1970, the states began to adopt regulations involving the use of the interest-adjusted index. There was considerable variation in those regulations so the NAIC adopted a model regulation on cost disclosure.

MR. WILLIAM F. SUTTON,III: For the benefit of those in our audience who are not familiar with the NAIC Model Disclosure Regulation, I should like to take a few minures to summarize some of its provisions. This is far from a complete summary. However, I believe I am covering all of the points that are percinent to this session.

The regulation covers life insurance in general with specific exclusions for annuities, credit life insurance, group life insurance, pension and welfare plans subject to ERISA and variable life insurance.

The basic disclosure requirement is that the insurer has to provide to all prospective purchasers two documents. One is a buyer's guide; the other is a policy summary. These must be furnished prior to accepting the first premium under a policy unless the policy has a ten day free look provision. In that case, the buyer's guide and policy summary must be delivered with the policy or prior to delivery of the policy.

The regulation defines in detail both the policy summary and the buyer's guide.

For the purposes of the policy summary, the regulation defines cost indexes and related values, all calculated on the interest adjusted basis, using $5 \%$ interest.

The summary must include:

1. Certain numerical data for the first five policy years, the loth and 20 th years, as well as at least one age from 60 through 65 or maturity, whichever is earlier. These data include:
a. The annual premium for the basic policy
b. The annual premium for each optional rider
c. The guaranteed amount payable on death
d. Guaranteed cash surrender value with separate values for base policies and riders
e. Cash dividends at the end of each year
f. Guaranteed endowent amounts payable under the policy which are not included in the cash value

With respect to cash dividends there is a provision that dividends need not be displayed beyond the 20 th policy year.
2. The effective policy loan annual percentage interest rate.
3. Life insurance cost indexes for 10 and 20 years, but in no case beyond the premium paying period. Separate indexes must be shown for the basic policy and each optional term rider. The indexes need not include such optional benefits as accidental death and disability waiver of premium.
4. The equivalent level annual dividend for participating policies separated between base policy and rerm riders.
5. A statement concerning the non-guaranteed basis of dividends.

The regulation spells out the complete rext of the buyer's guide. The front of the guide reads "This guide can show you how to save money when you shop for life insurance. It helps you to: decide how much life insurance you should buy, decide what kind of life insurance policy you need, and compare the cost of similar life insurance policies."

The guide indicates there are three basic kinds of life insurance - rerm insurance, whole life insurance and endowment insurance. It defines each of these types.
"Cost" is defined as the difference between what you pay and what you get back.

The guide discusses cost indexes and spells out in capital letters "LOOK FOR POLICIES WITH LOW COST INDEX NUMBERS." Statements to this effect are made three times in the guide.

The cost indexes are explained in non-mathematical terms. I feel a pretty good job is done in the explanation of what they are and what their significance is. There is also a discussion of the equivalent annual dividend. The matter of dividends and che difference between participating and non-participating policies is fairly well explained.

There is a section on the use of cost indexes. The guide states that cost comparisons should only be made between similar plans of life insurance. It warns to compare index numbers only at the age of the prospect and for the kind of policy he intends to buy, pointing out that companies vary from age to age and plan to plan in their cost position. It points out that small differences in index numbers can be offset by other policy features or the quality of service that may be expected from the company or agent. There is a warning that the indexes apply only to new policies and are not applicable in replacement situations.

On the whole I believe the buyer's guide is written well and objectively. Perhaps its greatest shortcoming is that it does not describe some forms of policies which are fairly common, even though they are not straight life or endowment policies. This would include family policies, retirement income policies and economatic type policies. I believe, however, that an easy to read, less exhaustive guide is probably better than one full of such great detail that persons would be discouraged from reading it.

The NAIC Model regulation also includes some general rules. Here are two that are percinent to today's discussion.

The regulation requires that any reference to policy dividends must include a statement that they are not guaranteed. It also requires that any statement regarding the use of life insurance cost indexes include an explanation to the effect that they are useful only for comparison of relative costs of two or more similar policies.

The status of che regulation at this point is that it is effective January 1 , 1978 in Connecticut, Iowa and New Jersey. New Hampshire has an effective date of April 1, 1978 while in Arizona the date is January 1, 1979. Oregon has had hearings on a draft with a May 1, 1978 effective date but final action may change the date to the end of the year.

My company supports the enactment of the model regulation when we are requested to comment. We emphasize however, that we seek uniform adoption. We are concerned that the model regulation includes a $5 \%$ interest rate in the cost index calculations, while in some of the early state requirements for use of interest adjusted figures, a 4\% rate was specified. There is real need to have uniformity on this point in all states.

We are generally motivated to use the cost disclosure uniformly in all states whether required or not. However, our understanding is that New York is currencly working on their version of the NAIC regulation. There is some possibility that they may have different requirements of information to be shown. For this reason we will put off a decision on nationwide use of the disclosure form, until we find out the exact requirements in New York. Our hope is that we will be able to use a single format in all states. Whatever state requires che most information hopefully will have requirements that meet as well as exceed those of other states so that uniformity can be accomplished.

My personal opinion is that compliance with the regulation is not onerous. As I mentioned previously, I feel the buyer's guide is fairly well written. The information required in the policy summary differs very little from what already is available in our policies and in illustrations that are being prepared by computer.

Of course there has been some cost: for cooling up to produce the particular form of policy sumary. However, once created, this system can be used fairly efficiently.

MR. NORMAN K. MARTIN: State Farm also supports the adoption of the model bill. We have been using the buyer's guide and policy sumary since July 1 , 1977. The policy summaries we are currencly using are based on $4 \%$ interest so that the interest-adjusted indexes will agree with our preprinted proposal forms, our rate books, and our machine-prepared proposals as well as with the rate of interest in those states already requiring interest-adjusted figures. We will begin using $5 \%$ as of January 1 , 1978. At that time we will have a new rate book and new preprinted proposals--both of which will have $5 \%$ indexes on them. If chere are any states remaining on a $4 \%$ basis, we will have machine-prepared proposals as well as policy summaries at $4 \%$ for those particular states. Our regional offices for those states will have listings available at $4 \%$ should they be needed by the agent prior to the time of policy delivery.

The policy summaries and indexes we are furnishing are based on the premium for the particular policy--standard or substandard. We will permit up to five life riders on a policy, so we are obviously furnishing separate indexes for the policy and for each life rider. We also assume our renewable term coverages renew, so we have 20 year indexes on five year renewable term policies. We believe our policy summary is in the format required by the model law and it fits, for the most part, on an $81 / 2 \mathrm{X}$ II sheer of paper. We print the policy summary at the same time the machine-prepared pages of the policy are printed and this is done on a remote basis within 24 of our 25 regional offices. We will start doing this in Canada as of January 1, 1978. The agent receives borh the policy and the policy summary ar the same time.

We have not received roo many comments from our agents or from our policyholders. Some agents, I know, stick them in their files, some of them look at them and then stick them in their files, some actually deliver chem. We even had one agent complain that he wanted more durations on the form.

I am convinced that one of the problems with the form is that the agents do not understand the interest-adjusted indexes. This has precluded some agents from delivering it. We have not expressed the need to deliver these forms to our agency force as compulsory but, obviously, as of the first of the year when ic becomes compulsory in some states, we will have to stare.

I think one of the reasons for discomfort among agents is that we have been too technical in the description of the interest-adjusted indexes. A simpler definition is needed. When an agent inquires about cash values on the policy he could care less about the present value of nonforfeiture factors and so forth. Perhaps we also should identify these indexes as only being indexes. They only indicate what the "cost" would be, given the right set of circumstances. They are not costs. Cost can only be determined retroactively.

Perhaps it is somewhat naive, bur I believe that the comfort level on the indexes is going to increase with continued exposure and wider use. This is one reason we have started using the policy summary before it actually became compulsory. We plan to try to better educate our field force so that their comfort level does in fact go up--primarily in the area of the indexes. We do not have any crouble with the rest of the information on the form.

I could summarize these comments by saying that we are using the policy summary and buyer's guide. We have had no adverse reaction to them but we haven't yet made delivery compulsory. We feel the agents' comfort level will increase as more companies start using the summaries. Therefore, $I$ encourage companies to do so.

MR. J. BRUCE MAC DONALD: While that was going on in the United States, Canada was following a different course. The Council of the Canadian Institute of Actuaries appointed a committee with the following mandate: "To consider whether the CIA should make a public pronouncement on the subject of cost comparisons of life insurance policies and if so, to recommend to the council the content of such a pronouncement." It should be noted that the subject is cost comparisons, not disclosure. The committee had both consulting actuaries and academics as members, as well as insurance company actuaries. The chairman was deliberately made the non-insurance company man.

The committee brought out its first report in June of 1975. This report was concerned more with principles than mathematics and recommended the use of a modification of the company retention method subject to certain additional machematical and statistical work being done. The report was accepted by the council and the committee was instructed to do the additional work ic suggested. The committee brought in its second report in November of 1976. This report validared all the conclusions in the first report, developed the mathematics, developed a set of actuarial assumptions, and correlated various proposed cost comparison methods. This report was also accepted by the council of the CIA.

The method recommended by the committee was christened the Actuaries' Index. In the Spring of 1977, the CIA made a public statement on cost comparisons which concluded, "While we do not believe that any one index can always be a valid measure of cost comparison between insurance companies, we believe that the Actuaries' Index is a better measure than any other yet devised, and if only one index is to be used, it should be the Actuaries' Index." The Canadian Association of Consumers criticized the Actuaries' Index on the grounds that it was too complex. Subsequently, they endorsed the interestadjusted net cost mechod while the Mercer Actuarial Bulletin and the magazine Canadian Risk Management and Business Insurance endorsed the Actuaries' Index. We have also had a visic from the Federal Trade Commission of the United States. They were quite enthusiastic about our conclusions.

It is of interest to consider the CIA reports in more detail. Perhaps the most interesting aspect is that each member of the commitree joined with a completely open mind and no preconceived ideas as to the best method of cost comparisons. As work progressed all became convinced of an inherent flaw in any event specific method, such as interest-adjusted net cost, and became convinced that the best overall method was the company recention method. The committee reports were unanimous in almost every respect. The only area in which we had problems reaching a consensus was in the choice of an interest rate, which accounts for the rather odd rate of $61 / 2 \%$ finally chosen.

Let us consider the original definition of company retention, as formulated by Professor Belth. The retention is the present value of all future premiums, minus the present value of all death benefits, cash values and dividends, on a set of actuarial assumptions as to mortality, rermination and incerest. The Actuaries' Index is obtained by multiplying all these terms by the ratio of the gross premium to the present value of the premiums. Thus the gross premiutn is effectively split into components representing death benefjus, the surrender benefits, the dividends and the loading or retention. This Jast inem is what is called the Actuaries' Index and is expressed in decimals. The Actuaries' Index can only be used for comparing policies with icentical premium-paying periods and level premiums, and in this respect is no betcer than Belth's original formula. However, our modification is more useful in the majority of cases as it relates to the premium, which is more easily understood than a present value.

In its first report, the committee states, "Reviewing our earlier conclusions, we believe that to make a claim of theoretical soundness, while avoiding the possibility of manipulation, a cost comparison method must reflect the time value of money and should recognize all major policy cash flows in each duration in the period of comparison." No event specific method recognizes all major policy cash flows and usually concentrates solely on the twentieth year cash value. As a result, all were rejected. Only three methods were considered to meet the criteria we laid down: standard mortality cost, Linton yield, and company retention. The first was rejected because of serious mathematical anomalies with respect to cash values. The Linton method was rejected because of problems associated with the scale of YRT premiums and because it did not analyze benefit components or distinguish clearly between guaranteed and non-guaranteed cash flows. Further we felt that any measurement of cash values must take into account the probability of utilization, that is, lapse rates. Only the company retention method and the risk premium index do this and we had already rejected che latter on other grounds.

In our second report we stated, "We feel that there is no logical reason to expect an event specific merhod to make meaningful cost comparisons, except with the specific event assumed. Too many items are simply ignored. An event specific method may well be a valid method of cost comparison, but if it is, it is by good fortune. To use an analogy, no one would suggest that the performance of an automobile could be judged solely by its rate of acceleration from zero to 60 miles per hour. While chis is an important component in assessing performance and possibly an assessment based solely on this factor might be valid, it must be demonstrated that such an assessment is actually valid. It can be demonstrated that most other cost comparison methods are merely special cases of the company retention method. For example, the company retention method can be transformed into the 20 year interest-adjusted net cost by setting mortality and lapse rates at zero for
the first 20 years and a termination rate of one at the end of 20 years." Thus, the conclusion was reached that in the absence of special circumstances that made another method more appropriate, the retention method, or Actuaries" Index, had the greatest theoretical justification.

We measured the effect of varying the actuarial assumptions and from this recommended a set of actuarial assumptions to be used. We also measured rhe degree of correlation between the Actuaries' Index and more traditional methods. By and large, there was not a high enough degree of correlation to warrant endorsing the other methods. Throughout our report we consider a correlation coefficient of .9 or higher to indicate acceptable correlation and of .85 to be marginally acceptable. Of course, changing these factors can lead to different conclusions.

There are certain limitations on the use of any cost comparison merhod and I quore from our first report, "The purchase of life insurance raises three questions: (1) whether to buy at all; (2) the type of policy to purchase; and (3) the specific company and specific policy. Cost comparison methods may be of considerable help in answering the third of these questions, of some help in the second, but of little assistance in the first. We would stress that insurance needs and insurance is not a simple subject and that in most cases, there is a real need for professional advice. No prudent person would serve as his own lawyer or doctor unless he was trained in these disciplines. Similarly, no one should expect to be able to choose an insurance policy which best suits his needs unless he has expert knowledge. Cost comparison indices are relative rather than absolute and they are intended to lead a purchaser in a general way towards an economical solution of his insurance needs. There are many features vital to the purchase of an insurance policy which cannor be embodied in a cost comparison method. The first is the financial soundness of the company. The policy which appeared least expensive at issue may become the most expensive if the insurer becomes insolvent. Another factor is the company's reputation for dealing with its policyowners. A chird is the company's ability and willingness to provide local service. A fine company operating in a restricted geographical area may become quite unsatisfactory if a policyholder moves 2,000 miles from its nearest branch office. And it must be remembered that service costs money and may injure cost rankings. We do not believe that any of these factors can be included in a method of cost comparison, but they are all sufficiently imporcant that they may override conclusions reached solely from cost comparisons.

[^0]All of these problems apply to any cost comparison method, but there are certain areas in which the retention method is very powerful. It makes proper allowance for compound reversionary bonuses as offered by British companies - interest-adjusted net cost fails miserably here. It makes proper allowance for varying death benefits of which the former is just a special case. In the present value version of the formula, it makes allowance for varying premiums. It can be used for comparing dissimilar policies to determine which is the most economical, but this is far from the only criteria. Buying a two-seater sports car at the dealer's price may be more economical than a station wagon with fts normal markup, but it isn't the correct decision if you have a wife, four children, two large dogs and a cotrage you go to every weekend. However, if the comparison is between a simple whole life and a gussied up whole life with coupons, special options, etc., whose whole reason for existence is to confuse the purchaser, the comparison is valid. You are able to put a value on the tail fins and the chrome. It can also be used in the economics of replacement situations, but in such cases incontestability provisions, suicide clauses, loan interest rates or the tax position of the individual may be much more important than the economics. The Actuaries' Index also offers a valuable tool for comparing participating and non-participating polictes. By isolaring the dividend element, it can be determined what effect a change in the dividend scale will have upon the retention.

Put another way, the reduction in dividends that is necessary to make a par policy seem less economical than a non-par policy can be determined, and this can be of help to the sophiscicated purchaser. These are some of the considerations that led to the CIA endorsement of the Actuaries' Index. The CIA endorsement, however, is not a blanket endorsement and the committee reports and the CIA statement make it quite clear that in special circumstances ocher methods may be more appropriate.

MR. MARTIN: I wonder to myself if perhaps disclosure of these retention type indexes to the regulators could be the first step toward rate regulation. Obviously, most of us have an interest in that. I think it could become general persuasion against some pricing practices. But for the most part, it should be reserved for the purposes of determining rough equity between products. The obvious temptation for an insurance department having these retention indexes would be to publish buyer's guides based upon these more theoretical indexes. I would argue against that because it would lead one to presume that the cheoretical indexes are more appropriate for an individual than are the event specific.

I am of the opinion that from a needs standpoint, the event specific indexes are more appropriate because the insurance purchaser many times is purchasing for a specific need. We can all think of examples of this sort of thing. For example, the individual who has a very short-term need will find that a retention index figure over the life of the policy or for 40 years or even for 20 years really is not of much use to him in deciding the type of coverage he wants. So first of all, he has to look at the type of coverage he needs. The industry has a long way to go in education about the various types of policies. All right, what about the more theoretical methods.

I became convinced a long time ago, that if you ask cheoreticians to solve a problem you would likely get a theoretical answer, and this has proved true more than once. I have no problem with the theoretical solutions which have been proposed, other than the fact that the insurance buying public generally is not theoretical. Of the theoretical solutions, I believe the retention
method over some period of time probably does the better job. My problem with the concept is that it is an averaging method. It is good for the policyholder group as a whole, but it really is not applicable to the individual. In my opinion, the averaging methods have the best potential use within the industry and not with the insuring public. Equity between various policies of a company can perhaps be judged over a fairly long period of time. For this reason perhaps the regulators could have an interest in these more theorecical concepts.

MR. JENSEN: Meanwhile South of the border, the FTC made some statements about what they perceived to be certain deficiencies and shortcomings in the NAIC method. They feel that the ideal life insurance cost disclosure package should include: (1) a graphical yardstick to help consumers visualize at a glance whether the policy under consideration is low, average or high in cost; (2) a cable or pie chare which breaks down the premium dollar and illustrates how much of it goes for death protection, savings, dividends, and company expense and profir; (3) a single manipulation-proof cost index which avoids the confusion caused by the NAIC's use of multiple index numbers and facilitares direct cost comparison between policies, (4) disclosure of the interest rate yield on the savings element of whole life policies; and (5) mandatory cosr disclosure during the course of the sales presentation, rather than disclosure upon request. They find these to be critical elements which are missing from the NAIC package. If the states promulgate their own regulation, under the McCarran-Ferguson Act the FTC may have no jurisdiction. More scates are scheduling hearings preparatory to adoption of the NAIC model b111. By one estimate, at least half of them will have completed their hearings before the year is out.

At the same cime, insurance companies are moving a little more towards the use of the NAIC disclosure package. In a recent survey of 19 of the largest companies, seven were now using the NAIC disclosure summary sheet and the interest-adjusted index in all states, and about half a dozen more expected to be doing che same by the first of the year.

MR. E. J. MOORHEAD: You, Mr. Moderator, said that the purpose of cost comparison is "to help the buyer choose among several policies." We must all recognize that the purpose of government-sponsored cost comparison is different; it is to protect buyers from inadvertently buying policies that cost substantially more than they need pay. Regulators are not concerned with modest differences among attractively priced policies even though the marketers of those policies obviously are.

In the many studies of relevant questions, such as merits of different methods and usefulness of dividend illustrations, there has been a mistaken rendency to use coefficients of rank correlation. Rank correlation does not work satisfactorily when, as in this case, many indexes in an array are closely bunched while others are spread apart. A sounder procedure is to select a suitable criterion of difference that can safely be said to be of financial importance to buyers. I have developed an affection for a 50 cent criterion under the interest-adjusted method and wish that other actuaries would examine the validity of this criterion.

One of the probable Federal Trade Commission enquiries will be on instructions and training being given to agents by their companies. Agents will more and more often be asked by the prospect, "Is This Policy Reasonably Priced?" Are they equipped and encouraged to answer chis fairly?

One of the major objections to the Canadian "Actuaries' Index" is that it gives credic for relatively high cash values no matter when, by policy duration, these occur. In fact, it gives more credit for high early values than for high late values. Public incerest is best served by policies with low early values (with due warning) and liberal later-year values consistent with the savings plan that life insurance is said to be.

MR. BARTLEY L. MUNSON: As Chairman of the Society's Committee on Cost Comparison Methods and Related Issues, discharged two years ago, perhaps I should respond briefly to Jack's criticism of those who unduly use correlation coefficients. We certainly were "guilty" of using those to a considerable extent, and perhaps I have not yet totally learned the lesson that Jack believes he has.

I would quickly acknowledge that the use of correlation coefficients can be overdone. They are not the end-all to analysis in this situation. However, our comittee felt they were very appropriately used to help sort out the rank comparisons between a large number of policies under a great many combinations of assumptions and cost comparison methods. It gives one a feeling for the comparisons that tend to result. Also, the Kendall rank correlation. coefficient can be interpreced in terms of the number of reversals of pair comparisons when correlating one ranking with another.

Beyond the use of such correlation coefficients, however, one certainly needs to apply much analysis and judgment. One must include in that the question of how important a change in rank really is, how wide the difference is between any two policies and the reasons why certain methods and their assumprions affect rankings the way they do. While rank correlation coefficients can be and indeed have been extremely useful, this subject certainly cannot be decided on the basis of such mere statistics.

I would like to change hats for a moment and comment on this subject from the viewpoint of a practicing actuary with an insurer that has some $\$ 10$ billion of individual ordinary insurance in force. We at Aid Association for Lutherans furnish the new NAIC-defined ledger illustrations in all states, effective October 1, 1977. We have been furnishing something quite similar for many years; this has now been changed to conform with the NAIC specifications.

There are two challenges which I would like to make to my colleagues in this regard.

1. Let us see if we cannot go beyond the required information, as defined in the NAIC Policy Sumary, and attempt to provide additional information. Let this additional information be as much, or as little, as each of us feels is useful to the purchaser of life insurance. It is my experience that some addirional information should be included and, indeed, can be included without much difficulty. In other words, let us attempt to comply not only with the lecter of the model regulation but also with the spirit of it.

An example of the information $I$ have in mind is the retirement income values of a policy. These could be shown, borh on a guaranteed and clearly labeled non-guaranteed basis, at an optionally selected retirement age (or ages). So, too, could we show nonforfeiture values at selected durations.
2. Let us begin to think in terms of providing ledger illustrations for policies already in force and not just those we wish to place in force. This is a challenge I placed before all of us at the Sociery meeting in Chicago in June, 1976, and I believe it is more urgent now than ever. There are indications that regulators believe such information would be useful. Certainly some of our critics have been saying this. As we look at the emerging replacement regulations, it seems they will give impetus for this type of service.

Most of all, it seems too logical a service for me to find any basis to refute its value and purpose. There seems no logical basis for concluding that we should be any less willing to provide disclosure of policy values on one already in force than we should on that which we are eager to sell and place in force. We will find, I am quite sure, that it is very good business to provide this information. It will improve persistency. It will lead to future sales. And, most of all, it will lead to a generally satisfied and better informed policyholder.

We have furnished such ledger illustrations for several years to all in force business, upon the request of the insured or the agent. We furnish this on all business we have ever issued, regardless of dare, rate book or plan. The information we show looks very similar to that which is furnished on a new business ledger illustration, with the exception that we do not show cost comparison index numbers and we do show any policy loan which exists.

It is my firm belief that this type of service will become a general practice in the life insurance business in the not too distant future, and we will find, if we look at this seriously, that it is not as onerous a cask as we appear to believe it is, judging by the near-total absence of activity in this direction.

MR. MARTIN: With regard to dissimilar policy comparisons, I don't subscribe to the statement that one particular index is going to remove all choice of life insurance products from the hands of the consumer. I still think he's got to look for the type of coverage that best suits the purpose for which the insurance is to be purchased. All of this must take place before he gers into the actual comparison between the various companies.

Obviously, we would all consider similar policies to be those that had the same premium-paying period for the same amount of insurance, etc., etc. In this case the indexes take on the most meaning, whether you're talking payment, cost, or retention.

But does dissimilar refer to par versus non-par? Ir obviously could. It is important to remember that the model law is a compromise on the part of many companies within the industry. It is a valiant attempt to derive a reasonable basis to which all companies could subscribe. The compromise shows four index figures and the part that dividends play in the development of those figures, if in fact they play a part. Therefore the indexes, including the concept of equivalent level dividends, can be used to compare costs between par and non-par.

Does dissimilar mean endowment versus whole life versus term, etc? This is the area that can properly be referred to as dissimilar policies at this time. Looking back, the original phrase "dissimilar" was inserted at the time that only the 20 year interest-adjusted surrender costs were being discussed. Since then we have picked up the ten year figures, the payment indexes and the equivalent level dividends. These items removed many of the problems associated with the discussion of par versus non-par. Some problems still exist on the subject of endowment versus whole life, etc.

In looking at our own product line at State Farn, the pattern of the indexes is really what I would expect between the various types of coverage. Over the shore term, the term contracts look better; as you get out to the longer term, the whole life contracts start to look better. I do not think any of us would find this too surprising. The problem is that if you look at indexes to decide what type of coverage you need, you're taking things in the wrong sequence.

MR. MAC DONALD: I think that using any cost index is not very much to the point when you are comparing really dissimilar policies. Let ${ }^{4}$ s take an extreme example. Consider a person who needs a million dollars of insurance, and further suppose the cost indexes prove that the Wild Life of Massachusetts has the cheapest retention on its ten year endowment. Considerfing only this, he will buy his million dollars of insurance from the Wild Life of Massachusetts on a ten year endowment. But he will only do this if he has the money to pay the premium and he can not find anything else to do with the money. If he can't afford it in the first place, he will end up buying what is going to fit his needs. I think people must never lose sight of the fact that dissimilar contracts are for different needs and the amount of the insurance company's markup on them really does not have very much to do with what they should buy.

MR. SUTTON: As we are trying to work out some good basis for disclosure and some way of helping prospective policyowners decide which are good policies and which are not, we have to get away from theoretical actuarial ideas and go out there into the marketplace--into the real world where an agent is sitring down with an applicant and discussing the kind of insurance he has, what he should be buying and what that agent would like to sell him. When you get out into that real world and talk about retention and a lot of theoretical kinds of ideas, you get losr. My personal feeling is that a comparison of interest-adjusted indexes, both net payment and net cost, does give a reasonable basis for a policyowner to make up his mind. When it gets down to explaining how these indexes are derived and what they mean, the interest-adjusted basis can be fairly easily explained while the retention method cannot.

On the matter of dissimilar policies, last week I opened up my rate book and took the age 35 interest-adjusted cost indexes over 20 years for six policies ranging from whole life to 20 year endowment, and ranked them in descending order. Then I wrote down the corresponding gross annual premium and 10 and behold, the premiums went up as the cost indexes went down. These six plans are wholly consistent with respect to their gross premium formulas, reserve bases, cash values, and dividend factors. You do not have to stop and think too long to realize that this has something to do with the fact that there's a $4 \%$ incerest rate in the cost indexes and something between $5-6 \%$ in our policies. No matter what the basic actuarial reason is, I found this to be a very good example of why you should not try to compare dissimilar policies just with 20 year cost indexes on the interest-adjusted basis.

MR. JENSEN: If I were to atcempt a consensus among us, it seems we would not use any one index for comparing dissimilar policies. We would decide berween plans of insurance on the basis of needs and funds available for premiums. We would not use an index to decide between plans of insurance. Pick a plan that fits your situation and then, if you are going to shop, look at various offerings in that kind of insurance.

MR. SUTTON: My understanding is that the model regulation for replacements is in draft form and will be given to the NAIC replacement task force for their consideration with the expectation that it will be presented to the NAIC at its December meeting. The information that $I$ have shows that a replacing agent must continue to nore the presence of replacement on the application and must inform the replacing insurer of the policies proposed to be replaced. The buyer must be given a replacement notice which is written co give an impartial position on the pluses and minuses of replacement. When the replacing insurer is informed by its agent of the replacement, it must prepare policy sumaries in accordance with the requirements of the solicitation regulation and it must furnish such summaries to the buyer and to the existing insurer. The replacing insurer must either hold up underwriting for 20 days or provide a 20 day free look provision in its replacement policy in order to give the existing company adequate time for any conservation. If the existing insurer or its agent makes any attempt to conserve its business, a policy summary of the existing policy must be provided to the insured and the replacing company. The existing insurer may also use additional materials, including cost indexes, to conserve its business so long as such additional materials are not contrary to law or regulation. If cost indexes are used, there will be a requirement along the lines of the buyer's guide warning that indexes should not be used to compare dissimilar polictes.

My quick reaction to the proposed regulation is that it is not roo rough to deal with. The particular area of replacements that bothers me is the difficulty in making decent comparisons between a replacement policy and the policy to be replaced. The basic problem here is that you have to take into account any values that are in the existing policy. Also when you have an existing policy with an existing insured, you frequently run into situations where the personal income tax status of the insured is critical if there are loans on the exisring insurance. If you are going to continue the loans, you have to consider the after-tax cost of the policy loan. If cash is released, you have a "real" investment situation where tax considerations may become important.

Situations involving replacement involve various levels of out-of-pocket payments, guaranteed values, and death benefits. Theoretically, you should either equate the payout and compare death benefits and cash values or have constant death benefits and look at the payout and some of the resulting values. The kinds of illustrations I have seen in these situations make it very, very difficult to come up with any good basis of comparison and $I$ really despair of ever coming up with any cookbook way of making good disclosure on replacements.

MR. MARTIN: I chink we all agree to the same thing--it's just difficult to come up with any one formula. Some replacements are really very legitimate because of changing needs. For example, the individual who has moved to a more expensive house and had originally purchased decreasing term for the specific purpose of covering his mortgage needs. This is a replacement of like with like and really is a very legitimate replacement. I don't think that you need to look for indexes on something like that.

We have furnished dividend listings on outstanding policies to our regional offices and the agents can request them. I would encourage other companies to do this because the policyholders certainly have the right to request information on an outstanding policy.

Another thing which $I$ would encourage all companies to do is to maintain contact with your policyholders. Avoid just sending them a request for their annual premium or something like that. I think you have to have personal contact out there. At these times you find out about the changing needs of the policyholder. Many times you will find out that he has, in fact, been approached by another agent with the idea of replacing his policy and a company that maintains a contact will have the chance to conserve their business.

MR. MAC DONALD: I completely agree that there is no universal formula that can be used. The only solution I have been able to come up with is to send the man off to a good consulting actuary who will charge him a great fee for telling him whether the replacement is a good deal or not. Sometimes when you begin looking at rhe situation you can say "Well, the replacement recomended is not a good deal, but I can think of another one that would be." Nobody has ever suggested that the company who is being replaced should be doing that.

Another thing which is going to have some effect on the purchaser is that both sides obviously have a vested interest-mone in placing the new business and the ocher in conserving it. There may be a certain lack of credibility applying to both sides.

MR. JENSEN: While there is much replacement these days and the insured public could use help in making good decisions, there is no practical general method or index that can tell whether a given replacement is financially desirable. Rather there is a melee of different ways of going at this and inventive propositions are somerimes made. Some of these are fair and understandable, but not all.

The best general advice is to get the figures down on paper and try to get likes alongside of likes to keep things as comparable as possible. We ought to compare like amounts of insurance. We ought to compare outlay to outlay. If we could have the outlay the same and the amount to the beneficiary the same, we could compare the cash values. To the extent this can not be done we have to make allowances and adjustments.

MR. MARTIN: I would say basically that we do support the model replacement law from the standpoint of disclosure; that is, showing the cash value, showing the dividends, and showing the premium on the existing policy. That is precisely the reason we have made this material available to our agents, not necessarily for replacement, but just as a source of information.

MR. CLAIR A. LEWIS: I will address myself primarily to the second point for discussion--the cost and value comparison of dissimilar plans. The replacement comparison is equally challenging but for the most part is a special case of the dissimilar policy situation.

I personally have found this subject quite frustrating. Even though my actuarial training gave me a great deal of knowledge to use in the analysis of insurance cost from the insurer's point of view, it did not do nearly as well with respect to such an analysis from the policyowner's view. Perhaps
this was an oversight. Then again it may have been assumed that no one in his right mind would be trying to compare dissimilar policies anyway.

At any rate, $I$ believe all would agree that cost involves two elements. The first is what you pay--the second is what you get for that payment. The payment is relatively easy to handle even for permanent life insurance. The "what you get" is also easy for most people because they compare likes and avoid the evaluation of the product or service altogether. One does not buy a screwdriver rather than a hammer because it has a lower price, nor does he buy a car rather than a home for the same reason. Such cost comparisons simply are not made. Yet for some reason (perhaps because permanent life insurance provides only two basic services--risk coverage and investment) there is a strong feeling on the part of some that actuaries should be able to overcome the "apples 'n oranges" aspect.

To cope with the problem, I have resorted to the following rather simplistic thought process which may sound a little grade-schoolish but which does make some of the more subtle aspects a little more obvious:
> "Assume for the sake of simplicity that one wants to compare 10 Pay Life and 40 Pay Life. He must have the wherewithal to pay the 10 Pay Life premium or there would be no point to the comparison. Further, if he needs $\$ 1,000$ of coverage, he's not going to buy $\$ 3,500$ of 40 Pay Life simply to use up the money. (Note: Life insurance can be evaluated as a pure investment on a 'gamble' assumption, but that is a separate subject.) One must conclude, therefore, that there will be money left over. This may be invested in bonds, a new car, or a trip to Las Vegas, but all involve interest directly or opportunity cost indirectly. Thus, needless analytical pain can be avoided by assuming the best common denominator--invested funds. In short, the issue boils down to a 'Buy 10 Pay Life or buy 40 Pay Life and invest the difference' comparison where the payment (or price) is the same for each alternative. The 'what you get' with 10 Pay Life is the death benefit or cash value. With 40 Pay Life each of these policy values is increased by the value of the invested difference."

This process does present certain difficulties when one tries to convert the results to a universal cost index:
(1) The value of the invested difference will be highly sensitive to the policyowner's investment rate. One rate (such as the $5 \%$ rate now prescribed by the NAIC Model Bili) will not serve all users.
(2) The tax structure of the invested difference differs considerably from that of iffe insurance. The interest rate on this investment must be an after-tax rate, and, of course, there will be no tax on the proceeds. Because the invested difference is on an after-tax basis, the life insurance cash values (if surrender is contemplated) must be also. This necessitates knowing the gain on surrender, the policyowner's tax bracket, and the manner in which the cash values are to be distributed.
(3) The pattern of death benefits under the two alternatives will, if the policies are really "dissimilar," be substantially different. Thus, after all the work is done, one will still be comparing screwdrivers and hammers.

This is not to say that the above exercise will not be useful. To the contrary, it may make it readily apparent that one course of action is preferable over another or it may suggest another alternative. At worst, it will be educational. It will certainly give rise to such questions as "What is a dollar of coverage worth that one doesn't want?" or "What is a dollar of coverage worth that one wants and can't get?" or "How, in determining one's investment rate, does one recognize differences in safety, liquidiry, etc. between permanent life insurance and his investment alternatives?" The point is that it is most unlikely that a simple index can be found which will serve as a satisfactory substitute for the process itself.

To those who would scorn the equal outlay/invested difference concept described above, I would offer a final comment. It is very tempting to separate permanent insurance into risk and investment components and analyze one or the other individually. As a practical matter, however, the components are notsold individually. The process described above reflects the real world in which the buyer must accept the mix characteristic of the plan he is buying. If some other cost measurement system produces conclusions which contradict those reached using this process, it would seem that one would at least want to have an explanation readily available.

MR. JERRY R. MC ALLISTER: Has anyone done any comparisons of the "retention" under a brand new policy and one considered for replacement? This could very dramatically indicate some of the real differences in the cost that the consumer is going to be incurring.

MR. MAC DONALD: I think that the retention method could be used here, except you are not going to be able to use the standard retention because we are now inco a specific situation. We have got to look here at what the actual interest rate appropriace to the purchaser is. For example, in Canada your first $\$ 1,000$ of investment income is tax-free, so if you're dealing with somebody who has no investment income you could use an interest rate of something like $9-10 \%$. If you're talking to somebody who has an enormous investment income, then the appropriate rate is his after-tax rate. Secondly, in the retention method we have a standard set of lapse assumptions. However, in a replacement situation the policy that is being replaced may have been around for seven or eight years. Certainly the probability that the replaced policy is going to be rerminated is quite low. You have to come up with what you think is a set of lapse assumptions applicable to the case.

I think the retention method can be used, but now you have got to do a lot of work in deciding what the appropriate actuarial assumptions are because group averages are no longer appropriate.

MR. SUTTON: I rhink this is another situation that would appeal to many of us as actuaries, but in the practical situation the cost of figuring out all the specifics becomes prohibitive.

I would like to think that given any particular replacement situation, I could come up with the proper kind of comparison to equate costs, benefits and the like. However, it is probably impossible to come up with any kind of general rule that would cover all situations.

MR. THOMAS K. GROSS: It seems to me that if each of us in our own offices were presented with a replacement case, the first question we might ask is not what cost is involved but why is this replacement being made. Perhaps we
might consider something like the buyer's guide. A replacement guide--what are the reasons that we commonly see for replacement? Why does the industry in general think that replacement is bad? Do any of those things apply to your particular situation? Obviously, if you're replacing like with like, cost is a factor but ocher things can be involved.

MR. JENSEN: Every concract meets certain needs and has a certain utility to an individual. In general, our indexes and similar methods do not reflect an individual's own perception of his situation and his utility. We may stipulate an interest rate in the interest-adjusted method and drive out a risk cost, but this is neither a total nor a unique reflection of utility. In the Linton method, we may stipulate a risk cost and drive out a yield, but again have notdealt wholly with individual utility. In the retention method, we may stipulate interest, claim and lapse rates and drive out the cost of manufacturing and distribucion, but still have not dealt fully with utility to an individual. This is one of the reasons why it is so important to use basic policy data in disclosure and comparison. It is also a reason for using both an outlay and a cost index, and over at least a couple of time intervals.

MR. MARTIN: I would not accept a blanker statement that all replacements are bad, but rather replacement without understanding is bad. If an individual knows what he has and knows what he could get and if he can somehow understand the differences between them and he wants to make his choice on that basis, fine. I guess the real problem is how to give him what he really needs to understand all this. I do not have that answer.

MR. MAC DONALD: When we think about retention and replacement from a theoretical point of view, the retention method is going to demonstrate that the retention is greater when the policy is replaced because the purchaser is paying the acquisition costs all over again. But the fact that it is costing you a bit more money to get something which is much more suitable is not a reason for being opposed to the replacement.

MR. EDWIN E. HIGHTOWER: The reason for my comment is the panel's reluctance to deal with the question of what constitures a good disclosure and cost comparison method in a replacement situation. While each case presents unique problems, I feel there are certain general principles which should be adhered to in determining relative financial advantage. They are as follows:

1. The method should take into account an interest factor, adjusted for tax considerations as appropriate for the circumstances.
2. The method should consider both surrender result equities and net estate results in the event of death.
3. The method should be based on and patterned after recognized methods of cost comparison.
4. The merhod should consider both short term and long range financial results.
5. The method should not confuse cumulative probabilities with "snapshot" financial results in the event of death or surrender.
6. The method should not produce results which are inconsistent with reason, e.g., demonstrate financial advantage for replacing a policy with one of the same series at a higher issue age.

In conclusion, I feel it is appropriate to note contributions to the literature on this subject by two non-actuaries. The first is William C. Scheel's (joint author Jack L. Van Derhei) series of articles in Best's Review, and in particular the section titled "How to Compare Fudge and Mud" (February, 1977), which presents a tabular display of annual and cumulative financial results and suggests criteria for determining whether retention of existing insurance or replacement is financially advantageous. Second, in a hearing before the Texas Insurance Department, Joe Belth mentioned that there are three possible outcomes in replacement situations: (1) replacement would clearly not be to the advantage of the policyholder; (2) replacement would clearly be advantageous to the policyholder; and (3) replacement would be neither clearly advantageous nor disadvantageous. Only in situation (2) should replacement be encouraged from a relative cost point of view. Agents should be counseled not to claim a cost advantage for a proposed replacement unless such advantage can be clearly demonstrated. That is the abuse of replacement through misrepresentation ("twisting") and is illegal.


[^0]:    "Policy design differences are also imporcant and may operate to fruscrate attempts at cost comparisons. Policy loan rates, additional charges for fractional premiums, and extra charges for disability and accidental death benefits are examples. The second of these, that is the charges for fractional premiums, may be quite important as it gives the company which writes the vast majority of its business on a monthly premium basis the opportunity of making its annual premiums appear quite attractive, while its monthly premiums may be much less so. Disability benefits included in the annual premium without a specific charge make comparisons more difficult. In fact, differences in benefit provisions may invalidate purchase decisions made solely on the basis of small differences in cost, however measured. Premium rates may be based on age last birthday, age nearest or age next. So the date on which the insurance is purchased may be important. This additional difference must also be recognized in a purchase decision."

