

RECORD OF SOCIETY OF ACTUARIES 1976 VOL. 2 NO. 4

ADJUSTABLE LIFE PRODUCTS

Moderator: ROBERT E. HUNSTAD. *Panelists:* JAMES C. H. ANDERSON,
WALTER L. CHAPIN, WILFRED A. KRAEGEL, C. L. TROWBRIDGE.

A discussion of existing and suggested life insurance products which adjust to changes in need for coverage and changes in ability to pay.

1. Introduction--An overview of adjustable products.
2. Paper: "Toward Adjustable Individual Life Policies" by Walter Chapin.
3. Article: "The Universal Life Insurance Policy" by J. C. H. Anderson.
4. Similarities and differences between the two approaches.
5. Current industry activity.
6. Problems and results--A view of the practical, applied level.

MR. ROBERT E. HUNSTAD: In the Presidential Address, Jack Bragg talked of the various types of products that will be marketed in the near term future. Of the five he listed, three are represented in the single product Adjustable Life:

Package plans
Flexible plans
Inflation protection plans.

MR. CHARLES LAMBERT TROWBRIDGE: For years it has been obvious to any serious student of individually sold life insurance that both life insurance needs, and the ability to pay for life insurance, will change over the policyowner's lifetime. The appropriate amount of life insurance will change through marriage or divorce, the birth or growing up of children, the availability (or lack) of group or social insurance, and for a score of business, economic, or tax-related reasons, including inflation. The appropriate premium will similarly rise or fall, affected by promotion (or demotion), upward (or downward) mobility, unemployment or re-employment, and changes in wage and price rates.

If we assume that both insurance needs and the ability to pay remain level over the insured's future lifetime, we sell an ordinary life policy.

If we make the same assumption as to the needs, but assume ability (or willingness) to pay will be gone at retirement, we may sell Life Paid Up at 65.

If we believe that early insurance needs will be high in comparison to ability to pay, but that income will catch up later, we may offer convertible term. In fact, any of our traditional plans of insurance can be viewed as preprogrammed solutions to the changing needs problem. Some of these programs may get a bit complicated or esoteric, involving more than one policy and one or

more "riders"; but the whole programming approach to the sale of life insurance is based on the premise that the future can be (at least to a degree) predicted; or, when events occur that cannot be foreseen, the situation can be re-programmed, utilizing the possibility of buying new insurance (or dropping old), or of exercising what flexible features the traditional product line contains.

There are the beginnings, however, of another approach to the changing needs concept. Advocates of this approach put forth two basic ideas:

1. They "give up" on the idea of preprogramming, in effect saying that our world is so unpredictable that preprogrammed solutions have no chance of fitting the situation beyond the first year or two after the programming is done.
2. On the other hand, they can conceive of life insurance contracts so flexible, and so easily changed or modified, that adaptations to changing needs can be made whenever the changing needs show up.

These unprogrammed solutions to the changing needs problem are the subject of our panel.

Probably most actuaries have, at one time or another, thought about the design of a truly flexible life insurance contract. If so, they may well have hit upon one, or both, of what I will here consider to be the two natural approaches to the unprogrammed solution.

Let me describe first what may be, conceptually, the easier of the two unprogrammed approaches. It is embodied in what Mr. Anderson has dubbed the Universal Life Policy. The individual life insurance contract becomes simply (1) an interest-earning savings deposit and (2) one year (or shorter) renewable term insurance. The savings fund accepts deposits in almost any amount (including zero or negative as well as positive)--and from the fund the term insurance premiums are paid. The savings and insurance elements are separate and distinct--and because of this the life insurance element is of a term nature, rather easily modified as conditions change.

The second approach may be conceptually a bit more difficult--but it retains most of the basic concepts of traditional level premium cash value life insurance, and may therefore be more easily accepted. This approach is the subject of Mr. Chapin's paper--and is represented in the market place today by Minnesota Mutual's Adjustable Life. Adjustable Life is quite different in form from Universal Life, largely because it retains the traditional principle that savings and insurance elements are intertwined--but we shall see that the same objectives can be accomplished.

That both of these approaches have serious difficulties must be admitted from the start. The Universal Life approach raises very serious field compensation problems, upsets the federal income tax picture of both the policyowner and the life insurance company, and puts the life company in the position of either (1) offering a straight saving vehicle in competition with the traditional savings institutions, or (2) abandoning the savings part of the market to the banks, the savings and loans, and the credit unions. The Adjustable Life approach seems to avoid most of these pitfalls, but has some difficulties of its own. These have to do with state regulation, administrative systems, and the delivery of the policyowner service implied.

In the remainder of this panel, we will hear more about both approaches. Perhaps the industry is beginning to realize that at least some of the difficulties can be overcome; and that the pluses of an unprogrammed approach--or at least of a vehicle flexible enough to adapt to changing needs--may be worth the considerable effort.

MR. WALTER L. CHAPIN: The ideas in my paper developed in a number of stages, each stage being derived from observed experience. It began by noting numerous increases in the insurance schedules of group life policies by amendment, leaving other policy provisions unchanged. Could this process be adapted to an individual policy by use of the computer? In 1964, J. Stanley Hill wrote a computer program that demonstrated the feasibility of such an adaptation.

The use of a computer for this purpose was foreshadowed as early as 1947 by Edward Reider in commenting on a paper on electronic machinery by Edmund Berkeley. A few months after our experiment, the same subject was discussed by Alfred Guertin.

In 1966, the Combined Insurance Company of America and affiliates pioneered the concept that an individual policy could be increased by amendments. All insurance is in small policies on the ordinary life plan. Up to four increases, equal in amount, may be made on premium due dates in the first four policy years. Each amendment contains a computer run of nonforfeiture values for the new total amount of insurance.

In 1971, the Minnesota Mutual began marketing its present Adjustable Life policy. There is no limitation on amount of insurance, premium or plan of insurance. When an applicant elects any amount of insurance and any premium, the computer solves the plan of insurance and prints the page of the policy containing all descriptive figures and nonforfeiture values. The applicant may instead indicate amount and plan, or premium and plan, leaving premium or amount to be solved.

After issue, the policy may be adjusted by making any two elections from amount, premium and plan as was done at original issue. A page of figures for the policy, including acknowledgment of reissue by the Company, is again run by the computer. There is no limit to the number of adjustments or the period in which they may be made. The plan of insurance may be term to any age at least five years older or life paid-up at any age. A non-repeating premium may be paid on any premium due date, immediately increasing nonforfeiture values and changing the plan. In any status, amount of insurance and annual premium must be level. Any increase in insurance requires underwriting unless waived by an option elected by the applicant.

The paper expands the basis of Adjustable Life as used by Minnesota Mutual to include continuous and limited payment endowment plans. It also applies the Adjustable Life principles to individual policy pension coverages.

In pension coverage, the increase in the projected retirement benefit from a salary increase under a defined benefit plan, or from increased contribution or an irregular contribution to a defined contribution plan, is produced by adjustment to a single policy on the life of the participant. The policy matures at a stated age which may be changed. The relation of a level death benefit to maturity value may be greater than, equal to, or less than such maturity value. The limiting case is a level premium retirement annuity having no level death benefit. When the monthly annuity is less than 1% of the

death benefit, the pension plan would include a side fund. Figures for any adjusted status of the single policy for each participant may be projected to maturity by the computer. A non-repeating premium may be used in the funding.

The paper uses the three basic assumptions in the interest of practical operation: (1) All reserves are by the Commissioners Reserve Valuation Method (CRVM). Cash values are reserves for the full amount of insurance taken to the nearest dollar. (2) All durations of term insurance with positive reserves have cash values. (3) The nonforfeiture values are cash values and paid-up insurance. The paid-up value applicable to both term and life plans is paid-up whole life insurance. Normal paid-up nonforfeiture values apply to endowment plans.

Adjustable Life obtains all figures for the policy, ledger statement, dividends and internal home office statistics from the computer. Twenty formulas in the paper are involved in the programming to produce all policy figures on original issues and adjustments. Sixteen additional formulas may be involved in all variations of pension coverages. The paper briefly discusses procedures that must be adapted to the Adjustable policy--underwriting, substandard premiums, dividends, guarantees, valuation, agents' compensation and counterparts of the typical rate book and sales manual. Of key importance is the proof that the Adjustable policy conforms to the Standard Valuation Law and in no case conflicts with the Standard Nonforfeiture Law.

MR. JAMES C. H. ANDERSON: The title of the paper which I presented to the Seventh Pacific Insurance Conference, The Universal Life Insurance Policy, is significantly misleading. In fact, the paper is primarily a critique of traditional life insurance products and distribution systems.

The product described in the paper consists of familiar components--a flexible premium annuity with a monthly renewable term rider. A specific product is described, but it is not suggested that this is the only configuration, let alone the best configuration, that could be designed. The description is specific only for the purpose of performing tests to determine whether or not such a product is feasible from the financial viewpoint. The results of the tests indicate that the product is feasible, provided the underlying assumptions are realized.

The most controversial of the assumptions, and also the most critical, relate to expenses, particularly distribution costs. It is assumed that, if the product is distributed through a traditional agency system, the compensation of the soliciting agent will be: \$100 per contract sold, \$.50 per \$1,000 initial amount of term life insurance and 2½% of all premiums paid. On average, this produces equivalent first-year and renewal commissions in the range of 50% to 60% of the New York maximums, with great variations by size of premium. The assumed level of agent compensation is realistic, in my judgment, only if a 100% increase in sales frequency is realized.

It is worth noting that the average sales frequency of the industry is very low--approximately one sale per week per equivalent full-time agent--and in that one sad statistic may lie the root of the whole problem. Is it reasonable to pay an agent a full-time income for making just one sale a week? Is our product so difficult to sell that 40 hours of effort are required to effect just one sale? Does the average full-time agent expend 40 hours of effort per week? These are the basic issues which must, in my opinion, be addressed and if the answers are those implied in my questions, I believe that

new horizons will open for the design of a new family of open-track products far better suited to the needs of modern society. In short, the development of new and better products has not been impeded primarily by the lack of ideas, or inhibiting regulation, or other factors often cited; the real impediment has been and continues to be unreasonably high distribution costs and our reluctance to expose those costs.

Recently, I have had occasion to perform an experiment to determine the composition of the premium for a typical non-participating whole life policy at age 35. First, I calculated a standard premium using fairly optimistic assumptions. Successively, I then reduced expenses, lapses, mortality and profit to zero. The results: expenses represented 41% of the standard premium, lapses 8%, mortality 10%, and profit 5%; the remaining 36% was the cash value accumulation. For a participating product using discount rates reflecting policyholder expectations rather than shareholder expectations, a similar exercise produced the following profile: expenses, 30%; lapses, 4%; mortality, 14%; surplus retention, 2%; the remaining 50% represented the cash value accumulation and dividends. Socrates advised us that the first step in knowing the truth is to call a thing by its right name. What name would you suggest for these products? Who do we really perceive to be our clients?

I cannot close without making reference to the aspect of the paper which has received the most attention: The Cannibal Life Scenario. A scenario is a most convenient literary device which affords the author the opportunity to advance outrageous ideas without the support of closely reasoned arguments. Perhaps I was suggesting that the Cannibals would make Missionaries of the life insurance industry we have known--a statement that has, and has deliberately, two possible interpretations.

MR. WILFRED A. KRAEGEL: Before listing similarities and differences, it may help to give them a framework. A new product is important only if it offers lower cost and/or greater benefits from one or more of three viewpoints - policyowner, agent, and company (all existing policyowners/stockholders). What do we mean by lower cost and/or greater benefits? Evaluation of lower cost/greater benefits (cost/benefit ratio) depends on what the objectives are and how well the products meet those objectives. And as we try to evaluate how well objectives are met, we might bear in mind that if a change is significant, the total result should be considered - not only the primary effects, but also the secondary effects.

Since evaluation depends on what the objectives are, let me suggest several. First, the primary objectives - relating to the purpose of providing an individual financial security service of higher value:

1. Greater responsiveness to policyowner needs.
 - a. Higher coverage from the outset with low initial premium (because most initial policies for young adults come nowhere near their initial needs for coverage). This wouldn't apply to all, of course.
 - b. Provision for premiums to increase, to reflect greater risk charge and savings requirements with advancing age.
 - c. Ability to meet changing needs of the policyowner over time - income level, dependents, inflation, estate taxes, etc.

2. Greater efficiency in company and agent performance.
 - a. Increasing premium flow to the company to deal with inflation's effects on agents and home office, via lower unit costs.
 - b. Better corporate tax performance.
 - c. Greater productivity in the field.
 - d. Greater productivity in the home office.
3. Better value to policyowner, however that may be defined.

4. Adequate return on investment in new products to existing policyowners/stockholders.

In addition, there are corollary or implicit objectives, including these:

1. To simplify the insurance relationship and make it more understandable to the buyer.
2. To reduce the incidence of failure in carrying out the policyowner's program, as evidenced by lapses and "splintering" (coverage of one person by many companies).
3. To attract and retain more highly qualified agents through expectation of higher median income and more satisfying work.
4. To attract and retain more highly qualified professionals and office staff through higher median salaries and more satisfying work.

That brings us then to the general similarities between Adjustable Life and Universal Life:

1. The names are arbitrary - both are adjustable and both are universal; that is a highly significant point. Both get at the basic objective of providing greater responsiveness to changing needs of the policyowner.
2. Both may have many variations in detailed characteristics. In each case they are specific examples of an important general approach.
3. Both are combinations of savings and protection, and both can produce any desired mix of the two.
4. Both are based on familiar "elements," combined into unfamiliar "compounds." Looked at from one angle, one is tempted to ask, "What's so new about that?" But from another angle, they are highly significant changes from what we do today.

The differences between the two also are significant:

1. Adjustable Life can reproduce virtually any existing plan directly while Universal Life can provide the results but not the interim path; either one may be considered a plus or minus in the individual case. The Universal Life is easier to change but more difficult to tell if the policyowner is on the right track.

2. Adjustable Life is structured and follows a pattern (an actuarial trail) while Universal Life is unstructured. The Adjustable Life structured approach is essentially a prospective view, while the Universal Life unstructured approach emphasizes more the retrospective view and the current year.
3. The savings element of Adjustable Life continues to be integrated with the risk element, while they are clearly separated in Universal Life.
4. Adjustable Life lends itself to a continuation of the current distribution system, while Universal Life points to a different system. Mr. Anderson sees serious problems with the cost level of the current system, and he sees Universal Life as permitting lower distribution costs through a different system.
5. The tax amounts and incidence may differ. For Adjustable Life, the life company pays Federal Income Tax (if a Phase I company in the U. S.) on investment income beyond that needed to meet interest guarantees; the policyowner (or beneficiary) pays tax on only a portion of the cash value or face amount or none at all. Though the tax status of Universal Life seems less clear, it is designed to pay excess interest on a basis taxable to the policyowners and deductible without limit (?) by the company.
6. Universal Policy is simpler and easier to understand in principle, because term insurance is inherently simpler than permanent insurance. However, in the high ages beyond retirement, the then high term premiums apparent under Universal Life may be more difficult for the policyowner to accept than the simpler continuation of Adjustable Life, even though the coverage may have important uses for estate tax, etc. Also, the determination of payment levels to meet future objectives may be difficult - analogous to the art of the Enrolled Actuary.

How do the two approaches compare in meeting the objectives described earlier? In light of the very limited experience with either approach, a comparison at this stage must be highly subjective. Both approaches appear to be by their nature more responsive to the changing needs of the policyowner; it is too early to tell which would be more so. A comparison of how well they meet the other three primary objectives is even less clear. Greater efficiency in performance is very likely under the Adjustable Life. Greater efficiency is probable also under Universal Life, provided that the substantially changed distribution system assumed for Universal Life is successful - a debatable assumption in the year 1976. Similar observations can be made about how well both meet the other two primary objectives. In short, Adjustable Life is enough like present products to anticipate definite improvements in meeting the objectives; Universal Life theoretically may do even better, but practically, may not do nearly as well.

MR. HUNSTAD: In the two years since Minnesota Mutual's product was described in the National Underwriter, we have received numerous requests for additional information. This summer I surveyed each of the companies to whom we have sent some material with these results:

- 14% express no interest at all in developing the product.
- 61% express minimal interest with most saying "wait and see what develops" or indicate little pressure to develop this product vs. other priority activities.

19% express strong interest and generally a commitment to delve into development of the product.
6% gave other responses.

In response to the topic of "problems and results," here are some highlights of the Minnesota Mutual experience to date:

1. As of September 30, 1976, we have more than 11,000 Adjustable Life policies in force. They have face value of over one quarter billion dollars and annualized premium of \$3.3 million.
2. Current sales through the first nine months of 1976 represent almost \$10 million of face amount per month, almost 400 policies per month, and over \$100,000 in first year annualized premium per month.
3. A comparison of repeat sales and in force policies was made between 100 Adjustable Life sales and 100 traditional sales. All the sales were made in the first three months of 1972. After over four years, the Adjustable Life policyholders have virtually the same amount of insurance in force as was originally purchased (i.e., increases have offset lapses and deaths). In comparison, the traditional policies, including any additional sales to the same client, only account for 65% of the original sales.
4. The policy is now approved in all states except Texas, Mississippi, Montana, and Pennsylvania.
5. One of the unique features of the Minnesota Mutual Adjustable Life product is the Cost of living Option. This option is automatically available to each policyholder each three years, provided there has been no change in face amount (if there is a change in face amount, the Cost of Living Option is deferred until three years after the change). The option allows the insured to increase the face amount in the same ratio as the Consumer Price Index has risen over the same period of years. The plan of insurance is retained and thus the premium is increased.

Our results to date indicate 70 to 80% acceptance of this increase in face amount and increase in premium. By the terms of the contract, this increase is limited to 20% of the face amount with a maximum dollar increase of \$20,000. By company practice, we have been allowing increases up to 30% or \$30,000.

MR. TROWBRIDGE: I would like to help you put yourself in a position of a company that is seriously interested in developing this product. Bankers Life is in this position. We are seriously developing the product, and we will have it on the market before very long.

First, the basic concept. The life insurance industry for years has said that permanent is great and term is not so great. We sell term only as a last resort and only if we can hope to convert it. Think a minute about Adjustable Life. The term-permanent distinction is entirely blurred. Adjustable Life is a term or is a permanent life--both. It changes from one to another. To use an analogy for people who think that permanent is great and term is not so great--What is more temporary than a permanent policy that lapses? and what is more permanent than a term policy that converts? Adjustable Life by its very nature is the most permanent of all forms because

when the needs change, the policy changes to fit. It certainly takes away most of the reasons why a person should lapse a policy.

Next comes the question of product design itself. What do the change provisions or adjustment provisions actually say? Consider nonforfeiture and reinstatement matters. I think you will find that reinstatement is much easier under this policy than under any other. You have to decide what your basic nonforfeiture option is, and incidentally, in the Minnesota Mutual it is paid-up life insurance; Bankers Life is going to be extended insurance. What dividend options are going to be offered? Typical dividend options of paid in cash or applied on premium or accumulated at interest are all as natural to this policy as to any other. But the option that we always called paid-up additions takes a different, and probably better, form.

The Cost of Living rider is an important concept within Adjustable Life and has to be thought out very carefully.

One of the most interesting things is how substandard comes out in Adjustable Life. We are all used to substandard being handled by an extra premium. In Adjustable Life, because the premium and amount of insurance are set, substandard comes out in the form of a cheaper plan instead of the extra premium. This, psychologically, is entirely different to the client. We have all had trouble placing substandard insurance policies. It may well be that Adjustable Life substandard is too easy to place. The client may not even know that he or she is rated.

The real problems and the real effort are in field compensation, field training, and especially in the service provided by the agency force. Any time we offer the policyowner as much flexibility as Adjustable Life, we are doing him no favor if we give these options and then do not help him use them. I maintain that Adjustable Life will succeed only if the agency force really can be motivated to retaylor the policy every now and then to fit the client's changing needs. Thus, incentive must make this attractive to the agent. We are going to use transferable service fees. The service fee goes to the agent who is helping the client today, not necessarily the agent who sold the policy in the first place. The general area of field training is a massive one. You do not come out with Adjustable Life without a lot of work with your field force, and we are in the midst of that today.

Finally, all of us realize that this policy won't work without the computer. Data processing systems must be adapted to it, both in sales illustrations and in the administrative system. Adjustable Life is not any harder to administer than traditional insurance policies, but it is different.

MR. KRAEGEL: A Missing Ingredient - None of the comparative material which I described earlier takes into account a vital characteristic of the market, namely, the consumer's reaction to life insurance. Although a tremendous amount is sold, most of it (at least in the individual part of the market) is sold through the initiative of an agent; seldom does the policyowner seek out either the first policy or subsequent policies. Three possible reasons for this phenomenon come to mind:

1. Life insurance companies have not learned how to market their products as effectively as they might, although some agents and some companies do much better than others. There may really be a way to persuade the consumer to recognize the need and act on it more readily.

2. Death has long been a taboo subject, at least in Western culture, and it is not easy for a human to face his/her mortality.
3. Current needs and desires for tangible goods and services are often much stronger than the desire to save and provide for the future.

All three reasons can be demonstrated, I believe, but the primary reason is that death has been taboo, and that has restricted the marketing effort severely as well.

Starting from Scratch - If life companies were opening their doors today, the life contract would almost certainly be different than that which developed 150 or more years ago. Would it be like the Adjustable Policy or like the Universal Policy? I am not sure - perhaps like neither one. In the absence of the death taboo, I am inclined to think it would be nearer the Universal type, because of its simplicity and efficiency.

Starting from Today's Reality - But life companies are not just opening their doors today. We have many decades behind us, a large field force familiar with current products, and a market that still wants to be sought out and persuaded (many of whom also are comfortable with current products). For the near future, at least, the Adjustable type would seem to be the way to go.

And in the Future - The times are changing, and several emerging factors will exert strong influence on future life insurance products:

1. The death taboo is beginning to be eroded, led by pioneers epitomized by Elisabeth Kübler-Ross (a psychiatrist who has written widely about her work with people who are near death). This will influence products toward the Universal type, because consumers will be less reluctant to talk about death, life insurance sales will be easier, and the distribution system can more easily be changed.
2. Rising standards of living mean that consumers will likely spend more time consuming, and they will be more likely to seek and accept help in financial security counseling, and more willing to pay for it. This could bolster the current system if it continues to meet their needs, but either way, it will lead to more time to service clients and less time needed to seek them out - on balance, leaning a bit toward the Universal type.
3. Computer support for the sales process is becoming more prevalent and useful. The Universal type tends to require less computer support, but it is available at relatively low cost, so this trend favors the Adjustable type - "we can do it that new, elegant way, so why not?"
4. Cable television and other communications advances will change most types of marketing dramatically, including life insurance. We can still describe most agent/policyowner contacts as "house calls," but with "home communication centers" this will no longer be necessary. If this trend is coincident with a lessening of the death taboo, life companies will find ways for the consumer to call them. The emphasis will change from agents as finders to agents as counselors, and this would favor the Universal type.

5. Most human personal decisions relate to immediate needs and desires, but savings and protection do not. Therefore, those two requirements will continue to take a backseat in many cases to tangible consumer goods and services. Life insurance will still be difficult to sell, scoring an important point for the Adjustable type with the current distribution system.
6. Inflation gives the appearance of having set up permanent residency in the world, which creates a very difficult condition for savings, including those in any form of permanent life insurance. This definitely hits both the Adjustable and the Universal types. If the Universal turns out to have the low costs and high productivity proposed for it, the company selling it could more easily weather inflation. If the Universal turns out to be as difficult to sell as the Adjustable, it would have no advantage here either.
7. There has been a trend toward greater reliance on employer and government for individual financial security. This must have some influence on which is the preferable product, but I am not sure which way the influence would lean.
8. Changes in personal lives have become more frequent - marriages, divorces, job changes, career changes. The Universal type is simpler to change, giving it some advantage here.

In summary, it seems to me that the Adjustable Life policy is still the best bet, at least for the next few years. Thereafter, the crystal ball is much more cloudy. If the Universal Life policy were to take over by that time, it must be on the assumptions that the death taboo were much reduced, and that agents no longer had to seek and persuade policyowners so assiduously. Other factors might also play a significant role at that time, such as relative tax performance characteristics for company and policyowner.

MR. ARSHAD H. QURESHI: What are the lapse results for Adjustable Life? How do these compare with results for regular ordinary products? If results differ, why?

MR. HUNSTAD: Lapse experience for Adjustable Life is comparable to the results for our entire portfolio of regular ordinary policies. However, because 75-80% of the Adjustable Life sales are of a term insurance type, the results could be interpreted as more favorable. Better results may be attributed to more frequent servicing by the agent.

MR. RALPH H. GOEBEL: Has any thought been given to the use of the interest adjusted net cost method and/or traditional dividend illustrations with the Adjustable Life policy? How does the client know whether the price is reasonable?

MR. CHAPIN: With the Adjustable Life policy, a ledger statement is provided for the first status of the policy and for each subsequent change in status. An agent could provide a ledger statement of hypothetical changes that the policyholder may make in the future.

MR. TROWBRIDGE: There is no reason why the interest adjusted net cost method cannot be used with the Adjustable Life policy. However, the interest adjusted net cost method is intended to be used in comparing similar plans of

insurance, and it will be difficult to find a traditional plan that is similar to the Adjustable Life policy. This may be solved by comparing an ordinary life-adjustable life contract to demonstrate that the cost is comparable to traditional products.

MR. LEWIS P. ROTH: Mr. Hunstad, do you have any facts, or even impressions, about the level of mortality expected under the Cost of Living benefit--especially at ages over 40?

MR. HUNSTAD: We have no specific results to report. Our pricing does assume that there will be mortality in excess of standard, fully underwritten business. The current high acceptance rate leads me to conclude the results may not be too much different from an ultimate mortality level.

MR. WALLACE R. JOYCE: I find your 70-80% acceptance of options fantastic. Would you attribute that primarily to compensation or do you have a specific system that produces this result?

MR. HUNSTAD: We send a letter to each policyowner, with a copy to the agent, stating the new premium and the new face amount. The agent also receives a ledger illustration. A number of agents report that when they contact the policyowner, the acceptance notice has already been returned. First year commissions are paid on the increase in premium. Both are factors in the acceptance level.

MR. JOHN HAYNES MILLER: I would like to add a bit of history and/or prophecy as to the future of flexible or adjustable life insurance policies. The term "Life Cycle Policy" first came to my attention in connection with the Future Outlook Study initiated in 1966 by The Institute of Life Insurance, and described in the Institute's report With An Eye To Tomorrow, released in 1967. I have not been able to trace the concept back to its origins. To the best of my knowledge, the first policy embodying the concept is the one described by Mr. Chapin.

While I believe the Adjustable Life policy will be offered by more companies in the future, I feel that an even more flexible arrangement may be accorded a larger share of the market. I shall refer to this more flexible concept as the "Trowbridge Rain Barrel," a reference to Mr. C. Lambert Trowbridge's very graphic diagram illustrating the funding of a pension plan. This was included in his article appearing in the Harvard Business Review, a modification of which is included in the new textbook of which Mr. Trowbridge and Mr. C. E. Farr are co-authors. This diagram shows contributions flowing into the barrel from a large pipe and interest from a somewhat smaller pipe. At the bottom of the barrel, there is an outlet for benefit payments and another one for the deduction of expenses. Obviously, the water level rises or falls depending on the setting of the valves controlling the flow of money in and out of the pool. Mr. Anderson's Universal Life policy can be illustrated in the same manner, with one of the outflow pipes representing the cost of term life insurance. An obvious extension would be an additional output pipe representing charges for disability insurance financed on a current cost basis. Such an arrangement would provide the ultimate in flexibility and permit integration with Social Security benefits to survivors and to disabled workers as well.

MR. TROWBRIDGE: The phrase life cycle has been around for some time and I do not know its origin. I have discontinued use of the term life cycle

because of the confusion that results from its use. I believe that the early form of life cycle policies made use of a preprogrammed approach. I prefer the use of the changing needs approach rather than the preprogrammed approach.

The illustration used was for pension funds for which expenses are represented as evaporation from the top of the barrel. With ordinary insurance products, an additional outflow pipe would have to be added to illustrate the greater importance of expenses. I do agree that the use of that illustration is more appropriate with Universal Life than with Adjustable Life.

MR. DAVID M. HOLLAND: When the Cost of Living rider is applied, especially to a large policy of, say, \$1,000,000, do you have a limit on the amount of increase, either on a percentage basis or as an absolute basis?

MR. TROWBRIDGE: Bankers Life intends to have a limit on the maximum percentage increase over a three year period as well as a maximum dollar amount limit on the face amount increase.

MR. HOLLAND: The scenario in Mr. Anderson's article discussed the interest of an owner of a traditional product in changing to a Universal or Adjustable policy. Would some one comment on this conversion or replacement?

MR. ANDERSON: If products are brought to the market with significantly different pricing bases, there will be substantial amounts of replacement taking place. That is the point of the Cannibal Life scenario in my paper.

MR. HUNSTAD: We do not encourage or permit any kind of replacement with our product.

MRS. ANNA MARIA RAPPAPORT: I am particularly intrigued by the Universal Life concept because it provides the opportunity to invest in many different types of investment vehicles--with policyholder choice. It also offers the possibility of varying benefits on any rational preset pattern and of offering benefits such as the disability benefit. Benefits could also be provided on other family members and for other forms of insurance. Combinations of coverage employing this concept have been marketed on different occasions and are currently being marketed in Europe.

